



D.3.3 Women-led Innovations in Agriculture and Rural Areas, Lessons Learned Report and Fact Sheets on Female Innovations

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ACRONYMS & ABBREVIATIONS

| | |
|------------------|---|
| CAP | EU Common Agricultural Policy |
| EU | European Union |
| Project partners | |
| Galway | NATIONAL UNIVERSITY OF IRELAND GALWAY |
| TU Delft | TECHNISCHE UNIVERSITEIT DELFT |
| TEAGASC | TEAGASC - AGRICULTURE AND FOOD DEVELOPMENT AUTHORITY |
| UNICAL | UNIVERSITA DELLA CALABRIA |
| LWL | LONGFORD WOMEN S LINK CLG |
| UTU | TURUN YLIOPISTO |
| UL | UNIVERZA V LJUBLJANI |
| CE | CONSULTA EUROPA PROJECTS AND INNOVATION SL |
| HNEE | HOCHSCHULE FUR NACHHALTIGE ENTWICKLUNG EBERSWALDE |
| ELARD | ASSOCIATION EUROPEENNE LEADER POUR LE DEVELOPPEMENT RURAL |
| UOULU | OULUN YLIOPISTO |
| ECOLISE | RESEAU EUROPEEN POUR DES INITIATIVES COMMUNAUTAIRES SUR LES CHANGEMENTS CLIMATIQUES ET LE DEVELOPPEMENT DURABLE |
| MENDELU | MENDELOVA UNIVERZITA V BRNE |
| LNU | LINNEUNIVERSITETET |
| HLK | HOGSKOLAN FOR LARANDE OCH KOMMUNIKATION I JONKOPING - HLK SCHOOL OF EDUCATION AND COMMUNICATION |



SUMMARY

This deliverable focuses on 20 national case studies that shed light on 200 women who spearhead unique innovations in the realm of rural areas and farming across ten European countries. The innovations led by the women are centred around four pillars of sustainability: environmental, social, economic, and cultural. They span across three distinct rural typologies: rural areas close to a city, rural villages, and remote rural regions. This comprehensive study provides a rich tapestry of female-led ingenuity and resilience in rural Europe.

The case study reports on 100 women-led farming innovations revealing a diverse, unique, and dynamic set of innovations. However, the rural location's impact on these innovations is debated, with some countries finding that the type of innovation or regional differences within a country are more significant than the rural typology. The women have introduced farming innovations that vary in scale, duration, and ownership structure, with many based on organic, biodynamic, and agroecological farming. Women engaged in farming innovation often face challenges due to patriarchal social norms, with many feeling that they are not being taken seriously, particularly those without a family farming background. Despite these challenges, which include motherhood, financial constraints, bureaucratic hurdles, and infrastructural issues, many women gain community respect and inspire others by successfully managing their farming projects. Despite challenges, women engaged in farming innovation are combining domestic and care work with business, and leveraging support from partners, family, and friends. They also benefit from financial grants, strong local and international networks, technology, visibility through media, and support from local governments, demonstrating resilience and adaptability in their endeavours.

The case study also reports on 100 female-led rural innovations, which vary greatly across and within countries, with many recent initiatives in the past four years. These innovators, ranging in age from 26 to 78 and often highly educated, lead these initiatives either individually or in groups, and operate through registered businesses, associations, or informally, demonstrating the diversity and adaptability of women in this sector. The innovations are mostly related to environmental activities, community engagement, rural job creation, tourism, and training and education initiatives. The impact of the rural location on these innovations varies, with some countries finding that the type of innovation or other characteristics like local culture and religiosity are more significant than the rural typology. Despite these challenges, women innovators leverage their rural environments, integrating community needs, utilizing local resources, and creating urban-rural connections, demonstrating adaptability across different rural typologies. Support from intimate social circles, including partners and family, is essential for women-led innovations in rural areas, though work-life balance can be a challenge, particularly in relation to childcare. Local communities can provide resources and support, but gaining trust can be difficult, and infrastructure constraints, such as public transport and broadband, can impact innovation. Financial constraints are common, with complex regulations and bureaucracy posing additional challenges, yet public funds and alternative funding routes can provide crucial support. Despite these challenges,



favourable conditions such as technical and business support systems, passion for their innovations, supportive networks, and geographical circumstances can offer opportunities for innovative solutions.

Drawing together female-led farming and rural innovations we can see that they are both diverse and have a high degree of adaptability. The importance of local and international networks, financial grants, and support from local governments are emphasized in fostering these innovations. Also, the role of and support from partners, family, and friends in these innovations are significant in both female-led farming and rural innovations. The challenges the women face include patriarchal social norms, financial constraints, bureaucratic hurdles, and issues related to infrastructure. The impact of rural location varies, with some countries finding that factors other than the rural typology, such as the type of innovation or regional differences within a country, are more significant.

INTRODUCTION

The FLIARA project investigates women-led innovations in farming and rural areas in Europe. One of the empirical foci, developed in the WP3, is a deepened understanding of the pathways to success and the challenges facing female-led sustainability innovation in a) farming and b) rural areas.

This report emerges from the FLIARA Task 3.2 “Case studies of Female led Innovations in farming and rural areas and Innovation Ambassador Selection” and Task 3.3. “Assessment of Case studies”.

The partners of the FLIARA project conducted 20 national case studies in ten European countries (Czechia, Finland, Germany, Ireland, Italy, Netherlands, Romania, Slovenia, Spain, Sweden), resulting in 200 women interviewed.

The case studies cover different thematic areas corresponding to four sustainability dimensions related to the innovation analysed (environmental, economic, social, and cultural) and three different typologies of rural areas (remote rural area, rural villages, rural areas close to city).

The analysis follows the project's conceptual framework (Farrell et al., 2023), considering the typology of rural areas where the innovations are implemented. It provides insights into women-led innovation pathways in farming and rural areas, deepens the understanding of the conditions and factors that can support or hinder rural women's agency, the dynamics of capital resources, and the adaptability of innovations to a broader rural context.

Farming and rural innovations have been analysed separately. UNICAL has been responsible for the farming reports, fact sheets and the analysis of the lessons learned related to farming innovations. LNU has been responsible for the rural reports, fact sheets and the analysis of the lessons learned related to rural innovations. Throughout the task we have collaborated closely.



REPORT STRUCTURE

This report is divided into four sections.

The first section includes the selection process of the case studies, the methodology used in carrying out the research and the main lessons learned on women-led innovations in farming and in rural areas.

The second section includes the national case study reports related to women led-innovations in farming prepared by the partners involved in the research.

The third section includes the national case study reports related to women led-innovations in rural areas prepared by the partners involved in the research.

Finally, the fourth section consists of 200 fact sheets on female innovations. Each partner, using a standardized format, has prepared a fact sheet for each innovation analysed, summarizing the pathway of the woman who brought it forward as well as the impacts of the innovation.



SECTION ONE

METHODOLOGY AND LESSONS LEARNED



CASE STUDY SELECTION PROCESS

The FLIARA project carried out 20 national case studies, ten on female-led innovations in farming and ten on female-led innovations in rural areas. The case studies cover different thematic areas considering four sustainability dimensions: environmental, economic, social, and cultural. The distribution of case studies among the countries was the following:

- Two case studies (one on farming innovations and one on rural innovations) in eight countries (Finland, Netherlands, Germany, Czechia; Slovenia, Sweden, Spain, Italy).
- Three case studies in Ireland (two on farm innovations and one on rural innovations).
- One case study in Romania on rural innovations.

Each national case study includes ten interviews with women leading innovations, resulting in 200 women interviewed (100 on farming innovations and 100 on rural innovations). To select the women to be interviewed two main criteria were followed:

1. the sustainability dimensions (environmental, economic, social, and cultural) of the innovation.
2. the typology of rural areas (Rural villages, Remote Rural areas, Rural areas close to city) where the women operate.

Each woman interviewed in each case study, depending on the type and location of innovation she carried out, was associated with one main sustainability dimension and one typology of rural area. In addition, to guarantee a variability in the sample of respondents and innovations identified, the following criteria, listed in D1.4 (Farrell et al, 2023) were also considered:

- Age Diversity
- Economic Backgrounds
- Ethnic and Cultural Diversity
- Education Levels
- Family Status
- Community Roles
- Diversity of Innovation
- Potential for Social Impact
- Novelty and Creativity
- Impact on Rural Development
- Community Benefits
- Partnerships and Networks
- Scalability and Replicability
- Documentation and Learning

The selection process of the women that has been included in the national case study was organised in three main steps:

1. Based on the inventory of 530 women-led innovations gathered through a desk analysis conducted earlier in the project (see Roos et al., 2024), each partner



selected two potential options of women to interview matching the different criteria listed above.

2. UNICAL and LNU reviewed the proposed sample and verified the overall variability and responsiveness of the criteria.
3. The final sample was approved by the partners and by the Executive Board

The final distribution of the interviews is illustrated in Table 1 and 2

Table 1. Interviews Distribution – Farm Innovation

| Sustainability dimension of the innovation | Typology of rural area | Czechia | Germany | Finland | Ireland | Ireland | Italy | Netherlands | Slovenia | Spain | Sweden | Total Interviews |
|--|------------------------|---------|---------|---------|---------|---------|-------|-------------|----------|-------|--------|------------------|
| Environmental | Remote rural | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 30 |
| | Rural Village | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | Close to city | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| Economic | Remote rural | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 30 |
| | Rural Village | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | Close to city | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| Social | Remote rural | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 30 |
| | Rural Village | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | Close to city | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| Cultural | Any area | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 10 |
| Total Interviews per case study | | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 100 |



Table 2. Interviews Distribution – Rural Innovation

| Sustainability dimension of the innovation | Typology of rural area | Czechia | Germany | Finland | Ireland | Italy | Netherlands | Romania | Slovenia | Spain | Sweden | Total Interviews |
|--|------------------------|---------|---------|---------|---------|-------|-------------|---------|----------|-------|--------|------------------|
| Environmental | Remote rural | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 30 |
| | Rural Village | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | Close to city | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| Economic | Remote rural | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 30 |
| | Rural Village | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | Close to city | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| Social | Remote rural | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 30 |
| | Rural Village | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| | Close to city | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| Cultural | Any area | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 10 |
| Total Interviews per case study | | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 100 |

METHODOLOGY

The case study approach was chosen by the FLIARA project because it allows for the study of a phenomenon (women-led innovations) in its real-world context (Harrison et al., 2017) and thus represents a valuable way of looking at and understanding contemporary women's agency, as well as the success factors and constraints they face. Guided by the FLIARA Conceptual Framework, developed in D1.1 (Farrell et al., 2023) and detailed in D1.4 (Farrell et al., 2023 b), the framework includes three main levels of analysis:

- 1) The **female-led innovation pathways**. The aim is to investigate the pathway undertaken by women who lead a farm or rural innovation. The focus is on motivators, decision and preparatory activities, concretisation and impacts of innovations.
- 2) The **innovation ecosystems**. PESTE (Political, Economic, Social, Technological, and Environmental) analysis is adopted to investigate how the rural innovation context supports or hinders female innovations along the innovation journey.



3) The **mainstreaming**. The aim is to explore how women-led innovations can spread throughout society by analysing different forms of scaling (up, in, out, down, deep) (Moore et al., 2015; Sánchez Rodríguez et al., 2021).

To operationalise the research, the main question is formulated as follows: "How do women promote innovation practices in rural areas and farming?". Other specific questions are formulated in relation to the three levels of analysis mentioned above and are detailed in Sivini et al. (2023). Considering the research questions, two interview guides were provided (Sivini et al., 2023), one for women leading innovation in farming and one for women leading innovations in rural areas, organised into the following six sections:

General questions about the innovator background and the local context. The main topics investigated are brief account of personal experience and of the local context in which the respondent operate.

The business/practice/project (for rural innovations); **The farm** (for farming innovations). The main topics investigated are related to the organisation and management of the business/practice/project or the farm.

Origins of the innovation. This section aims at reconstructing the very early steps of the innovation journey. The main topics investigated are origin of the idea/motivation and constrains and favourable conditions.

Decisions and preparatory activities. This section aims at exploring if and how the innovation ecosystem is supportive, and which forms of scaling in and scaling down have taken place. The main topics investigated are decisions to act, resources mobilised, networks activated, skillset and expertise needed.

Concretisation of innovations. This section aims to collect information on the tangible outcomes of the innovations and whether they manifest themselves mainly as economic, technological, social, cultural, and or environmental changes. The main topics investigated are results and outcomes achieved.

Impacts of innovations. This section sought to collate information on the impacts of the innovations, on the contexts where they are implemented and if any mainstreaming has happened (scaling out, scaling deep, scaling up).

The interviews were semi-structured, the common guide was not meant to set up a prescriptive format. The order of the questions, and the questions themselves vary with each interviewee. However, all the topics mentioned above were investigated throughout the interview. The interviews were carried out from January to April 2024 and each woman interviewed signed a consent form.

In addition, grey literature (such newsletters, bulletins, fact sheets, reports, project publications, newspaper/magazine articles) related to the specific innovation was collected and their websites and social media pages were also scanned. A desk analysis on the national rural context and on the role of women in farming and in rural areas at country level was previously carried out (Roos et al., 2024) and has been used to give provide to the analysis.



All the interviews were transcribed by partners. Data processing included anonymising participants as much as possible. If full anonymisation was not possible, pseudonymisation was used. Case study analysis was completed by each partner in relation to National Context, Innovation, Innovation Pathways, Innovation Ecosystems, and Mainstreaming Action.

LESSON LEARNED ON WOMEN-LED INNOVATIONS IN FARMING

The national case study reports present the experiences of 100 women leading innovations in farming across nine European countries. As mentioned above, in each country, the innovations focus on four sustainability dimensions: environmental, social, economic, and cultural across three different rural typologies: rural area close to city, rural village and remote rural area. The analysis shows clearly that the rural contexts of the nine countries differ from one another in multiple ways and great differences are also noted across different regions within the same country. It goes without saying that the innovations undertaken by the women in the different countries, even when they correspond to the same sustainability dimension and rural typology, are very diverse, unique, and dynamic.

In fact, rural location is debated and varies across the countries. Significantly, some countries faced important difficulties in analysing and operationalising differences between the three rural typologies (particularly Finland, Sweden, Ireland, Slovenia, the Netherlands, and Germany). They found that these differences did not matter so much in shaping women's innovations. For instance, in Sweden and Finland, the type of innovation affects challenges, opportunities and impacts more than where in the rural they are located. In Germany, the difference between regions turned out to be more prominent than differences between the regional typology, especially in relation to 'Rural village' and 'Close to city'. In Ireland, most women described themselves as living in a rural farming context, irrespective of its remoteness or proximity to an urban region, suggesting that differences can be better described using an urban-rural classification rather than focusing on different types of rural typologies. In the Netherlands, population density is high and rural remoteness is very different from other European countries, as towns and smaller cities are never too far away.

The following paragraphs present the lessons learned, providing examples from different national contexts and, where possible, suggesting some differences among rural types. The focus is on the type of innovations developed, the constraints and challenges faced by women in developing these innovations, the opportunities and favourable conditions that helped them in their projects. This is to start reasoning on how women entrepreneurs in the farming sector could be further supported in developing their innovative farming.

OVERVIEW OF FARMING INNOVATIONS

The innovations undertaken by the women are very diverse and dynamic, and all at a different stage and scale. Some innovations are very new (one or two years old), while others have been operating for ten years and longer. Some are based on farms or assets (e.g., land plots) inherited from the women's families, some are farming-related projects



that women started from scratch, renting, or buying a piece of land. Some projects are led only by one woman, others are projects co-managed by multiple people (a woman and her partner, an entire family, a group of people). In this regard, property rights are diverse: in some cases, women are the only owners of the farm; in other cases, they own it alongside a partner or husband, sibling, or friend, or together with a group of people (e.g., in the case of agricultural cooperatives).

The ages of the women ranged from mid-twenties to one woman in her early seventies. Their educational background is also diverse. However, many of the women interviewed have higher, tertiary education. Some have agricultural degrees of different sorts (from following some agriculture-related courses at university to holding a PhD in agricultural science); others studied something completely different and learned farming from family members and friends and/or through various courses (offered under specific support programmes for agricultural entrepreneurs and/or from formal and informal farming networks). Many women also developed their projects as self-taught farmers: learning by doing and experimenting.

The farm sizes varied with some over 1500 hectares, and some farms as small as two hectares.

Many of the projects analysed are based on organic, biodynamic and agroecological farming, meaning they revolve around the production of sustainable, high quality and healthy products with high ethical standards, especially when involving animals. Some farming projects - located in Spain, Sweden, Germany, Czech Republic - revolve around different innovative technologies (e.g., precision agriculture, GPS for livestock management, milking robots, solar panels, bio coal plants, biogas tractors) with a specific focus on environmental sustainability.

Many innovations also entail much more than the production of agricultural products. In fact, engaging in multifunctional farming projects is something that characterises many women-led innovations. Multifunctional farming projects (Wilson and Burton, 2015; Novack et al. 2021) may involve opening an agritourism, a restaurant, or a kindergarten, transforming farm products (e.g., producing jams, flour, etc.) as well as organising training courses, workshops, and activities (e.g., cooking workshops, guided tours and trainings with animals, animal assisted therapy, music therapy, escape rooms, yoga lessons) and hosting events (e.g., birthday parties). The diversity of products and services varies across different rural typologies, at least to some extent.

In remote rural areas, across countries, women tend to lead innovative agricultural projects related to the valorisation of local resources and cultural heritage, for instance by producing niche and high-quality products (e.g., in Italy, in Spain, in Germany) or wool products (in Ireland). In some cases, however, farming projects in remote rural areas are based on technological innovations. For instance, in one case in Sweden, an eco-certified dairy farm in a remote rural area is managed using milking robots, automatic fodder dispensers and an app for measuring and monitoring cows' activities and health issues.



Overall, projects in remote rural areas allow women (and their families) to live in areas where services and infrastructures are often limited - importantly contributing to long-term sustainability and development of these areas. At the same time, carrying forward farming projects in remote rural areas can be very challenging and requires women to develop specific marketing channels and networks to sell their products. In Finland, for example, women in remote rural areas found it difficult to attract tourists. Some women also mentioned that they had to find additional finances via farm diversification innovations to ensure the viability of the farm (e.g., in Ireland, in Italy).

Networks and community support seem particularly important in remote rural areas, although there are exceptions. In Czech Republic, for instance, in two cases, women's innovative projects took place completely independently from the local community, probably because these women did not have any tie to the community as they started the project, and they targeted tourists particularly (offering accommodation and horse-riding experiences).

In rural areas close to the city, innovations across countries take advantage of the close availability of resources, technology, infrastructure, and markets. The innovations can focus on providing farm-related educational and entertainment services for children and adults, both for people living in the nearby city and for tourists (in Italy, Sweden, the Netherlands, and Finland); and/or they can focus on producing organic or biodynamic grains and vegetables, meat and dairy products for people living in the nearby cities. In Czech Republic, female farming innovations near large and medium-sized cities focus on offering both a historical and contemporary perspective of agriculture to urban residents who often have unrealistic ideas about it.

In rural villages, women-led innovations are diversified, and less generalisable. Women often take advantage of strong community ties, entailing the creation of new products (e.g., traditional organic crops and cheeses, items produced with upcycled farm material) or new services offered by and in the farm. In Spain, for instance, rural villages exhibit a strong sense of community and an attachment to traditional farming practices but challenges to attract younger generations to the agricultural sector become evident. In Sweden, women farmers located in rural villages were particularly motivated to respond to emerging local crises related to climate change such as the disappearance of Swedish meadows. In Germany, the women interviewed seem to be particularly committed to improve dairy products and meat production by making it more sustainable and attentive to animals' well-being.

In general, economic gains are considered by most women interviewed across countries and rural typologies, except for Sweden. The general consensus being that innovations shall be profitable and economically sustainable, however, women's motivations/aspirations to engage in innovative farming actions ran far beyond mere financial achievements. Addressing issues around climate change and environmental sustainability is a very common characteristic of women-led innovations in farming, independent from the rural typology where they are implemented and across countries. These issues are considered and addressed in various ways. Producing (both for self-



consumption and for selling) high quality, healthy food is an aspiration for many women who feel this is extremely important for healthy and sustainable living: a point mentioned by women in Ireland, Italy, Finland, Slovenia, Sweden, Spain, the Netherlands. This also means embracing specific farming techniques, paying attention to preserving the local biodiversity by maintaining or reviving traditional farming practices and cultivating local crop varieties, as well as paying attention to animal husbandry ethics and animal welfare. It also means selling products through short supply chains (on farm, at local markets, through local consumers' groups, etc.). Moreover, many engage in different recycling and upcycling activities within their farm to minimize waste. Other women, not engaged in organic or traditional farming, find other unconventional ways to earn an income on a farm. For instance, in Finland one woman bought a historical farm and started arranging birthday parties and other children's events there.

Besides, practicing multifunctional farming enables women to interweave environmental sustainability with economic, social, and cultural sustainability. Many women across countries are motivated by the desire to share with others the well-being brought by being in nature and living close to animals. They thus develop farm-related activities and services targeting children, adults (both local people and tourists) and often also people belonging to marginalised groups (e.g., disabled people). This is the case in Italy, Czech Republic, Sweden, Slovenia, and Germany. Creating a more inclusive and sustainable community is a desire shared by many women across countries and rural typology: in some cases, this also means offering (or aspiring to offer) employment opportunities for local (often marginalised) people. This is the case in Ireland and Slovenia. Preserving the local cultural heritage and traditions is another important driver of women-led innovation in farming across countries, which relates to maintaining the local specificity of a place, and thus to attracting tourists.

Finally, women across countries are also driven by their desire for personal development and fulfilment.

CHALLENGES AND CONSTRAINTS FACED BY WOMAN INNOVATORS IN FARMING

Being a woman engaged in farming innovation is in itself challenging with rural environments of all typologies still governed by patriarchal social norms.

Many women (at least in Italy, Spain, Ireland, Finland, and some women in Germany) mention how they often feel like they are not taken seriously both within their localised social context (e.g. interacting with neighbouring male farmers or people living close by) or when trying to access local offices, dealing with bureaucratic matters. This is particularly the case for women who did not inherit a farm from their parents. It seems that these new entrants to farming took more time to gain credibility and support within their rural community. As their business becomes evidently successful and popular, and women show their skills as managers or co-managers of a farming project, they gain trust and respect within the local community. This is more the case in remote rural areas, where gender roles are more emphasised. However, in some contexts such as Ireland,



women explain that running a successful business in a male-dominated context can be a motivating factor in itself and can encourage women to start a farming business and to inspire other women to do the same.

Being a mother managing a farming project is described as being, at least in some ways, challenging. However, there are differences between countries. For instance, in Italy, maternity benefits for women entrepreneurs engaged in farming are paid only for a few months and at minimum wage. If the pregnancy is at risk and the absence from work is prolonged, this can cause serious damage to the business, especially if the business is newly started and the woman is the only or the main person managing it. In Ireland, childcare was a problem for some women, but proximity to larger town provided most women with options around schools and childcare. In Spain, partners or family members were crucial in supporting women with childcare. Also in Sweden, services such as daycare and schooling are seen as essential for child care and for enabling women to manage the farm, but the important support of spouses was also emphasized. Instead, in the Czech Republic, some women mention how being a mother is integrated into the farm work itself without many issues. Children are seen as a self-evident part of the mother's activities and help on the farm from an early age, inspire and support business diversification, especially in relation to activities targeting children. This does not mean that the help of a partner or husband or of other family members and friends is not described as fundamental to run a successful business while raising children.

Experiences of gender discrimination and prejudices vary greatly across countries and among women interviewed within the same country. For instance, in Slovenia as well, none of the women reported difficulties in having their role on the farm recognised by employees: instead, they highlighted the strong support they received from the local community. In Finland, many women also felt supported and admired by the local community. In Ireland, however, some women felt there is still a lot of gender-related discrimination in farming, even though others explained that they faced very little discrimination for working in a male dominated employment.

Lack of financial resources or difficulty in accessing bank credits and financial support in general is a challenge across countries and rural typologies (except for Czech Republic). Women without a family farming background are the most disadvantaged in this regard as they often need bank credits to develop their farm/innovation, a factor most prominent in the initial stages of acquiring land. Additionally, women who inherited a farm or had resources available to start their own business often complained about the scarce possibilities of accessing bank credit to develop their businesses. Accessing bank credit is difficult especially if women are single and/or if they manage the farming business by themselves. In Czech Republic, financial problems were not mentioned by the women interviewed, but rather the considerable administrative burden. In terms of start-up financing, in fact, 2 women joined a large company and their own initial capital did not matter; 5 women had a family background; including a significant financial capital (the company also draws subsidies to varying degrees) and 3 women founded a non-profit society getting entry subsidies for investments (like reconstruction of buildings, purchase of machinery).



Next to this, navigating bureaucratic matters, both for obtaining financial support through different national and regional programmes as well as for obtaining permission (e.g. to start new activities within the farm, offering different services, etc.) is challenging and frustrating for women innovators across countries. The interviewees highlighted the constant stream of paperwork that is very time consuming and adds to the struggle of starting and maintaining a business, while juggling between domestic and farm work. This point was mentioned in Germany, Italy, Spain, Ireland, Sweden, Czech Republic, and Slovenia.

In particular, interviewees in Italy, Spain, Slovenia, the Netherlands and Czech Republic, found it difficult to find land to buy or to rent in order to start a farming project. Most cultivable land, especially in rural villages and rural areas close to cities, is leased or sold at very high prices that most people cannot afford, but which is exceptionally difficult for women who have the added issue of accessing finance. In remote rural areas, land may be available but abandoned for too long or difficult to access, hence, bringing it back to production is a long and difficult process. In the Netherlands, finding land close to the largest cities is more complex, not only due to the urban pressures but also due to landscape conditions (e.g., peat land, polders). It is also difficult to establish long-term land lease agreements, which makes it difficult for farmers to set up agroecological farms, which need years to flourish and become profitable.

Moreover, in remote rural areas, long transport distances and high costs of transportation, as well as poor or non-existent public transport creates additional challenges for women (e.g. in Slovenia). These challenges include getting their product to a market or hiring workers if necessary as well as attracting tourists.

In Spain and in Ireland, some women pointed out that inadequate internet connectivity in rural areas also limits their access to information, digital markets, and modern agri-tech solutions.

OPPORTUNITIES AND FAVORABLE CONDITIONS FOR WOMAN INNOVATORS IN FARMING

From the outset, some women across countries explained that there are strengths to being a woman engaged in farming. In Ireland, Germany, Finland, Czech Republic, and Italy, for instance, some women mentioned that farming allows them to combine (at least to some extent) domestic and care work with doing business. Women's particular attitude towards care work and women's ability in problem solving, for instance, were sometimes mentioned as a strength (in the Irish and Finnish context).

Across countries and rural typologies, inheriting a farm, a plot of land or other assets (e.g. farmhouse) represents a solid starting point, if not a great advantage, for the implementation of women's innovative practices.

Besides, across countries, and even in cases where the farm was not inherited, support by partners, other family members or friends is also crucially important to start and



develop a farming business. This support ranges from financial backing to assistance with daily farm operations or childcare.

In addition, despite the difficulties in accessing bank credits and navigating bureaucratic matters, it also emerged that many women (in Italy, Spain, Germany, Sweden, Republic, Finland, and some women in Slovenia) obtained financial support through grants provided by European programmes as well as through government grants at regional or national levels. These funds were mostly used to further develop/expand the business rather than to start it.

Financial support programmes at the European level, in countries like Italy and Spain, funding from the CAP is mentioned by many as instrumental. Several women have also obtained important support through LEADER funds, particularly in Ireland, Slovenia, Finland, the Netherlands, and Sweden.

Moreover, across countries, most women, and particularly those living in rural villages and remote rural areas, are very active and have large social networks. Networking, with other farmers as well as with other entrepreneurs and in general with the local rural community, is considered crucial to develop a project, to get support and advice on different issues, to establish collaborations and to gain technical knowledge. Networks mostly unfold at the local level but in some cases, they are also international. For example, some women interviewed in Slovenia are connected through international networks such as ECOLISE, the Global Ecovillage Network and the ERASMUS network.

Farming networks and organisations are fundamental also to many women who undertake courses and gain specific farming related skills from more experienced farmers (e.g. in relation to organic, biodynamic farming or dairy products production) - especially for those women who do not have an educational background in agriculture.

Most of all the women interviewed in all the countries did not know about AKIS. As underlined in the German report this could also be because the Knowledge and innovation institutes or public authorities do not use the term in front of farmers or applicants. In addition, many officials do not have a clear understanding of the EU Commission's expectations when asking for the "strengthening of the AKIS" as noted in the guidance document for the development of national CAP strategic plans. Only a few interviewees were aware of AKIS but only in Spain they have used its resources to access the latest research, technology, and best practices in agriculture.

In general, the availability of agricultural courses offered both through the public school system as well as through other (more informal) channels is a favourable condition to develop innovative farming businesses. The increasing availability of information on the web, that can be accessed remotely, is also important to gain knowledge, learn skills and develop ideas.

In some cases, technology also represented an important opportunity for women innovators. For instance, GPS and other IoT devices for livestock and crop management



in remote rural areas allows farmers to monitor and manage their operations remotely, thus reducing labour needs and improving the efficiency and sustainability of resource use (e.g., in Spain). In other cases, women also used agricultural technologies to modernise greenhouses, irrigation systems and food processing (e.g., in Slovenia, Ireland and Czech Republic). Solar panels and windmills are also at times mentioned as important to increase profit (e.g., in the Netherlands).

Gaining visibility through different TV channels, newspapers and radio programmes is also mentioned as a relevant way to advertise a business, across all rural typologies and countries. Besides, women insisted on the importance of developing and maintaining good websites and social media pages to advertise products, services, and activities - attracting both local people and tourists. Some women, for instance in Germany and in Spain, became famous social media influencers, regularly sharing their experiences and knowledge as a farmer. Websites and social media platforms also allow women to sell products directly to consumers, bypassing traditional, often male-dominated, distribution channels, and to consolidate short supply chains.

Obtaining support from the local government and local politicians also turned out to be an important opportunity in some cases, especially in rural villages and remote rural areas. For instance, a woman farmer in Italy has developed her farming business by leasing a public piece of land. Another turned a public building into a farm restaurant, which also works as a tourist point. In the Netherlands as well, local public officers have been mentioned as central in facilitating the emergence of community-supported agriculture (CSA) initiatives.

CONCLUSION

Women innovators in farming across different European rural contexts face multiple (and similar) challenges and constraints as they develop their business. As rural areas, be they remote rural areas, rural villages, and rural areas close to cities are still governed by patriarchal social norms and the agricultural world is still male-dominated, it is particularly difficult for a woman to be recognised as a farmer and to be supported in developing her idea. However, women have multiple ways to face these constraints. The support of partners, relatives, and friends as well as of local networks is fundamental in this regard.

Women-led innovations in farming have several impacts, particularly at the local level. Impacts do not relate to disruptive policy change or cultural norms but to slow but incremental and promising changes towards more sustainable rural areas, especially at the local level. Many if not most of the women interviewed, through their farming projects produce high quality, healthy products -usually organic and sold mostly at the local level. Consequently, they contribute to food security, while taking care of the local environment and ecosystem and enhancing environmental sustainability. Farm products are first of all sold locally at the farm itself, or at local markets through local consumers' groups or other short supply chains. In these ways, and through their websites and social media, women contribute to spreading awareness about the importance of producing and



consuming local, healthy food as well as of preserving local traditional farming practices and crop varieties and promoting animal wellbeing – while sustaining a circular economy.

Through their projects, some women ensure their financial independence or importantly contribute to their household's income. Those women who are managing larger farm projects, in all countries, are also able to offer employment opportunities to local inhabitants: something that is considered not only a great achievement, but also an imperative to the sustainability of the local area.

On the other hand, several women emphasised how their outcomes were not financial. For instance, those who are focusing on social sustainability, organising activities targeting children and vulnerable groups, moreover, contribute particularly to the social cohesion of an area, providing a space for people to meet and enhance the sense of community (a point particularly mentioned in Slovenia, Sweden, and Italy – particularly in rural areas close to cities).

By hosting tourists via agrotourism projects, managing farm-related restaurants serving the farm products and organising different activities such as guided walks with animals and cooking workshops, women across countries and rural typologies also enhance the value of the local environment, as well as cultural traditions and products. By opening their farms to local people and tourists, they show how farming in specific ways can contribute to taking care of the environment and producing sustainable food. Diversification and multifunctional farming not only improve economic gains, but also promotes environmental sustainability by encouraging the cultivation of different crops and the implementation of different activities on the farm. By implementing specific technological practices, women also contribute to ensure energy self-sufficiency and sustainability in rural areas and reduce operational costs in farming (e.g., in Czech Republic and Spain).

In all these ways, they contribute to the development of a specific rural area, counteracting de-population, attracting tourists, and thus also encouraging the local municipality to develop and/or maintain services for the local community. This is the case in all countries.

Most importantly, women's innovative actions slowly, or at least partly, challenge the patriarchal “normality” that often dominates the agricultural world. Although in many cases, women innovators are at first looked at in a sceptical way, especially in those rural contexts where patriarchal social norms are particularly strong, they introduce new products, services, outlooks, and modes of action that turn out as successful. In this regard, they represent examples of what it entails to live and work in a rural area (all types of rural areas) in a way that is sustainable on multiple levels.

Finally, but also importantly, most women are proud and fulfilled on a personal level. They are satisfied even if their business is small; in fact, many women across countries reiterate how “small is good”: a small farming project is usually unique and local, and this can be its strength.



LESSONS LEARNED ON WOMEN-LED INNOVATIONS IN RURAL AREAS

The national case study reports present the experiences of 100 female-led innovations in rural areas across ten European countries. As mentioned above, in each country, the innovations focus on four sustainability dimensions: environmental, social, economic, and cultural across three different rural typologies: rural area close to city, rural village and remote rural area. The analysis reveals significant variations in the rural contexts across the ten countries, with notable differences even within regions of the same country. It's evident that the innovations in rural areas led by women in these countries are remarkably diverse, unique, and dynamic, despite aligning with the same sustainability dimension and rural typology.

What follows is first an overview of the female-led rural innovations studied in the ten countries. Additionally, an exploration of the significance of the rural typology and an analysis of the constraints and favourable conditions for female-led rural innovations.

OVERVIEW OF FEMALE-LED RURAL INNOVATIONS

The characteristics of the female-led rural innovations varies a lot across the countries and within the countries. No clear themes were detected when it comes to type of innovation with the innovations spanning many sectors, industries, and missions. Some are emphasising environmental activities, other innovations support community engagement, some focus on rural job creation and tourism, while others include training and education initiatives. The earliest innovation studied started in 1992 in the Netherlands, while some in Ireland only commenced in the last few months. Nonetheless, within the context of all countries, studies included innovations that have been operating since 2011 onwards. Many of the innovations studied are newly established, from the last four years. Slovenia stands out here with the newest studied innovation starting in 2018, as such providing a mature set of innovations.

A clear majority of the women innovators are very well-educated. Many of them have university degrees and PhD-certificates. All countries, except Slovenia and Spain, do however have at least one woman who does not have a university degree, hence also providing that perspective.

The overall age distribution across the countries shows that women are innovative in all ages. For those countries that could report the women's age it varies between the youngest of 26 and the oldest 78, with many interviewees aged between 30 and 50. Italy, Finland, and Romania interviewed at least one woman between 26 and 29 years old. In Sweden, half of their interviewees were between 60 and 80 years old which stands out as an old demographic.

Some women were individual innovators, but a number were also innovations that were operating and developed by more than one person, with female leadership. Sometimes this person was another woman and sometimes a man, often a husband/partner. We also studied innovations by groups of people where one or several representatives were



interviewed. For example, two sisters were interviewed in Ireland as leading an innovation.

Most innovations are businesses with some kind of registration with the government. However, there are also associations of different kinds, formal and informal. On the informal side we also see individual people innovating not necessarily through an organisation but rather by being who they are and using their voice, such as politicians. Also, some women are employed rather than having their own business.

IMPACT OF RURAL LOCATION FOR FEMALE-LED RURAL INNOVATIONS

For all countries in FLIARA, regardless of rural location, the legal frameworks in the countries try to ensure that women innovators have consistent access to resources and support. However, as alluded to by some countries, for example, Finland, these frameworks are often based on a male norm as well as an urban norm and they thus may be ill fitted towards fostering women-led innovations in rural areas. As such, in Dutch reality, since landscapes and urban pressures differ by province, it justifies differences in policy.

The impact of the rural location varies across the countries. Finland, Sweden, Ireland, Romania, Netherlands, and Slovenia all report difficulties in analysing differences between the three rural typologies. For Finland and Sweden, a likely reason for the missing systematic differences between the rural typologies is that the type of innovation affects the challenges and problems more than where in the rural they are located. When it comes to infrastructure (such as broadband, public transport, and access to utilities) Ireland, Netherlands, and Romania report the same limitations and highlight that it is rather an urban-rural issue than variation among the rural areas. Slovenia also reports similarities across rural typologies, highlighting that many women made autonomous decisions, networked within their local communities as a first step, and had external access to financial incentives. Adding to this, Czech Republic highlight that the conditions for women's innovations may differ not only according to rural typology, but also according to other characteristics, such as local culture, level of religiosity and tradition, and other such characteristics.

Following this, some countries also had difficulty in examining the case studies via the rural typologies identified. Some interviewees from Sweden, for example, failed to see the significance of a remote rural location, with some women seeing the location in a positive light rather than a negative one, for family reasons and for innovative branding identify. Because of the dense population in the Netherlands, rural remoteness is not often experienced, and depopulation and the experienced rural decline is nowadays very local rather than regional. Germany report that the classification of rural villages did not work so well because rural villages are very heterogeneous depending on the Federal State and the geographical characteristics (mountain, population density, distance to urban area etc).



Nonetheless, countries also report differences in their analyses of the rural typology. Starting off with the remote rural areas we see that in Spain and Italy, innovations in remote rural areas focus more on environmental and cultural sustainability, utilising natural resources and a rich cultural heritage. Also, a focus on economic sustainability is evident in remote rural areas in Spain with the aim of boosting local economies through creating value-added products. Women's economic activities are also important in rural Czechia. Both Czechia and Slovenia highlight the impact of cultural values in remote rural areas on women-led rural innovations. Affected by war and migration/emigration, Czechia and Slovenia report that changing societal values and behaviours related to gender quality is a slow process in rural remote areas.

For the women-led innovations classified as located in rural villages, the community is highlighted in many countries. The innovations reported on from Spain integrate community needs with innovative solutions, and thus enhance the social structure of their communities. This is also done in Italy where local cultural heritage and the environment is used to create a feeling of community as well as to attract tourists. The local culture is also important for Czechia where women's innovations often focus on cultural potential. In Czechia it is also highlighted that the stronger relationship of people to the landscape, land, and villages, and higher religiosity (as opposed to remote rural areas) implies that women's innovations are related to soil, landscape, and the hydrological regime.

The innovations located in a rural area close to a city made use of the infrastructure and markets that the cities provided. Both economic, environmental, and social focus are present, with Spain highlighting economic and social sustainability through services and educational initiatives, and Czechia highlighting economic pursuits and the provision of environmental services, which are in short supply for urban residents. In Italy this is also where there is most diversity in innovations. As such, interesting urban-rural connections are created, using the potential of rural areas to sell products/services to people who mostly live in cities. However, Czechia raise the perspective that innovators closer to the city are more attached to the city in economic, social, and cultural spheres and participate less in rural life. This is also linked to what Ireland and Romania is reporting on services being better closer to the cities or closer to area capitals. With Ireland the quality of broadband is somewhat improved closer to the cities, and within Romania the access to for example schools, clinics, and pharmacies are dependent on the size in terms of population of the municipality/commune.

While some countries did not see any clear variations when it comes to rural typology, remoteness as a factor is still discussed as a constraint (see discussion below).

CONSTRAINTS AND FAVOURABLE CONDITIONS FOR FEMALE-LED RURAL INNOVATIONS

The factors discussed here that affect, either as a favourable condition or a constraint, female-led innovations in rural areas are family support, work-life balance, the local community, infrastructure, access to finance, and bureaucracy.



The support from the women's intimate social circle such as their partner, family, parents, and so on, is essential from all the reporting countries. The support can be in the form of concrete help (such as helping with renovations, moving products, balancing work-life with children), giving advice, enabling inheritance of property or other use of family-owned spaces, and providing networks. In Romania, the parents' life decisions meant that the interviewed women came from a privileged background in terms of access to education, information, and to some extent economic resources. For Spain, Sweden and Finland, their previous professional experiences and skills significantly benefited the women innovators. Also, in Ireland, friends are highlighted as important supporters.

Work-life balance, however is also seen as a constraint in all but one country. Sometimes work-life balance is related to childcare as especially reported by Italy since financial constraints increase as women become pregnant and cannot work to the same extent as they had previously. This is due to limited maternity allowances and child-care services. The lack of access to schools and childcare facilities in Romania affects how innovations are formed. When a woman innovator formed a network, she had to implement childcare for the women in the network. Also, Netherlands highlight that childcare support from family members can be difficult if the woman decided to move to the rural parts of the country. In Finland, work-life balance is related to the women's own degrading wellbeing and difficulty in coping amidst their workloads. Especially finding time and earning the skills for effective marketing was a toll on the workload. The country that stands out here is Sweden where the innovators' family situation had little impact on the innovations, possibly because Sweden has a well-developed welfare system and comparatively high levels of gender equality. These circumstances allow for both men and women to combine work and family.

The local community is seen both as a constraint and a favourable condition. In Spain, Italy and Sweden, the local community can provide local resources such as municipality buildings, which help to minimize operational costs. Similarly in Finland, the rural community assists and supports women innovators by providing an active local tourism scene. Slovenia also reports that when there is support from the local community and stakeholders it is favourable and an advantage to women who seek to initiate a business or innovation within their local community. However, the constraints reported from Slovenia, Romania, and Italy is the difficulty in gaining the trust and respect of local people, as well as from public officers.

Infrastructure, such as public transport and broadband, is reported as a constraint in most of the countries. The lack of public transport is highlighted as a constraint in Romania and Finland. This affects the innovators as they experience challenges with accessibility of getting customers and tourists to the rural area and their innovation. In Czechia the lack of public transport is not a significant constraint since functioning public transport exists also in remote rural areas and the fact that innovative women usually have a car. There is also a need for a car in rural Sweden to be able to innovate as public transportation is often lacking. Also, Spain highlights that where infrastructure was available, women innovators utilised it to enhance their business operation. Broadband is highlighted as essential for innovation in Sweden and in Ireland. In Sweden



widespread access to broadband is seen as a favourable condition while in Ireland some women reported issues with the quality of broadband they could access. Additionally, in Ireland, the lack of infrastructure did not prevent the women interviewed from either establishing their businesses or initiating their innovation, showing the issues faced to be surmountable. Also in Romania, the lack of infrastructure is something that sparked innovation resulting in the creation of for example carpooling or local shuttle services.

All but two countries report financial constraints as a barrier to innovation. In Slovenia and Germany finances are the most common/inhibiting constraint. The constraint involves a lack of funds, unstable financing, and the lack of funds for specific practices. An additional constraint in Finland, associated with finances and costs, is the rising costs of gas and electricity experienced by women innovators, leading to difficulties in maintaining and advancing their business and innovations. Many of the women in the reports rely on public funds for their operations, especially in Germany. Many interviewees alluded to the difficulties around accessing financial programmes, finding the paperwork complex and time-consuming, in addition to difficulties in being suitable for the initial funding call. This was very much the case in both Italy and in Ireland. Those in Italy and Slovenia who received financial support or found alternative funding routes view the process favourably allowing their initial innovative idea to become a reality. In Romania, the availability of financial resources plays a crucial role for the innovations, but it is also something that sparks innovation.

In Czechia and Sweden availability of financial resources was satisfactory for the women interviewed. In Czechia this is probably because part of the activities focused on rely on public resources. It also seems that women - unlike men - do not engage in financially risky activities in Czechia. In Sweden, financial resources either through banks, private foundations, or through public support, was reported as a favourable condition.

Related to the availability of public funds is the issue of bureaucracy, as highlighted by Italy above about how financial programmes are difficult to navigate. Women in the reports from Germany, Spain, Italy, Finland, and Romania face bureaucratic and complex regulations, which is stalling innovations. As such, women in Germany need high levels of passion and motivation to be able to address these bureaucratic impediments or find alternative routes as was found to be occurring in Italy.

In addition, interviewees also alluded to facing constraints such as discrimination of foreign women, individual gaps in skills, self-confidence and knowledge, gender-based and/or paternalistic biases, lack of established networks, and government support and policy, for example lacking political support for NGOs. These constraints were not seen across all countries or had less importance in the reports.

When it comes to additional favourable conditions the reports also highlight access to technical and business support systems, a passion and drive from the women, being part of a tailor-made network that provides both emotional and practical support, and just being a woman. In Germany, stable curated networks were the most facilitative factor for women's innovations. Also, the report from Romania highlights curated networks. Slovenia report constraints associated with the remoteness of areas and the associated



demographic challenges, but they also highlight those particular geographical circumstances, such as remoteness or border locations, offer opportunities for customized innovative solutions. Hence, remoteness can also be used as an advantage for women-led rural innovations.

CONCLUSION

The female-led rural innovations studied are diverse, spanning various sectors and missions, with no clear thematic trends. These innovations range from environmental activities to community engagement, job creation, tourism, and education initiatives. The woman innovators are generally well-educated, with a wide age range from 26 to 78 years old. Some innovations showed collaborative processes involving multiple people, and can be formal businesses, associations, or informal individual efforts, although all were still led by women in some format.

Legal frameworks across partner countries aim to support women innovators, but often reflect male and urban norms, making them less effective for rural women. The impact of rural location varies, with infrastructure issues like broadband and public transport being common challenges, more related to urban-rural divides than specific rural typologies. Some countries struggle to apply rural typologies due to local variations, while others report differences in innovation focus based on remoteness, such as environmental and cultural sustainability in remote areas. Community support and local culture play significant roles in rural villages, while proximity to cities offers infrastructure benefits but may reduce rural engagement. Despite these challenges, women continue to innovate, leveraging local resources and networks.

Female-led innovations in rural areas are influenced by various factors, including family support, work-life balance, local community, infrastructure, access to finance, and bureaucracy. Family support is crucial across all countries, providing practical help, advice, and networks. Work-life balance is a significant constraint, particularly related to childcare and personal well-being, except in Sweden where a strong welfare system mitigates these issues. The local community can either support or hinder innovations, with infrastructural challenges like public transport and broadband access being common constraints. Some countries report that constraints and bureaucratic hurdles are major barriers, though some countries report satisfactory financial resources and supportive networks that facilitate innovation.

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SECTION TWO

NATIONAL CASE STUDY REPORTS ON WOMEN-LED INNOVATIONS IN FARMING



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FARMING WOMEN-LED INNOVATIONS IN CZECHIA

CASE STUDY REPORT

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1. THE NATIONAL CONTEXT

Czech agriculture transformed from almost 100 per cent nationalization of the farms and establishment of big public cooperatives through collectivization to a market economy, in 1989, and then to the EU's common agricultural policy, in 2004. At the same time, the structure of large agricultural enterprises was preserved - transformed into cooperatives, joint-stock companies and limited liability companies. This structure was supplemented by individual peasants (family farms), but to a lesser extent than expected. The result is by far the largest average area of agricultural land per farm in the EU. The average family farm manages an area of 39 ha. Another consequence is the extremely high proportion (73%) of farming not on own land, but on leased land. Agriculture contributes 1.79% to the gross domestic product of the Czech Republic, and its share of jobs is 1.99%.

The consequence of the historical development after the Second World War and the current structure of land management is the employment relationship with agricultural production of a very significant part of people working in agriculture. Another consequence is the unsatisfactory state of agricultural land. The water regime was disturbed by large-scale meliorations in the past. The consequence of ploughing the boundaries and the formation of large fields led to higher vulnerability to water and wind erosion and the loss of biodiversity.

In 2016, a hypothetical agricultural holding in Czechia utilised 132 ha of agricultural land. Out of this area, it owned 35 ha and the remaining 97 ha were rented. On average 7 people worked in one agricultural holding, out of them, 5 people were fully employed.

Czech agriculture occupies a unique position within the EU. It ranks first in the average area of agricultural land per 1 holding, first in the share of entities over 500 ha (6.6%), first in the number of employees per entity (4.9 people), and second place in the share of ecologically managed entities. In contrast, it ranks 28th in the share of family workers (37.2%), 24th in the share of own agricultural land (26.9%) and 24th in the number of workers per 100 ha of agricultural land (3.8 persons).

Organic agriculture is developing, which in 2020 was implemented by 11.2% of enterprises managing 15.3% of agricultural land (mostly grasslands). The reason is the mountainous nature of the greater part of the state, where there are no favourable conditions for conventional agriculture, but pasture. Given the organizational structure of Czech agriculture (large companies and large fields), there are suitable conditions for implementing the principles of precision agriculture. However, we see the share of women more in the implementation of the developing social agriculture.

Today, the Czech countryside is very little dependent on agriculture both in terms of job opportunities and the rural economy. Agriculture is particularly important for the creation and maintenance of the landscape, among other things, to support its attractiveness for tourism and housing. That is why it is also more important to seek the role of women in non-agricultural activities, especially in local administration, association activities and services.



In terms of workforce, there has been a significant decline since 2000. However, the situation is completely different for family farms and legal entities. While the number of agricultural workers on family farms has hardly changed, on legal entities it has fallen by a quarter since 2000. In 2016, 36.9% of owners, 39.3% of their family members and 10.9% of employees worked on family farms (the rest were agency workers, contract workers, etc.). For legal entities, 60.9% were employees, 35.2% were irregular (mostly seasonal) workers and only 2.3% were owners and their family members.

For what concerns the age structure of people engaged in agriculture, 15,215 are younger than 30 years, 70,938 are middle-aged (30-60) and the rest are older than 60: 12,646 persons. The share of older workers has been decreasing recently but remains higher than in other sectors of the national economy. In terms of education, 9.7% of workers in agriculture have a basic (even incomplete) education, 52.2% have an apprenticeship, 25.6% have a high school diploma and 10.7% have a university education. Unemployment in agriculture is increasing and has reached 2.2%. This results in a high proportion of foreigners (22,600 people). Wages reach 80.3% of wages in the national economy. So it makes no sense to focus on the creation of job opportunities in agriculture when it is not possible to fill the existing ones either. Moreover, unemployment in the countryside is lower than in the cities.

The share of women in the total number of labour force regularly employed did not change much since 2000; it decreased from 34.4% to 32.5%. Their share rose distinctly in the age group above 55 years (+22.7 p.p.), while a decrement was recorded for the group up to 34 years (-2.5 p.p.). The share of women in holdings of natural persons was slightly lower (31.5%) than in holdings of legal persons (33.1%). Since 2000 the trends in both legal forms were different: the share of women in holdings of natural persons rose by 1.2 p.p., probably in connection with an increased share of holder's family members working on the farm; on the contrary, their share in holdings of legal persons declined by 3.0 p.p.

According to projections (Šimpach and Pechrová, 2015), the share of women in agriculture will increase from today's 30% to 35% by 2046, and the share of women in managerial positions from 16 to 19%. However, the authors are based mostly on demographic data and do not yet take into account increased immigration.

In the agriculture sector (AS), almost 28 % of women are in leadership positions (it can be comparable to the whole national economy, but in industry, it is only 15%; Czech Statistical Office 2022, Labor Force Sample Survey).

Inequality in the remuneration of men and women at AS is also comparable to the national level, but it is less pronounced in agriculture than in other sectors of the national economy (the ratio of women's wages to men's wages in agriculture 85.5% in 2021 compared to 76.6% in industry). Wages in agriculture are, however, significantly lower compared to average wages in the national economy – they reach only 77.5% of the average amount (according to CZSO 2022, Structure of employee wages).



In AS, women – compared to men – are more often employed part-time. Eurostat data show that in the years 2019-2021, an average of 7% of women and only 2.5% of men were involved in this way (in AS).

For the future perspective of women in agriculture, their long-term stable representation among agricultural secondary school students has to be pointed out (according to data from the National Pedagogical Institute, in 2021, 35% of women studied agricultural secondary school specialization).

2. THE INNOVATION

Among the innovations, one large agricultural cooperative, one limited liability company, several organic farms with their own sales, and also agricultural enterprises of multifunctional agriculture combined with environmental, educational, social functions were analyzed.

The innovations (all of them based on sustainability principles) introduced by women in our sample can be divided into three groups:

- socio-cultural innovations (revival of social life based on traditions, education and enlightenment, community building),
- economic innovations (new technologies in agriculture, energy self-sufficiency, diversification of economic activities, specific local production)
- environmental innovations (sustainable soil management, vegetables production without chemicals, ecological/organic farming methods, increasing the landscape ecological stability, use of renewable energy sources, and transition to the circular economy)

A striking phenomenon in all cases is the combination of primarily economic activities (common and as well as innovative) with educational and enlightenment activities (to varying degrees for all women, for 8 of them to a very significant degree). Their work is strongly rooted in the local environment or the result of their innovation is the specific professional community (7 women).

Female farming innovations near large and medium-sized cities often focus on presenting the history and present of agriculture to urban residents who have often unrealistic ideas about the industry. Recently, there has been an increasing emphasis on the ecosystem services of agriculture in the countryside. Hobby businesses for urban residents of an agro-tourism nature (for example, breeding, stables and horse riding) are also considered.

In rural villages, which are usually located in fertile lowlands, conventional agriculture prevails, in which women are less involved. Winemakers are a certain exception. From the point of view of the project, the representation of women and their willingness to participate in the solution of the project was lower. (The exception was the chairwoman



of the board of the Agricultural cooperative Unčovice, which with 6,100 hectares of land is one of the largest agricultural holdings.)

The (highland) periphery (both internal and border) seems to provide a wider field of action for innovative women. Conventional agriculture, which tends to be the domain of men, is not very successful in these areas. Here, women develop multifunctional agriculture in combination with various forms of direct sales, social agriculture, the participation of farms in the cultural life of municipalities, educational functions and the like.

Table 1. Interviews

| N. Interview | Age | Educational Level | Dimension of the farm (ha) | Property rights(own; rented) | Legal form of the farm (family farmer; company) | Year when she started operating in the farm |
|--------------|-----|--|--------------------------------------|------------------------------|---|---|
| 1 | 45 | Higher education | 6,100 | rented | company/collective farm (the cooperative) | 2003 |
| 2 | 50 | High school education (currently studying at university) | 215 | rented | family farmer (limited liability company) | 2004 |
| 3 | 41 | High school education | 10 | own | community (registered association) | 2009 |
| 4 | 45 | Higher education | 412 | own (mostly – 310 ha) | family farmer | 2001 |
| 5 | 64 | Higher education | 5 (mostly non-agricultural pastures) | own | family farmer | 1993 |
| 6 | 39 | Higher education (doctor's degrees) | 15 | rented | company | 2017 |
| 7 | 45 | Higher education (doctor's degrees) | 17 | own | association | 2014 |
| 8 | 52 | Higher education | 10 | own | association | 2001 |
| 9 | 45 | Higher education | 1500 | | family farmer + NGO (museum) | 2003 |
| 10 | 45 | Higher education (doctor's degrees) | 65 | own | family farmer | 2008 |



3. INNOVATION PATHWAYS

3.1 MOTIVATORS FOR INNOVATION

The typology of the areas is not a decisive factor shaping innovations. However, the personal motivations of women and life attitudes appear to be essential. Half of the women come from an urban environment, but most have moved to the countryside in a nearby region. The remoteness or more demanding climatic conditions were not reflected in the motivations of the women to start their activity in agriculture, and their attitudes in this regard did not differ in the entire group. They were mostly determined to work in agriculture for a long time ahead, in many cases from childhood. In only three cases the motivation was supported by family tradition. Almost all of the respondents started their career in the current field immediately before attaining higher education; some of them already worked on family farms during their studies or had a long-term interest in (especially alternative ways) farming. Only two respondents started a primarily different career path (academic position and extensive non-agricultural business) and their change of direction occurred later in their life and based on different impulses than the rest of the group (the need to leave the academic bubble or the desire to rest and enjoy the last motherhood in harmony with nature). One of the women then deviated from agricultural production to community gardening and community landscape care.

Most women were also motivated by the possibility of combining work with childcare and household care. This aspect was often emphasized (according to the participating women – animal care, fieldwork or administration – can be done easily together with children, this fact was considered a motivational advantage). Women in agriculture focus only on selected, apparently less competitive sub-specialization in agriculture business/activities. These are primarily: animal care, marketing, and sales of own production or farm accounting.

All respondents agreed that the beginning they did not have different ideas compared to current reality. They entered the business knowing all the risks, opportunities and expected barriers. They all try to improve processes mostly on a local scale (on their farm or in their community). Ideas are chained and the initiating motives are the improvement of the business, the development of the farm, and ultimately the prosperity of the whole community. In the beginning, there is an idea, inspiration or an identified potential/opportunity – rather than a necessity, e.g. in the form of looking for a use for existing accommodation capacities, use of the accumulated know-how for educational activities, replication of normal operations on a micro-scale (children's farm, demonstration greenhouse). Sustainability and crisis management is a supporting concept that consciously and unconsciously drives the development of an enterprise. The driving force in relation to the company's diversification and sustainable activities is mostly a woman, even if she is part of larger male collectives.



3.2 CONSTRAINS AND FAVOURABLE CONDITIONS

Family background and partnership play an essential role; this was mentioned in all cases. In the interpretation of this fact, it can mostly be observed through a polarized point of view (partnership as an advantage for starting a business versus ending a partnership in connection with business/work in the non-profit sector). Exactly half of the women interviewed started a business together with their husband, and this cooperation is perceived as a significant motivation and advantage. The relationship provides them with decision-making support, substitutability, and, in most cases, greater financial security, enabling a better reconciliation of work and family life. The other half of the women are self-employed (most women were divorced or widowed, specifically three women in agriculture and two women in NGOs). These women experienced non-support from their husband at a certain stage of their business: as a rule, they perceived it more as an obstacle on a personal level. In business, this means greater responsibility and loneliness, which implied dealing with initial underestimation by their business partners (men).

The typology of the territory does not play a significant role, they state, for example, "... the harsher climate here is not a disadvantage, but a fact. I went into business with this knowledge." In no case were children mentioned as a limit, on the contrary, they are usually a self-evident part of the mother's activities (they help on the farm from an early age, participate in public activities, inspire the introduction of several services intended for children and thus support business diversification). Differences can be observed on the axis of women in top management positions and women who are part of a family business in non-managerial positions. In top management positions (represented by one respondent), multi-year parental leave can be perceived as a significant disadvantage, especially when the company specializes in technology and innovations (e.g. precision agriculture in a large company). A specific feature of the Czech Republic is a three-year long parental leave for one child: if a woman is not at home with the child during this period, a large part of society still perceives this fact negatively. However, all of the participating women worked to varying intensity in their current line of business during their parental leave.

The lack of farmland is a significant limiting factor in the Czech Republic, both at the level of ownership and at the level of renting. However, none of the women pointed to this barrier in their business. Only the disadvantages associated with land leases were mentioned (i.e. the need to communicate changes with the land owners in advance and the associated risk of disagreement) if they did not directly own the land.

Financial problems were not mentioned, but rather the considerable administrative burden to which women are already adapted and expected. All women emphasized the need for continuing education: they consider this fact not as a disadvantage but rather as an opportunity (innovate, improve business, and create networks). Access to information is not perceived as a limiting factor; they most often exchange information in personal contact and they highly value networking within the professional community and often also within the local community.



Respondents mostly did not mention significant obstacles in their business or activity; on the contrary, they adapted to the conditions and looked for new solutions. Here, too, personal approach and inner energy, that women had as they started their businesses, is a fundamental motive for overcoming obstacles.

In three cases, the primary motivation was family background and an established family farm, all of which can be found in remote regions.

In the case of non-profit organizations dealing with agriculture, the initial impulse was an inner conviction and an effort to find a natural way of farming and to apply the principles of sustainable development (linking the economic, social, and environmental pillars). Most of the work fully corresponds with their life attitudes.

In enterprises where modern technologies are used and the activity is connected with technological innovations, this very circumstance was an impulse and motivation. Basically, it was the desire to try something new, to start something that could be sustainable and grant self-sufficiency (two women).

3.3 IDEA AND PREPARATIONS/DECISIONS AND PREPARATORY ACTIVITIES

All women were educated upon starting the innovation and continue to be educated: all of them consider the learning process essential in their work, as well as or professional networking. All women are part of the network. These are non-governmental organizations such as the Club of Agricultural Women Managers, but very often they are unofficial networks that women organize. The main activity is the exchange of experience and information. These networks were often based on informal meetings, in the post-Covid era they were mostly converted to the digital level.

In terms of start-up financing, women can be divided into the following groups:

- Joined a large company and their own initial capital did not matter (2 women)
- They had a family background; including a significant financial capital (the company also draws subsidies to varying degrees, five women)
- founded a non-profit society and did not do without entry subsidies (3 women). They get entry subsidies for investments (like reconstruction of buildings, purchase of machinery).

3.4 CONCRETISATION OF INNOVATIONS

A total of 15 different innovations were identified, the primary objective of which is to ensure the viability of the farm. However, several innovations also have a multifunctional and non-production related character. These are mostly related to the environment, but innovations of a social nature are also significantly represented. An overview of the news is given in the table below. It can be stated that women in suburban regions are more inclined to the systematic introduction of ecological innovations. Women in remote and



central rural areas usually do not introduce this kind of innovation in a targeted and systematic way but apply the principles of sustainability in individual steps according to the acquired experience or knowledge. Women in non-profit organizations gravitate toward social innovations more than others.

Table 2. Focus of the innovations

| Type of innovation/ farm | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|----------------------------|---|---|---|---|---|---|---|---|---|----|
| renewable energy source | | | | | | | | | | |
| water management | | | | | | | | | | |
| circular economy | | | | | | | | | | |
| environmental awareness | | | | | | | | | | |
| local production | | | | | | | | | | |
| caring for the landscape | | | | | | | | | | |
| ecological breeding | | | | | | | | | | |
| sustainable production | | | | | | | | | | |
| pesticides free production | | | | | | | | | | |
| sustainable tourism | | | | | | | | | | |
| new technology | | | | | | | | | | |
| jobs | | | | | | | | | | |
| employment of the disabled | | | | | | | | | | |
| community building | | | | | | | | | | |
| traditions | | | | | | | | | | |

3.5 IMPACTS OF INNOVATIONS

Innovation can mostly be seen as incremental and permanent, often with lasting/sustainable innovation potential – new services or products are offered (e.g. training modules and educational activities, regional food, exchange of experience, professional networking, engagement opportunities persons with disabilities, innovative offer of accommodation services, etc.). Women's creativity is not influenced regionally but is determined by the field of their business and the opportunities supported. Many innovations depend on external funding.

No radical or disruptive innovation was noted. In only two cases, women's innovative approaches take place completely independently from the local community (there is no



interaction with the local community), which can be interpreted as slightly contradicting the principles of sustainable development. Innovations in this case are mostly focused on the internal needs of the farm and at the same time on external clientele, especially within the range of tourism-related services (accommodation, horse riding, etc.). Both these women, indeed, live in remote regions (and remote parts of the village), they live without a partner, and they moved to the place of work from nearby towns, but they do not have their roots in the areas where they established the businesses.

Other innovations are fundamentally connecting to the community in which they are implemented (customers in the meat or tomato shop, nearby elementary schools); they emphasize self-sufficiency and long-term sustainability (energy, renewable resources, planting trees in the open landscape, cultivation without agricultural chemicals). Innovations can therefore mostly be evaluated as long-term, with local impacts (in the context of the farm and the village or the surrounding community). These internal impacts are often complemented by external impacts (clientele from more distant places, professional community).

4. INNOVATION ECOSYSTEMS

4.1 POLITICAL

Cooperation between women and local institutions was neutral in most cases (no significant support was noted, but no barriers were identified either). Only in three cases was the support of local and regional authorities necessary. However, the majority of women introduced innovations thanks to the subsidized regional, national, and especially European provisions (see section 4.2). In no case did women report barriers at the policy or regulatory level. As a rule, they complained about the large administrative burden, which they take into consideration from the beginning and do not fundamentally question. Farmer women themselves point to the weak position of women in professional life. Limits are mainly given by stereotypes in society, which are prescribed across sectors, but a woman in the role of a farmer is probably more surprising than in other sectors. However, they do not feel that the state or municipality should change anything in this matter. Changes in society's thinking are necessary, but it is a matter of education and generational change; some women ignore this inequality and do not pay attention.

4.2 ECONOMIC

All women receive subsidy support, but only some of them are mainly dependent on it (it concerns rather the non-profit sector, but even here small crowdfunding and especially volunteerism play a big role – e.g. in the form of unpaid work planting trees in the landscape, involving the disabled/handicapped). Other women (8 in total) generate additional income on their own in addition to subsidies (selling agricultural commodities and food, organizing paid events, offering services including accommodation, etc.) or deliberately reduce costs (e.g. own energy sources, precision agriculture, and savings on fertilizers and biocides substances means). A system of agricultural and other subsidies is usually necessary for the viability of enterprises. Three women continued



the family property, two women joined an established agricultural cooperative, one woman transferred funds obtained from a previous non-agricultural business to her current farm, one woman started together with her husband and progressed step by step (first on rented land and on a small scale and then on their own farmland and property), three women created their community dependent on the grant system and did not need their own additional input capital (this is an NGO).

4.3 SOCIAL

Women need to network; the exchange of experiences is absolutely essential for them and their business. Anchoring the network in the local community is the most common practice. If there is no anchoring in the local community, it is because women have specific professional goals that do not imply the support or participation of the local community. For instance, one woman is networking with returning tourism clientele and she gets inspiration through the internet and artificial intelligence. Regional and national networks were not mentioned by any woman.

Women do not have a problem with employees (subordinates) as mostly these are selected from a closed and carefully selected circle of people (e.g. family members, friends and acquaintances, women in a specific situation – women on maternity leave, female foreigners etc.).

Gender stereotypes are relevant here. On farms, women are more often engaged in so-called "soft activities" (administration, marketing, accounting, sales, education and training, animal care) – in general, these are activities with either fixed working hours and easy substitutability (e.g. educational activities) or position with flexible working time (administration etc.). These positions are most often associated with a better combination of family and household care. However, even these stereotypes did not apply to the entire monitored group of female farmers.

In the group, there were also women challenging these stereotypes, who combined managerial working positions with another important position (e.g. a woman with a high managerial position in a large agricultural company and at the same time a high managerial position in the Regional Agrarian Chamber, a female farmer without permanent employees and at the same time the director of an organic certification company, a female farmer without permanent employees and the coordinator of an association of women in agriculture). The role of women in general is still strongly determined by society's expectations and stereotypes related to motherhood and their parental functions.

Social networks often play a significant role, especially when it comes to promotional marketing and professional networking.

Gender differences are manifested rather only in the initial mistrust of business partners, who do not expect that a woman will occupy a higher position in the company. This usually changes with time.



4.4 TECHNOLOGICAL

The women involved in the research did not develop any new technology, but rather sought ways to communicate with the public and spread awareness, or rather "advocate" their role (and the role of agriculture in general) for society. They mostly find it necessary to inform and involve others in meaningful farming or agricultural activities. Very often they feel that they have to convince the public of the importance of agriculture for society. Agriculture is generally viewed from a different angle in Czech society and has a long-term reputation as an inferior specialization.

Innovations are also mostly aimed at opening up the agriculture outside the closed community and explaining the connections (e.g. the farmer as a landscape manager or the connection between human health and healthy nutrition or healthy soil). While the image of a typical farmer is unfairly perceived in Czech society as a "complaining man receiving subsidies", women want to actively change this image and convince the public of the multifunctional and irreplaceable role of agriculture.

Two of the women are involved in innovative technologies (pesticide-free cultivation and natural-based herbal medicine, purchase and use of precision agricultural technology). However, most innovations are based on traditional practices, and these procedures are perceived as innovative even in the context of modern times.

The activities of half of the women are inherently based on the interweaving of all pillars of sustainability, the social pillar being particularly strong.

4.5 ENVIRONMENTAL

Eight out of ten women's innovations have a strong focus on sustainability, which is the basic supporting concept of their business. For the two remaining women, environmental sustainability is not a key concept, but they still apply the principles of sustainability (through renewable energy sources, circular economy, local production and shortening of supply chains, environmental education, organic farming, and breeding).

All deal with environmental improvement and take environmental context into account when promoting innovation.

Most of them have adopted agroecological principles or organic farming.

Most (7) women are active female farmers, 5 of them have agriculture as main occupation. For the other 3, farming is just the culmination of a sustainable way of life (community garden, community chicken farming, self-sufficient community employing the disabled in agriculture, producing sustainable products, farm in the city, demonstrating the historical roots of agriculture and passing on the legacy of ancestors, volunteering care for the landscape).



5. MAINSTREAMING ACTIONS

5.1 SCALING UP

Regarding the activities of female farmers in our sample, there were no proposals or demands for changes in policy, laws, institutions or norms (at any level).

5.2 SCALING OUT

Most of the women approached this question with humility and did not see themselves as "influencers". However, they partially admitted that they could inspire someone. However, they did not use this strategy on purpose. On the contrary, they drew inspiration from others.

Women usually do not want to expand their businesses outside the region as they have built a strong relationship with the region/place where they have historical roots or their business. They mostly consider their business to be locally unique and non-transferable (these specific conditions do not exist elsewhere). Most women were satisfied with their businesses. One of the women switched from a small farm to taking care of the landscape (her main job was planting trees in the landscape, tending orchards and running a community garden).

It is typical for women to be involved in networks or professional spaces, where there is space for exchange of experience, knowledge and inspiration. This is certainly an efficient method of spreading of knowledge. Various social events recognizing the achievements of women in individual fields, such as the Entrepreneur of the Year competition help inspiring the Czech society.

5.3 SCALING DOWN

Most women acquired the know-how from their families or learned gradually by practicing. All of them confirmed that education is important, and it is necessary to undergo it on an ongoing basis. However, they have not actually graduated in specialized capacity building/agricultural programmes. They have created a network of contacts independently and through their business. The reason is the insufficient offer of such training in Czechia, in the past there was no such offer at all.

5.4 SCALING IN

Women respect each other very much, they know the context of agriculture and its risks, and it inspires them to meet and share experiences. For most, it is more pleasant to deal with a woman at work, but this is not the rule.

They did not mention any organization supporting their innovative approach: these do not even exist in the Czech context. They did not propose changes, if they identified obstacles in their business; they were determined to solve them themselves. They would not be interested in institutional support for women and changes in laws.



They don't know AKIS at all.

5.5 SCALING DEEP

Most of the benefits can only be observed at the local level, but the other context (national, regional) is not even important for the majority of women in sample. In any case, they contributed to the micro-scale of their immediate surroundings. However, the differences can be traced to the size of the subject. A woman in top management positions in a large agricultural cooperative certainly has greater territorial impacts and disrupts social stereotypes more significantly than women in small companies (family farms). Regional differences can be seen not so much at the level of agriculture as in the status of women in remote and suburban regions.

According to the respondents, a generational change (based on a mind change) is necessary to support women in their professional development.



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FARMING WOMEN-LED INNOVATIONS IN FINLAND

CASE STUDY REPORT

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1. THE NATIONAL CONTEXT

Finnish rural areas face challenges, especially those linked to aging and unbalanced demographic developments. Especially young and educated women tend to leave rural communities, which causes demographic imbalance and challenges in the social structure and unsustainable local economies. Women's outmigration is often related to the lack of job opportunities and services, rather than to the rural region itself. Digitalization has been often studied or planned as a potential and applicable tool for meeting the challenges of ageing, outmigration and disbalancing of sparsely populated rural areas. Digitalization is hoped to help with supporting wellbeing, education and other services and for creating new business opportunities and models.

Rural area is usually described as a great place to raise a family. Small communities are generally described as having a communal spirit and the closeness to nature is considered to be a source of wellbeing and for engaging in various activities. Most described having received help and support from their community, though the innovative ideas and practices of the women sometimes faced underestimation and amusement by the locals in the beginning. In some areas, local plans for windmill farms or mining were perceived to threaten the attractiveness of rural areas. Overall, agricultural farms were described as struggling financially and suffering from a lack of support and appreciation from the government.

Rural typology did not have a noticeable effect on the innovations; the type of innovation mattered more. For example, the closeness to rural centres versus remoteness mattered in relation to the type of customers the innovative businesses were trying to reach. For tourism businesses the problems of accessibility related to remoteness were lessened if there already existed a locally lively tourism scene. It also mattered, how many days tourists would want to spend in a specific area or participating in a tourist program. People are more ready to travel longer distances if they spend several days there versus if the program only lasts an hour or two: then it was an advantage to be located closer to population centres. Innovations related to animal-assisted welfare, however, need to reach customers nearby. However, there was one remote rural animal-assisted wellbeing business that had enough customers locally and thus the remote location was not a problem. When the women operated in closeness to rural centres and bigger cities, or in places with a lively local tourism scene, these were considered as advantages to their own activities. On the other hand, most innovations required the presence of nature and remoteness from the hassle of cities. In these cases, remoteness was also a favourable condition.

Finnish farming relies commonly on small and mid-sized farms that are often family owned. Finland has a unique geographical profile with arctic climate conditions, vast forests and numerous lakes that characterize and define the farming models. Due to the environmental conditions and for historical reasons, Finnish family farming often combines multiple livelihoods – such as tourism, bioeconomy and forestry, and agriculture. Over 30 per cent of farms practice other activities in addition to agriculture.



2. THE INNOVATION

Table 1. Farm case studies in Finland

| N. Interview | Age | Educational Level | Dimension of the farm (ha) | Property rights (own; rented) | Legal form of the farm (family farmer; company) | Year when she started operating in the farm |
|-----------------|-----|---------------------------|----------------------------|-------------------------------|---|---|
| FI_F_EC_1/Int.1 | 41 | upper secondary education | - | - | farm | 2012 |
| FI_F_S_2/Int.5 | 40 | higher education | - | - | limited partnership | 2015 |
| FI_F_EC_2/Int.8 | 42 | higher education | - | - | farm and limited liability company | 2006 |
| FI_R_E_1/Int.1 | 50 | upper secondary education | - | - | limited company | 2008 |
| FI_F_E_3/Int.3 | 40 | upper secondary education | - | - | limited company | 2021 |
| FI_F_S_1/Int.4 | 49 | upper secondary education | - | - | limited company | 2006 |
| FI_F_S_3/Int.6 | 53 | upper secondary education | - | - | limited company, sole proprietorship/trade name | 2013 |
| FI_F_E_2/Int.2 | 48 | upper secondary education | - | - | cooperative | 2012 |
| FI_F_EC_3/Int.9 | 66 | upper secondary education | - | - | partnership | 2002 |
| FI_F_C_3/Int.10 | 40 | upper secondary education | - | - | trade name | 2020 |

3. INNOVATION PATHWAYS

3.1 MOTIVATORS FOR INNOVATION

Innovations typically started from the basis of personal hobbies, needs and interests; many women had an interest in being an entrepreneur or turning a hobby into something to make a living. For the herb cooperative, the motivation was about seeing how collaboration with marketing and sharing the workload could benefit several small enterprises. Life experiences influenced the type of activities the women wanted to engage in. For many, individual professional and life stage had been a catalyst for their motivations: such as dissatisfaction with previous employment or maternity leave and having children. Innovation was often related to finding a way to earn an additional income on the farm.

Since a farm income can be very limited, adding other activities and services was seen as valuable for the livelihood and to support the continuity of the farm. For example, there were two women engaged in reindeer husbandry whose innovations helped to support the continuity of the traditional reindeer herding culture that otherwise struggled with profitability. Some other women did not engage in farming at all but had found an



unconventional way to earn income on a farm. For example, one woman had bought a historical farm and started arranging birthday parties and other children's events there.

Many women shared a wish to help people and share with others the wellbeing brought by being in nature and with animals. For some it was also a longing for nature and rural areas that they had felt for a long time. City life felt overstimulating. Overall, the women shared the trait of having lots of new ideas and a will to turn them into reality. There was often an element of chance in the formation of the innovation. For example, a woman started offering animal-assisted wellbeing services after experiencing troubles with her own mental health and finding her farm environment with its animals to be a healing environment.

3.2 CONSTRAINS AND FAVOURABLE CONDITIONS

FAVOURABLE

Overall, the women reported receiving help from their family, in the form of concrete help (such as helping with renovations, moving products), or getting advice and innovating together with family members. This was much appreciated. Women also consistently reported receiving help and support from their rural communities, even though many faced bafflement within their community in the beginning. Overall, the ability to form social networks, and utilizing existing social networks were considered as helpful. Some innovations, such as the herb cooperative and the mushroom business relied on the availability of domestic herbs, mushrooms and berries.

Women reported that they possessed a character and personality traits which helped with being innovative and engaging in entrepreneurship in general, such as being brave, having constantly new ideas, and being able to turn ideas into reality. Previous work background and existing skills usually brought something that could be utilized in the new activities, such as knowledge of digital marketing, on managing financial issues, entrepreneurship, having an artistic background or in social work or farm relief worker. Being a woman was usually seen as strength in the kind of activities they did. For example, women in general were thought to have more empathy and being more interested in caring for others, which was a strength and inspiration for those offering some sort of wellbeing services. One woman had started to arrange children's birthday parties on her farm, which was inspired by her own experience as a mother with workload arranging such events. She doubted whether a man would have had the same idea.

Rural area and closeness to nature, as well as an ability to keep various animals on the farm, were considered overall as major strengths. Many activities depended on the peacefulness of the rural environment, such as animal-assisted welfare services or reindeer herding tourism. If there already was an active local tourism scene, or the farm was situated closer to some rural centres or cities, this was strength, for it brought customers and networks with other businesses and entrepreneurs. For example, the animal-assisted welfare services are mostly used by local people and if they are located too far from population centres it is difficult to get customers to come by, especially since



rural areas may lack public transport. Those engaged in tourism activities, could attract tourists from further away but closeness to population centres and, for example, cities with airports was a plus. Those located in more remote rural areas, benefitted, if it already existed, of the active local tourism scene.

CONSTRAINTS

Rural areas are characterised by long distances and location and accessibility could be a challenge. The common lack of public transportation together with long distances, often posed a challenge for getting employees or customers. Since the women started innovating once they already had the farm, the place of the farm was not always ideal when it comes to accessibility. Lack of local tourism was a challenge for those who engaged in tourism.

The innovations that relied on natural products such as herbs or mushrooms were affected by the very unpredictable availability of these products from year to the next and had to come up with new products and services to compensate. Also, in Finland it is a challenge to find people to pick mushrooms, herbs or berries for businesses which also affects the volumes of production.

Finding time and skills for effective marketing was a challenge for many. Many ran their business mostly alone and there was so much work that marketing was often the one aspect that suffered. The herb business cooperative faced the challenge that all the small business owners had to give up their own identity as an individual enterprise, and be okay with having the same brand, selling not only their own products but other enterprises' products as well.

Many had financial challenges and were affected by the rising costs of gas and electricity. Overall, most women reported that their own wellbeing and coping strategies amidst the workload were at times threatened.

Those involved in animal-assisted care felt that this was perceived as a very new thing in Finland. Hence, health care institutions or municipalities did not always understand its value. This posed challenges since cooperation with health care institutions and municipalities was essential in getting customers.

Covid was a big challenge for most women because it limited customer interaction and affected prices of feed, fuel and materials. Many women expressed lack of support during the pandemic and having financial troubles.

3.3 IDEA AND PREPARATIONS/DECISIONS AND PREPARATORY ACTIVITIES

The women have had various paths to concretize their innovation depending on the nature of the innovation itself. The first idea for business was usually born by chance and related to the woman's particular life and living circumstances. Most women already had the farm and some animals, but often built more infrastructures, and renovated the farm



buildings, and sometimes bought more animals. Many had expanded their operations greatly. Often the preparations included training about farm animals and about other new activities. For example, one woman heard by a chance a lecture on equine assisted wellbeing services and immediately felt that it was her calling.

The five women who established an herb business cooperative met by chance during an herb training course.

In general, everyone had applied for at least some financial support, especially for building and renovating the farm infrastructure and for buying animals. The preparations also typically included establishing the company, designing a website and creating social media pages.

Some women felt a lack of support when starting their innovation journey. There was a tangible lack of a support system. Local advisory groups and banks did not support their idea as much as the entrepreneur would have expected.

The women emphasized the importance of establishing networks with local entrepreneurs and businesses.

Most women had educated themselves further and took on various courses and webinars to develop skills related to the particular activities they were engaged in, such as in green care, MinD training, energy therapy, or horse pedagogy, or in entrepreneurship or in marketing.

3.4 CONCRETISATION OF INNOVATIONS

The innovations created new jobs (seasonal or permanent), internships, summer work for youth, work try-outs, and work rehabilitation possibilities, usually for local people. The women collaborated and subcontracted other local entrepreneurs and businesses. For example, an entrepreneur with a seed business depends largely on a supply network that works through subcontractors.

Most innovations created new wellbeing or tourism services and programs that were also utilized by the local rural communities. Women also emphasized the importance of getting feedback from customers and constantly developing their products and services based on it. Some farms were involved in agrobiodiversity conservation and for example one sheep farm preserved cultural biotopes by sheep grazing.

3.5 IMPACTS OF INNOVATIONS

The women's innovations are supporting local economies and businesses by using and promoting their products or services, and by subcontracting local entrepreneurs. Some of the innovators were nationally recognized and thus contributed to boosting local visibility. The women who had tourism businesses reported that through their actions they had inspired other local people to engage in tourism to earn an additional income. A few entrepreneurs expressed being a role model for children. Children attending riding



lessons and school classes visiting farms had expressed being inspired by the entrepreneurs and their activities.

Those who offered animal-assisted welfare services supporting local wellbeing and new tourism programs such as birthday parties and escape rooms also felt that their services were also used by local people and thus invigorated local social life. The two women engaged in reindeer herding tourism spread knowledge of reindeer herding culture and supported its continuation. The women engaged in animal-assisted welfare services also contributed to developing these services and raising regional and national awareness about them and their effectiveness. One entrepreneur felt she had helped people who had not found help elsewhere through animal therapy. She is working on expanding her services to even more demanding social work including violence and conflict counseling.

A couple of the farms were involved in preserving the indigenous Finnish horse breed Finn horse, or indigenous Finnish sheep breeds.

4. INNOVATION ECOSYSTEMS

4.1 POLITICAL

Overall, the women who were engaged in agriculture and farming emphasized the need for a political will to support and see the value in primary producers. They felt that their professions are not valued even though they contribute to domestic self-sufficiency. They also felt that nowadays animals, for example sheep, are seen mainly as a climate problem.

A sheep farmer wants to bring farm life closer to people, especially to children. She feels people have become too alienated from food production. She hosts school classes on her sheep farm and utilizes everything from her animals.

One woman lived in an area where there had been an increase in wind farms near settlements that posed serious challenges to the local quality of life and threatened the viability of tourism. Behind the increase in wind farms is the green energy transition.

Some women felt that Finland does not support small entrepreneurs enough, and that the jump from employment to entrepreneurship is, at the moment, financially too much of a risk. For example, the taxation of small businesses was considered to be too high and employing people as a one-person company is too much of a financial risk. This means that the workload accumulates, and the entrepreneur becomes over-worked, facing the risk of burn-out.

Employment policy decisions seem to be made with bigger companies and factories and factory workers in mind, but the women noted that in today's world employers are diverse and they wished that politicians would take this into consideration. For example, in tourism the work is seasonal in nature and the women felt that an employer should be able to agree locally with employees, for instance, that during winter season they would work more and during summer they would work less. Previously it was possible to apply



for financial support for hiring the first employee, which was very good for small entrepreneurs, but now such support mechanism no longer exists.

Those women who were involved in animal-assisted wellbeing services had been lobbying better awareness concerning animal-assisted care in parliament. They had noticed that an institutional change to Wellbeing Services Counties had worsened people's possibilities to use animal-assisted wellbeing services. They also had experienced how public tendering, for example within wellbeing services counties, favors bigger companies who know how to fill in the applications. Smaller entrepreneurs may have the expertise but don't have the knowledge needed for the tendering process, preparing contracts and offer/bid technicalities, and as such are at a disadvantage. They also felt that the public sector has a negative view of private sector service providers.

4.2 ECONOMIC

Most women had received some financial incentives, such as EU-funding through Centre for Economic Development, Transport and the Environment, Agricultural fund, or LEADER. Challenge here is that most financial incentives, such as LEADER, need a self-financed share which many women did not have. The women also emphasized a need for the availability of grants supporting smaller pilot projects or investments (such as establishing a website). Women often managed too small businesses to apply for available funding which seem to be tailored for the needs of bigger companies and investments. Those women who are not full-time entrepreneurs had difficulties in finding financial support and had mostly used their own money. One woman involved in animal-assisted wellbeing services had tried crowdfunding twice but did not reach the goal. Another entrepreneur from the same field got some financial aid for further education.

During Covid19, many entrepreneurs faced major financial issues.

4.3 SOCIAL

Most women were very active locally and have large social networks. All emphasized that networking is crucial to reach success. All women had received support and help from local communities, even though some had faced belittling in the beginning. The women also received help and support from their families: in agriculture and reindeer husbandry it is typical that the whole family participates in the activities.

Some women had experienced prejudices from other locals and neighbors for being women running a farm, but these instances were relatively minor. Most attitudes towards them had been positive and supportive. Even though the head of a farm in Finland were traditionally male, Finland has a tradition of strong women in agriculture and the work of both men and women is equally appreciated. Some of the women had female role models who had run farms, and, for example, one woman's farm had been inherited twice from a mother to a daughter. A couple of women were running horse farms and horse entrepreneurship is generally a female-dominated field.



Reindeer herding culture is traditionally male dominated, but attitudes are beginning to change, and more and more women are involved. One of the women had been among the first women in her area to participate in herding work and to inherit the livelihood from her father as a woman. However, there were negative local attitudes towards reindeer herding in her area, which for her were psychologically hard to cope with.

Many women felt that being a woman had influenced the type of activities they wanted to engage in. For example, women were considered in general to be more emphatic and wanting to care and help people and thus more inclined to engage for example in animal-assisted wellbeing services. Many also felt that being a woman had influenced the way they wanted to run their businesses: they were less profit driven (which was associated with men) and put other values first such as social responsibility and environmental sustainability.

In rural areas it is typical that women are the primary care-givers of small children. Most women did not see this as a problem per se and for example they valued the possibility to be at the farm with their children. However, this increased the workload and sometimes lessened the amount of time they could put into developing the business.

One woman noted that in Finland still prevails a culture of self-reliance, the idea that one must do everything by oneself. This may lead to exhaustion and burn-out for entrepreneurs and farm-owners since they are not easily inclined to ask for help. She was involved in horse entrepreneurship and had seen how some of her peers had fallen to a lonely burn-out, which in their business unfortunately meant that the care for the animals suffered as well.

Meeting some specific people has been important to get an idea about what and how to do things. Artistic background and networks have been a resource, but the role of arts and music in social services is still not fully acknowledged and recognized.

Constraint: Traditional gender roles and stereotypes ask for extra effort to show that 'a woman can'. For example, operating heavy machinery still gets odd looks. Especially attitudes of older men are still quite old-fashioned and consider women to be not too loud and rather work in the kitchen (attitude of male neighbours). Otherwise, men and women were considered to be equally capable.

4.4 TECHNOLOGICAL

All of the women used social media (YouTube, Instagram, Facebook, Facebook pixel, Tik Tok) for marketing. Some also used TripAdvisor, blogs, podcasts, email newsletters, and websites. Overall, these were considered to be very important avenues for marketing, especially for rural areas. One woman mentioned that local development company portals have provided visibility.

One woman, who had a background in IT, noted that digitalization, AI and robotics have a lot of potential to increase income for rural farms, by developing farm work to be more efficient and by providing new opportunities for earning income. While in traditional farming the amount of income is limited, with digitalization and social media the income



one can earn has no limit. She mentioned for example, berry picking robots or making animal videos for social media.

4.5 ENVIRONMENTAL

Rural environment and the possibility to keep animals (horses, sheep, chicken) or herd semi-domestic reindeer are essential for all the innovations. Rural and farm environment as well as its animals were seen as sources of wellbeing. Seasonal variation of Finland was seen as something that brings rhythm to life, and work was often organized according to different seasons. For those engaged in reindeer husbandry tourism the season is during winter months and getting more tourists (and thus income) for summer is a challenge. On the other hand, those who organized various events and escape room games the season was summer months, with winter as limiting factor for outdoor activities.

The women were overall environmentally conscious and considered sustainability issues in their operations in various ways, such as by practicing organic farming, recycling, using recycled furniture, and giving food waste from local grocery stores to their animals. They favoured the use of local products. Women had obtained different certificates and labels for their innovative operations, such as Sustainable Travel Finland certificate, Green Care labels, and Green activities certificate. One woman used her sheep to maintain traditional rural biotopes, and another was involved in managing field and forests, wetlands, traditional biotope meadows and in restoring a creek and some had sheep that keep landscapes open and contribute to biodiversity. Another employed circular economy as much as possible and used manure as a fertilizer. Those with sheep sold and processed wool for products. One woman who was involved in animal-assisted care was also a front runner in organic sheep farming.

An entrepreneur with a seed business is actively trying to reduce dependence on oil. The seed drying runs on local wood chips and seed waste. She also uses a no-tillage farming technique.

Some farms are subject to environmental regulations due to subsidies.

5. MAINSTREAMING ACTIONS

5.1 SCALING UP

One woman expressed having influenced gender norms in relation to reindeer husbandry in her area, by being one of the first women to engage in herding work. A couple of women had probably influenced local attitudes towards farm tourism into more positive through their own tourism businesses related to escape rooms and reindeer tourism.

Those engaged in animal-assisted wellbeing services were involved in raising awareness about the effectiveness and existence of such wellbeing services.

However, most women reported no impact.



5.2 SCALING OUT

Many had seen that similar activities to theirs had started to pop up locally, even some attempts of copy-cats and imitation. The replication of their ideas was sometimes seen as a threat to their own earning ability if they directly competed for the same customers. However, spreading of good ideas was also seen as a good thing. Women should be encouraged to adopt examples and influences from outside their location, and meeting peers. Also, to be heard and seen is important for women innovators. For example, one woman had established the international training “Farm Escape Academy” for others to replicate her concept. There has been so far one new partner farm. The women running an herb cooperative have been giving talks about their operations all around Finland.

One woman is engaged with developing GreenCare in Finland and is actively involved in having similar activities becoming more widespread. Similarly, another entrepreneur is considered as one of the forerunners of social care in a farm environment. She offers two types of services: recreation and welfare services (also for employees), music and experiences as well as demanding and intense social services for the public sector, e.g. animal assisted therapy, music therapy, family therapy, psychotherapy.

5.3 SCALING DOWN

Most women have received some type of funding support, such as subsidies from local LEADER-group, and agricultural and investment subsidies.

Most women have done various training courses and webinars such as training for running escape rooms, GreenCare training, MinD training, energy therapy courses (by Finnish energy therapy association), short courses related to entrepreneurship, webinars by Sustainable travel Finland, course on female entrepreneurship organised by the education and development services of Oulu University of Applied Sciences, various programs in summer universities, neuropsychiatric trainer, social media training, social pedagogical horse instructor, a solution oriented neuropsychiatric coach, a nature care instructor, centered riding instructor, nature- and animal-assisted work instructor, integrative brief therapy instructor, and Specialist Vocational Qualification in Leadership and Business Management. One woman is known to get financial support for further education.

5.4 SCALING IN

Most women have received help, support and advice from municipalities, local tourism associations, and (female) entrepreneur associations (important peer group). Those who had not received local help or cooperation with municipalities, local tourism associations or entrepreneur associations would have wanted it.

Many women noted that a peer network would be useful, for example a network for rural entrepreneur women, not only national but also an international one. Some women expressed that a project like FLIARA could potentially provide something like this for women, visibility or a network.



Knowledge of possibilities to apply for financial support that does not need big savings was mentioned as helpful and overall knowledge of suitable sources of financial support.

One woman noted that women running farms by themselves would need some help with the heavy farm work, as it can be physically challenging.

Overall, it was felt that to foster innovations, people with new ideas should be supported so they would dare to bring them up. They should not be suppressed, no matter how crazy they may sound. The women who truly were engaged in innovative practices had had a challenging road for their activities were questioned and there were no ready guidelines on how to proceed.

One of the older women had taken a female entrepreneurship course that had proved very useful when she embarked on her reindeer husbandry tourism business. She thinks these kinds of courses could be a useful way to support female innovations, offering practical skills, inspiration but also to include not so official sections that support work wellbeing and mental wellbeing. Also offering peer support is very important.

Also help and support with overall coping and wellbeing was mentioned to be needed for small entrepreneurs. It was noted that many entrepreneurs probably would need more support and advice, but that many are so busy and exhausted that they do not have time and energy to find support themselves. A strategy should be developed to reach these people. For example, many female horse entrepreneurs are tired and over-worked, but do not dare to hire additional help, and have no time or necessarily skills to seek knowledge and help themselves. When it comes to small businesses, everything often depends on one's own ability to work. Some support would also be valuable for longer breaks due to, for example, illness. One woman engaged in animal-assisted wellbeing services had experienced such a long bout of illness and did not have money to pay for YEL (entrepreneur insurance) for a couple of months. The only "help" offered was dept counselling.

5.5 SCALING DEEP

Finnish society is in general already quite equal so there was not much talk about the need to fight for gender equality. In cases where the women had faced sceptical reactions by local people, it had changed into recognition when the women had shown that they were capable of running the business. Local people had started to believe in them and the capacity of women to do all kinds of things.

Traditional gender roles are not important anymore, and women can be credible entrepreneurs in rural areas these days. In agriculture, women tend to be more interested in environmental topics than men who are more into technology. To promote female entrepreneurship, more education could be targeted to women who are interested in it.



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FARMING WOMEN-LED INNOVATIONS IN GERMANY

CASE STUDY REPORT

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ACRONYMS & ABBREVIATIONS

| | |
|---------------|---|
| CTR DE | Centre of Germany (e.g. State of Hessen) covering in this report the South of the Federal State of Hessen and the West of the Federal State of Rhineland-Palatine |
| GDR | German Democratic Republic (before reunification, the area of the Federal States of Mecklenburg-Pomerania, Brandenburg, Saxony-Anhalt, Saxony, Thuringia) |
| LPG | Landwirtschaftliche Produktionsgenossenschaft: socialist agricultural cooperative in the GDR |
| NE | North East/north-eastern |
| NW | North West/north-western |
| SDG | Sustainable Development Goals |
| SW | South West/south-western |
| VEG | Volkseigenes Gut: GDR state-owned estate |



THE NATIONAL CONTEXT

1.1 STATISTICS FOR THE FARMING SECTOR IN GERMANY

The published statistical data provides limited information on gender. Although farm data has been collected including the sex of the farm owner, detailed analyses for gender-related questions have not been published (yet). Such a request and specific analysis is possible in theory. However, the statistics office would need an official request including payment for such additional analyses of the data. Such an order was not foreseen in the German 'Women on Farms in Germany' (by Thünen Institute and Göttingen University²) or the FLIARA project. For that reason, the data in this section represents the information available from published reports of the National Statistics Agency (DeStatis).

Table 1. Farm size data for Germany, 2010 and 2020

| | 2010 | 2020 |
|---------------------------------------|------------|------------|
| Number of farms | 299 134 | 262 776 |
| Utilised agricultural area (UAA) (ha) | 16 704 044 | 16 595 024 |
| Average size of Farms | 55,84 | 63,15 |

DESTATIS - Statistisches Bundesamt 2023

The comparison of the structural development of the farming sector in Germany between 2010 and 2020 shows that around 12% fewer farms were registered. While the agricultural area fell by less than 1% of the total area utilised farmland, the average farm size increased by around 13% to around 63 ha UAA per operation (Table 1).

Table 2. Number of farm managers by age class and sex in 2010 and 2020

| | 2010 | | 2020 | | 2010(in %) | | 2020(in %) | | Change 2010 to 2020(%) | |
|--------------|--------|---------|--------|---------|------------|-------|------------|-------|------------------------|-------|
| | Female | Total | Female | Total | Female | Total | Female | Total | Female | Total |
| < 35* | 2,712 | 21,282 | 2,599 | 20,025 | 0.9 | 7.11 | 0.99 | 7.62 | -0.009 | 0.51 |
| 36- 45* | 9,714 | 94,699 | 8,317 | 63,613 | 3.25 | 31.66 | 3.17 | 24.21 | 0.08 | 7.45 |
| 45-64 years | 13,824 | 188,530 | 17,005 | 169,059 | 4.62 | 63.02 | 6.50 | 64.34 | -1.88 | -1.32 |
| > 65 | 1,677 | 15,903 | 3,090 | 30,104 | 0.56 | 5.32 | 1.18 | 11.55 | -0.62 | -6.23 |
| Total | 25,215 | 299,134 | 28,412 | 262,776 | 8.43 | 100 | 10.81 | 100 | -2.38 | 0 |

* The classes 'younger than 40', and '41-65' do not exist for German data. DE statistic offices use the classification 'younger than 35' for the youngest age group.

² Zazie von Davier, Susanne Padel, ImkeEdebohls, Uta Devries, Hiltrud Nieberg 2023. Frauen in landwirtschaftlichen Betrieben in Deutschland – Leben und Arbeit, Herausforderungen und Wünsche. Thünen Working Paper 207, https://literatur.thuenen.de/digbib_extern/dn065997.pdf



Table 2 presents the number of farm managers by age class and sex. In total, around 28,000 women were registered as farm managers, which represent around 11% of all farm managers (262,776 persons in 2020). This share has slightly increased since 2010 (by around two per cent points). The proportion of female managers in the age groups 'younger than 35' and '45-64' include 13% each of the total number of farm managers and is higher than the share of the other categories (10% and 1%). The higher proportion of female managers in the younger generations is positive but overall the numbers have not changed significantly in this decade.

Table 3. Farm labour force, in persons in 2010 and 2020

| Family labour force (sole holders + family members), No of persons and % of total | | | | | |
|---|------------|------------------------|---------------------|------------|------------------------|
| 2010 | | | 2020 | | |
| No of female | Female (%) | Total of family labour | No of Female | Female (%) | Total of family labour |
| 194,605 | 34.98 | 556,343 | 144,100 | 33.17 | 434,400 |
| Non-family labour force* (no of persons and % of total) | | | | | |
| 2010 | | | 2020 | | |
| No of female | Female % | Total of non-family | No of female | Female % | Total of non-family |
| 28,936 | 24.26 | 119,259 | 28,200 full time | 22.22 | 126,900 |
| 35,536 | 47.93 | 74,142 | 44,600 part-time | 43.73 | 102,000 |
| 64,472 | 33.33 | 193,401 | 72,800 | 31.80 | 228,900 |

https://www.destatis.de/DE/Themen/Branchen-Unternehmen/Landwirtschaft-Forstwirtschaft-Fischerei/Landwirtschaftliche-Betriebe/Publikationen/Downloads-Landwirtschaftliche-Betriebe/arbeitskraefte-2030218209004.pdf?__blob=publicationFile p.192

https://www.destatis.de/DE/Themen/Branchen-Unternehmen/Landwirtschaft-Forstwirtschaft-Fischerei/Landwirtschaftliche-Betriebe/Publikationen/Downloads-Landwirtschaftliche-Betriebe/arbeitskraefte-2032802109004.pdf?__blob=publicationFile p.234

*non-family labour without seasonal workers

Table 3 shows that the proportion of women working on a farm is 33% much higher than the number of farm managers (11%) in 2020. The total number of female family labour force fell by 26% between 2010 and 2020, which indicates a structural adjustment of the work contribution of women within the farming families. At the same time, the total number of non-family labour on the farm increased with falling shares of women employed.

Small-scale farming with farms of less than 5 ha and with 5-10 ha plays a subordinated role with 0.2% and 2% of the total utilised land area in Germany (Table 4).

Farmers grow organically certified crops on around 10% of the total land area. This share has not changed substantially between 2010 and 2020 (Table 5, 2020). Table 6 highlights that around 23% of farms in Germany have diverse branches. Therefore, 23% of the farms with multifunctional agriculture engage in renewable energy production, around 9% in processing of farm products and 4% in tourism and associated services.



Table 4. Number and total land area of small-scale farms (0-10 ha)

| | 2010 | | 2020 | |
|-----------|--------|---------|--------|---------|
| | Farms | ha | Farms | ha |
| < 5 ha | 27,400 | 54,000 | 21,600 | 36,500 |
| 5 - 10 ha | 47,300 | 343,900 | 44,600 | 323,300 |

https://www.destatis.de/DE/Presse/Pressemitteilungen/2021/01/PD21_028_412.html

Table 5. Number and total area of organic farms (2010 and 2020)

| | Farms | | Utilised agricultural area (UAA) (ha) | |
|------|---------|---------|---------------------------------------|------------|
| | organic | total | organic | total |
| 2010 | 16,532 | 299,134 | 980,851 | 16,704,044 |
| 2020 | 26,133 | 262,776 | 1,592,735 | 16,595,024 |

https://www.statistischebibliothek.de/mir/servlets/MCRFileNodeServlet/DEHeft_derivate_00004207/2030221109004.pdf p. 44

<https://www.destatis.de/DE/Themen/Branchen-Unternehmen/Landwirtschaft-Forstwirtschaft-Fischerei/Landwirtschaftliche-Betriebe/Tabellen/oekologischer-landbau-bundeslaender.html?nn=371820>

Table 6. Number of farms engaged in multifunctional agriculture

| | Farms in total | Provision of health, social or educational services | Processing and direct marketing of agricultural products | Tourism, accommodation, leisure activities | Horses (pension and sport) | Renewable energies | Wood processing | Forestry | Farms with multifunctional agriculture in total |
|------|----------------|---|--|--|----------------------------|--------------------|-----------------|----------|---|
| 2010 | 299,100 | / | 13,200 | 9,300 | 12,100 | 37,400 | 5,400 | 22,600 | 92,100 |
| 2020 | 262,776 | 4,510 | 22,840 | 10,260 | 16,570 | 61,660 | 15,030 | 38,100 | 111,700 |

<https://www.destatis.de/DE/Themen/Branchen-Unternehmen/Landwirtschaft-Forstwirtschaft-Fischerei/Landwirtschaftsaehlung2020/Ergebnisse/Tabellen/betriebe-mit-einkommenskombinationen.html>

https://www.destatis.de/DE/Themen/Branchen-Unternehmen/Landwirtschaft-Forstwirtschaft-Fischerei/Landwirtschaftliche-Betriebe/Publikationen/Downloads-Landwirtschaftliche-Betriebe/einkommenskombinationen-2030217209004.pdf?__blob=publicationFile

<https://www.destatis.de/DE/Themen/Branchen-Unternehmen/Landwirtschaft-Forstwirtschaft-Fischerei/Tabellen-Landwirtschaftsaehlung-2010/7-1-betriebe-mit-einkommenskombinationen.html>

Due to the heterogeneity of Germany's regions, it is very difficult to find and present the information supporting the FLIARA analysis. Data is available on the level of NUTS 2 or 3. However, this information will be very detailed and complex because of the large number of German NUTS 2 regions, and it might not fit with the area covered by the different interviewees. **Figure 1** gives an overview of rural and urban areas. Colours represent the number of family-owned businesses per county.



Raumtypen

Stadt- und Landkreise Deutschland 2018

■ Ländliche Räume

■ Städtische Räume

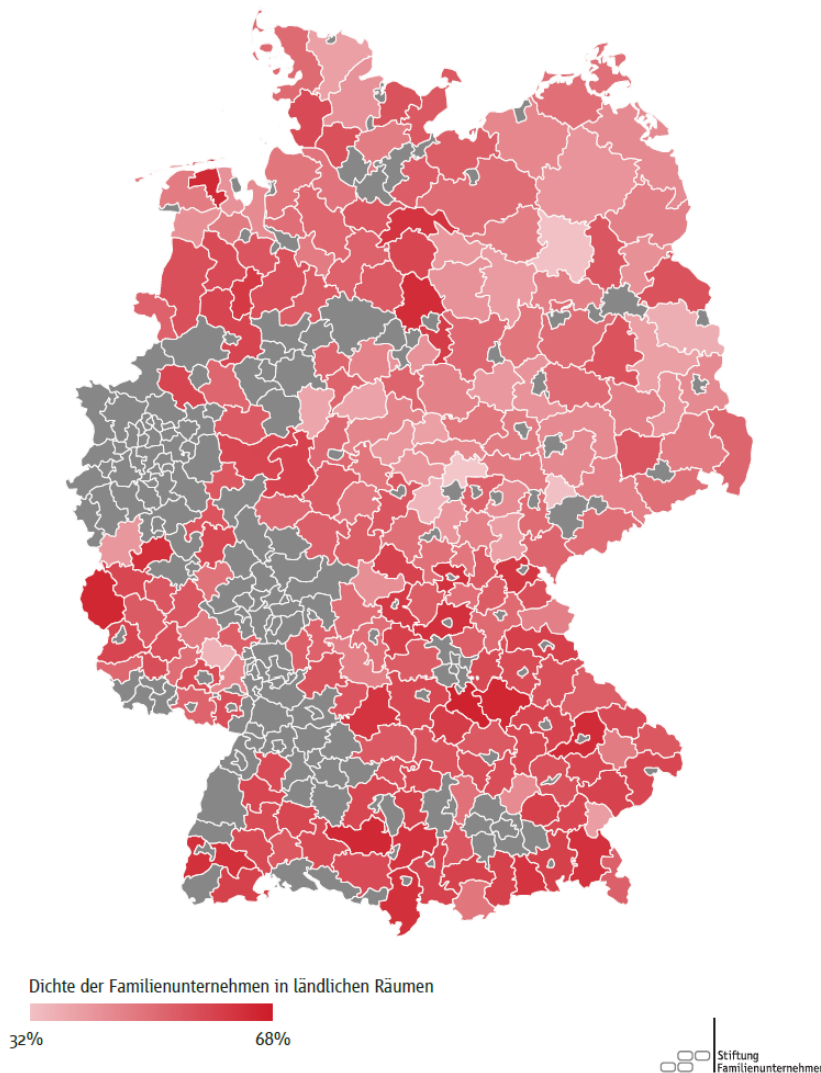


Figure 1. Rural and urban cities and counties and density of family-led enterprises in rural areas

Source: Foundation for Family Enterprises

Note: Coloured in light and dark red: The density of family-led enterprises in rural areas is between 32 and 65% of total enterprises registered in the area.

The red-coloured counties represent 'Rural Areas'. The darker the red, the higher the proportion of family businesses (of the total number of businesses registered) in the rural country.

For the analysis across case studies on the European level, the typology of areas was predefined for all European countries. These are remote rural areas, rural areas close to cities, and rural villages. This classification, however, cannot ensure a clear delineation



for driving area-related factors for female-led innovation in Germany. Remote areas are relative, and they often are rural villages with insufficient infrastructure (e.g. doctors, public transport, broadband) and more than one hour travel time to the next economic hub. However, rural villages including areas with lacking infrastructure can also be located relatively close to cities. For that reason, aspects such as available infrastructure (public transport, proximity to good public schools, motorway access, and access to health or care services) might be more critical for innovative solutions developed by innovative female farmers.

1.2 GERMAN DIVISION, REUNIFICATION AND TRANSITION IN EASTERN AREAS

Social studies covering Germany as whole and comparing differences between geographical locations such as this FLIARA investigation need to take into account the historical phenomenon of the country's division into Western Germany with its market economy system and the German Democratic Republic (GDR) with its socialist system (1949-1990). The country's post-World War II division in East and West ended with the German reunification in 1991. The economic and social system remained stable for the population in the western Federal States but changed dramatically with a major transition required for the communities in rural and urban areas in the Eastern part of Germany, covering the Federal States of Mecklenburg-Pomerania, Brandenburg, Saxony-Anhalt, Thuringia, and Saxony. The fast transition of the economic system affected all areas of life. All families, professions and local communities in the eastern areas were – although in very different ways – strongly affected.

Although more than thirty years have passed since the Iron Curtain fell, economic, structural and social differences are still more or less obvious. These differences result from distinct cultural and individual development pathways. If and in how far eastern or western socialisation of individuals drove the emergence and the characteristics of entrepreneurial spirit or the willingness to take responsibility for common interests on the local level has been discussed at many kitchen tables. However, systematic analyses, in particular related to the farming community, are not at hand.

The availability of childcare for youngsters below three years is maybe the only measurable criterion for systematic differences affecting female-led innovation (see Rural WP3 report for Germany). However, robust scientific analysis are missing, which studied other effects such as the impact of the former socialist role model of working mothers and female students in engineering or other technical professions and the emergence of female-led innovation. Moreover, the potential long-term effects of lacking competitiveness-based training, strictly regulated access to universities until the end of the eighties, and the absence of tacit knowledge among daughters from entrepreneurial families was not investigated systematically. Hypotheses related to these aspects are widely spread, but scientific literature is not available apart from impressing individual examples.

Apart from the social and cultural impact of the country's division until the beginning of the 1990s and the following transition of Eastern society, farming structures continue to



remain fundamentally different in the Eastern and Western Federal States. Eastern areas are characterized by the collectivization of agriculture between 1945 and the late 1950s. Under Russian occupation, the land of farmers owning more than 100ha was confiscated between 1945 and 1949. These farms, often called estates, became state-owned farms (Volkseigene Güter, VEG) with several branches and numerous employees. The VEGs were set up following the model of the soviet sovkhozes. The other farms (less than 100 ha) were subject to collectivization in the 1950s when the individual farmers had to join the cooperatives (model of soviet kolkhozes). When becoming a member of the agricultural cooperative, called LPG, individuals kept their land titles. This made a big difference after reunification because the Federal State of Germany took over the confiscated land from the GDR. Owners of collective land, used by the LPG or its successor, renting the land in the early 1990s, were free to decide with their land when the rental agreements ended (unless the land was used for other purposes e.g. construction). The examples of DE_F_E_2/Int.2, DE_F_E_1/Int.1, and DE_F_EC_1/Int.7 represent this group. DE_F_E_1/Int.1 and DE_F_EC_1/Int.7 are also of local origin while DE_F_E_2/Int.2 come from urban areas in the western part of Germany.

Most dispossessed farming families had flown to the West (1945-1949). Some of these refugees, in case they wanted to stay in farming, received government support to find land. They settled down in rural communities, started farming or liaised with a family farm without a successor. None of the interviewees represents this context of post-World War II refugee farming.

Splitting up the large LPG ('kolkhozy' type) and VEG ('sovkhozy' type) after 1990, restoring land to previous owners and returning to privately-run holdings was a huge legal venture with encompassing social effects for rural communities in the Eastern Federal States. This transition of agriculture and rural communities is relevant for this FLIARA case study on female-led innovation in farming. Several of the interviewees represent the large number of individuals who profited from the opportunity to have access to land and start farming since the 1990s. This would have been impossible in the Western areas or during GDR times. The representatives in this report are DE_F_E_1/Int.1, DE_F_E_2/Int.2, and DE_F_EC_1/Int.7)³.

SELECTION OF FEMALE-LED INNOVATION IN GERMANY

Since case study interviews from transition countries are underrepresented with Slovenia (20) and Romania (10), compared to Ireland (40), Sweden (20), Finland (20), Spain (20), Italy (20)), the German selection process aimed for an overrepresentation of innovative women from the Eastern Federal States. This region-based selection was not connected to the FLIARA region-specific criteria 'Remote', 'Close to City' and 'Rural Village. The

³ The FLIARA rural case study report for DE includes three interviewees also located in the Eastern Federal States.



criterion Eastern/Western Federal States was a Germany-specific regional selection criterion. It was unclear from the outset if it would affect the case study results. However, it is a relevant detail explaining the methodological approach in those interviewees was not selected. The Eastern/Western context has an impact on the size or number of farms in the particular Federal State and the (lacking) family farming traditions.

Owing to the different educational and economic systems, the socialisation of women has been different in the Eastern and Western areas during division and transition decades. This aspect might affect the interviews. Therefore, the self-reflective section highlights that the FLIARA interviews had to be held in German and by researchers with excellent knowledge about the various farming areas and sectors in Germany. However, they were not neutral regarding the Eastern-Western history context (see Chapter 1). Each German family has a history legacy that relates to the division in a specific way. Stemming from the West, feelings such as guilt, ignorance, or arrogance can drive the way of asking, listening and understanding the interviewee, and vice versa. When aspects related to the history or type of farming emerged during the interviews, the interviewer addressed the topic to ensure at least transparency and allow for a discussion concerning potential effects.

2.THE INNOVATIONS

This section presents the women interviewed, their innovative approaches and the areas, in which they are active. Moreover, the section highlights the main sustainability dimension the activities of the women refer to as well as the typology of the area as defined for the FLIARA case study work. The classification of areas and the sustainability dimension of the innovation for the 10 interviews was a result of the FLIARA case study selection process (Task 3.1).

Table 7. Overview of selected interviewees for the farming case study in DE

| The sustainability dimension of innovation | Type of rural area | Code | Geographical area in Germany (DE) |
|--|--------------------|-------------------|--------------------------------------|
| Environmental | Remote | DE_F_E_1/Int.1, | Northern-Eastern (NE) DE, Baltic Sea |
| Environmental | Close to city | DE_F_E_2/Int.2 | NE DE |
| Environment | Rural village | DE_F_E_3/Int.3 | Mid-Western* DE, Rhineland-Palatine |
| Social | Remote | DE_F_S_1/Int.4- | South-Western (SW) DE |
| Social | Close to city | DE_F_S_2/Int.5 | SW DE |
| Social | Rural village | DE_F_S_3/Int.6 | North-Western (NW) DE |
| Economic | Remote | DE_F_EC_1/Int.7 | NE DE |
| Economic | Close to city | DE_F_EC_2/Int.8 | Mid-Western DE, Hessen |
| Economic | Rural village | DE_F_EC_3/Int.9 | NE DE |
| Cultural | Close to city | DE_F_C_[]/Int.10 | Mid-Western DE, Hessen |

*Note; In the following, the Mid-Western area will be called the centre of Germany (CTR DE), covering the Rhein-Main Area with the South of the Federal State of Hessen and the West of the Federal State of Rhineland-Palatine.



Table 7 presents the categorisation of the selected interviewees for the FLIARA farming case study in Germany. The type of area chosen for the geographical location of the selected interviewees depends on the national or regional context. This refers in particular to the criteria 'Remote' and 'Rural village'. Remote in South-western (SW) Germany is different to North-Eastern (NE) Germany where communes merged and counties expanded to reduce administrative costs in the sparsely populated rural areas.

The following tables show the interviewees with their number listed in the HNEE catalogue of FLIARA innovation from across sectors and areas of Germany (with an overrepresentation of Eastern Federal States with three out of ten interviewees, see 2.4). Table 7 serves as a point of reference for the following tables.

Table 8 presents the characteristics of the interviewees, their farm business or farming- or land-use-related innovations. Two women have farms registered as Civil Law Companies (GBR), which usually represents close cooperation between family members in charge of different branches of the farm business. Two women manage their farms under the framework of Sole Proprietorship. One farm is a registered Ltd. Another farm operates under the legal construction of a foundation holding the assets of the former state-owned estate interconnected with a registered shareholder corporation that holds the farm business. The remaining three interviewees represent other forms of farming-related or land-use-based activities: one interviewee is a farm employee with a private farming-related business; one interviewee managed 80ha conservation grassland without formal registration of a farm business; one interviewee was a farm manager until the rental agreement ended a few years ago. The latter has been a pioneer in a novel dairy herd management system, which she developed and maintained on her farm and which spread across Germany in the meantime. Her current occupation relates to these experiences as a farmer but does not represent the innovation assessed for this case study. Only half of the women are landowners. The others rent the land; one interviewee receives Natura 2000 payment for the maintenance of ecosystems. The risk with fully rented farms materialised by one dairy farmer who had to sell the cows and stop the associated innovative herd management system. Increasing rents or losing the rented land is always a risk. All farming women are self-employed apart from the one interviewee who works as an employee and is a social media entrepreneur. All selected women have an entrepreneurial spirit and have a business or branch of business under their supervision.

All selected women have a high level of education. Six of them finished university with a degree, thereof three with PhD in Agriculture, veterinary medicine or biology. One interviewee has a Master's degree in social studies (and no formal farming education). Three women have the Meister certificate. One woman received training from an agricultural academy.



Table 8. Educational level and the farms' characteristics of the interviewees

| Interviewee | Age | Educational Level ⁴ | Dimension of the farm (ha) | Property rights(own; rented) | Legal form of the farm (family farmer; company) | Year when she started operating in the farm |
|--------------------|-----|---|--|------------------------------|--|--|
| DE_F_E_2/Int.2 | 45 | Master degree social studies | Dairy sheep, 16ha, 60 ewes | Owned | Civil Law Company (GbR) | 2012 |
| DE_F_E_1/Int.1 | 43 | Master degree Agriculture | Grazing, 330 ha, beef cows, ewes, hens | 9 ha owned, 321 ha rented | Sole Proprietorship | Took over the farm in 2016 |
| DE_F_S_3/Int.6 | 26 | PhD Agriculture | 100ha arable, 20ha forest | Employee on the farm | | Since summer 2021 |
| DE_F_E_C_3/Int.9 | 41 | Industrial clerk & agricultural college | 350ha | Owned | Sole Proprietorship | Since 1872 family farm; since 2014 she took over |
| DE_F_E_C_2/Int.8 | 42 | Master degree Agriculture | 35 ha | Rented | Civil Law Company (GbR) | 2010 (comes from urban area, western DE) |
| DE_F_S_2/Int.5 | 46 | Meister in Agriculture | 60ha | Lease ended in 2022 | | From urban area, western DE |
| DE_F_S_1/Int.4 | 45 | Meister in rural housekeeping | 90 ha | Owned | Sole Proprietorship | Farm inherited the farm from father (western DE) |
| 2-DE_F_E_C_1/Int.7 | 57 | Meister in Agriculture | 21 ha | Owned and rented | Ltd | 1993 (reunification) |
| 7-DE_F_C_/_Int.10 | 52 | PhD in veterinary medicine | 135 ha | Owned by the foundation | Construction of Foundation and Shareholder corporation | 2006; no family farming background (western DE) |
| 56-DE_F_E_3/Int.3 | 52 | Master's degree Biology | 80 ha | Land maintenance agreements | No farm business registration | 2010, from urban area in NW DE |

The fact sheets of women-led innovation from the farming sector in Germany present the innovative approaches and products of the interviewees. The information on the fact sheets presents the basis of the analysis of the following sections.

The marketing the products from remote rural areas requires the development of particular sales channels and communication strategies. The three farms sell specific

⁴ A master's degree is a postgraduate academic degree awarded by universities or colleges. The master craftsmanship (Meister) is the highest professional qualification in crafts. The Meister is a state-approved grade with a certification (Meisterbrief). The qualification includes theoretical and practical training as well as business and legal training. The qualification implies the allowance to train apprentices. The Meister education prepares for running an own business or a high position at a company.



and high-quality products that have their niche market promoting additional high values. These are protein crops grown in 'your neighbourhood' (lupine products), hand-made cheese from the family farm nicely packed as gift for friends, or organic vegetable fresh and directly delivered to town). These sales concepts ensure profitability even with longer transportation of the produce or higher travel costs for those visiting the farm shop. Maybe, it is (or not) an incident that the four cases share the topic of low-intensity and animal-welfare related dairy and meat production (see 3.1).

The group classified 'remote' applies particular strategies to cover what DE_F_E_1/Int.1 summarises with "*long ways*". The sales of the farm products require innovative strategies for the communication of the individual story of their additional value (locally grown protein (DE_F_EC_3/Int.9) or protection of biodiversity (DE_F_E_1/Int.1). This relates to the opportunity to socialise (DE_F_S_1/Int.4).

The innovations representing farming close to cities benefit from the proximity to the urban areas. The four examples engage in direct marketing and sell animal and other products on a regular and more frequent basis compared to the remote areas. Apart from DE_F_E_2/Int.2 (owners), the other three farms also aim for a close engagement with the society or their customer group. The proximity to the cities allows for a direct and frequent encounter with customers including a formal relationship with regular customers (membership or shareholder subscription). These interviewees wish to create a feeling of ownership and responsibility for their production, processes and the high-quality food from the farm. The four interviewees from the group 'close to city' represent innovation related to organic or low-intensity meat production with a particular focus on animal welfare, and behavioural health of mother animals and calves/lambs in particular. Three farms produce dairy products from cow, sheep or goat (DE_F_C_/Int.10, DE_F_E_2/Int.2, DE_F_EC_2/Int.8) milk. They focus on the communication of high ethical standards of their animal husbandry systems. Innovation associated with young animals (calves, lambs) corresponds with the traditional division of work on the farm where women tended to be in charge (among others) for the animals such as calves or chicken while men looked after cropping.

The remaining three women allocated to the category 'rural village' represent different sectors and geographical areas (northern, western, and southern Germany). Overall, the selection of the innovative women aimed for diversity in sectors, regions and objectives. This resulted in a lack of communality or comparability of the innovative approaches. However, the three interviewees aim to engage actively with the non-farming community, and to inform non-experts about farming and food production. They are telling stories about nature conservation cropping and farming in general, and the manufacturing of niche crops specifically (DE_F_E_3/Int.3, DE_F_S_3/Int.6, DE_F_EC_3/Int.9). They share their enthusiasm to tell stories and communicate information with consumers, visitors, neighbours, or social media followers.

The group 'Rural village' lacks clear delineation for Germany in general and overlaps with the categories 'remote' and 'close to city'. For that reason, comments about the



characteristics for this group might be less reliable than for the other groups. The three examples of rural villages in this study are all in relative proximity to metropolitan areas.

Since the innovative activities were chosen for their diversity based on the sustainability dimension, all cases were allocated to a key sustainability dimension. During the interviews, the women were asked about the self-understanding of their activities and the associated sustainability dimension. The interviews showed that they had a good understanding of the sustainability concept. Several mentioned they would see more than one sustainability dimension highly relevant for their activities. Three out of 10 emphasised their work focused on integrating the three sustainability dimensions (DE_F_E_1/Int.1, DE_F_EC_1/Int.7, DE_F_C_/Int.10).

The innovative approaches classified as 'environmental' are using land with low-quality soils, mainly sand (Table 9). This communality is obvious because the ecological rules that the less nutrients are available for fauna and flora, the more diverse and extraordinary the species will be. The conservation of high nature value parcels near the river (DE_F_E_3/Int.3) is a good example because the area in general has medium quality farmland. However, the land with high-value ecosystems requires a low-intensity grazing system that is cautiously adjusted to the development of the protected species on the ground. For example, farmers keep cattle and sheep on pasture in a species-appropriate manner almost all year round. The female farm manager connects animal husbandry, cropping and direct marketing closely and links it with the promotion of biodiversity (DE_F_E_1/Int.1).

The innovative approaches classified as 'economic' are centred on the profitability of the farms' production systems. The viability is of particular relevance for those farms that have rented land, and in particular when the farmers have been newcomers in farming (DE_F_C_/Int.10, DE_F_EC_2/Int.8, DE_F_S_2/Int.5, DE_F_E_2/Int.2, DE_F_EC_1/Int.7).

DE_F_EC_3/Int.9 processes her harvest into dry products for a niche market. Side streams are also used. *"I make 80% of the products myself, also the manufacturing of fine brandies"*, and *"We need to be innovative. Competition never sleeps,"* she says.

All interviewees have a good understanding of the Global Sustainability Goals (SDGs) and the distinction between the three main dimensions of the sustainability concept. Most interviewees expressed her concern to assign her activities to mainly one dimension. Instead, they saw the sustainability dimensions interconnected and more or less all relevant for their activities.

When focussing on the most important sustainability dimensions addressed by the different innovative approaches, two topics emerged. These most prominent objectives, which are driving the women's innovative approaches, are:

1. Sense of mission explaining the importance of farming and the sustainability performance of agriculture in the area (nearby, regionally, nationally) and in general, including raising consumers' awareness for their ethical responsibility to



value local food (lupine coffee and brandy, organic vegetables etc.) and in particular animal products from animals of normally no or deficient value (e.g. brothers of female dairy calves)

2. Animal husbandry ethics and animal welfare; not only emerging from animal health (utter health, exercise etc.) but including values such as natural behaviour and social interaction (e.g. cow-bond calve rearing, stallion herds)

Most interviewees highlighted one or both of these motivational aspects as crucial for their activities. Both aspects are difficult to allocate to one sustainability dimension because they are crosscutting.

DE_F_S_3/Int.6 expresses it nicely: *“The more I have learned about farming, the more I have cleared up my prejudices. I realised how much ignorance is out there. The media point to agriculture and claim it is responsible for dying insects, climate change and so on. Yet agriculture has the potential to solve almost all of these problems.”*

For this analysis, the sense of mission of the interviewees has been allocated to the category of ‘social sustainability’, even when the messages driving the mission affected the natural environment (environmental dimension) the viability of the farm or the regional economy (economic dimension).

Animal welfare-related innovations do not fit well under any of the three classic sustainability dimensions. For that reason, they are part of the fourth dimension ‘Other’, which usually covers the impacts of climate change.

The sample of only ten interviewees is small. Moreover, several of the originally selected women were not available for an interview. As foreseen by the methodology, the second-choice candidates replaced them making sure the proportion between the categories ‘area’ and ‘sustainability dimension’ remained stable. These adjustments might have affected the originally intended balanced set of female-led farm innovations with animal husbandry becoming slightly overrepresented. However, the study ‘Women on Farms in Germany’ explains, “Almost two-thirds of the women confirm they are looking after animals. Fieldwork and machine maintenance, on the other hand, are mentioned less by all respondents. If mentioned, these are often female farm managers and predominantly young other family members. Moreover, women engage in the so-called ‘secondary enterprises’, which contribute to the income of around half of the farms participating in the study. Women are running such diversification activities in various ways. In particular, the areas of ‘direct marketing and processing’, ‘tourism offers’, ‘social services’ and ‘horse husbandry’ are mainly under the responsibility of women.”

2.1 AREA-SPECIFIC SELECTION

Table gives a short description of the local context including the quality of soils and rural infrastructure. The allocation to the sustainability dimension refers to the formal selection criterion of the FLIARA case study concept.



Table 9. Description of the locations by type of area and sustainability dimension

| | Remote | Close to city | Rural village |
|----------------------------|---|---|--|
| Environmental focus | DE_F_E_1/Int.1 Rural with village structure; medium to low soil fertility; lacking infrastructure; schools, doctors; Motto "long ways" | DE_F_E_2/Int.2 Very rural character; low soil fertility on most parcels; car needed; proximity to Berlin is obvious; many artists and ex-urban dwellers (only 79); no broadband but no urgent need; lacking doctors is a problem; Motto 'live your life and let other live their lives' | DE_F_E_3/Int.3 Good to medium soils in the area but the high-nature value land used is sandy; located in the metropolitan area Frankfurt/Rhine-Main; grazing animals are robust and can keep sandy areas open. |
| Social focus | DE_F_S_1/Int.4 Village in the middle of a triangle of rural hubs (30 min drive); this is remote for southern DE; medium soil quality; low unemployment rate; very limited options for direct marketing; good rural infrastructure; a traditional family farming area with mixed and many small farms | DE_F_S_2/Int.5 The area with the marketing label is a rural area close to major cities in South-Western DE; medium soil quality; low unemployment rate; high average incomes; good infrastructure; good opportunities for direct marketing; and lots of entrepreneurial spirit in the area | DE_F_S_3/Int.6 Rural area with village structure; excellent soil quality; housing seals land while houses in villages/towns not used; fair infrastructure (car needed; one bus per day); access to medical care is good |
| Economic focus | DE_F_EC_1/Int.7 Distance from Berlin and the coast; medium to low soil quality; lacking infrastructure; high unemployment rates; reduced entrepreneurial spirit. | DE_F_EC_2/Int.8 Not far from the university cities of Marburg and Giessen; medium soil quality; low unemployment rate; good infrastructure; Motto "Pleasing others"; lacking will for inclusion and participation | DE_F_EC_3/Int.9 Located in the centre of a triangle of cities; good infrastructure but car needed; good/medium soils |
| Cultural focus | | DE_F_C_/Int.10 Located in the metropolitan area Frankfurt/Rhine-Main; good soils; part of the university city of Darmstadt; good infrastructure | |

2.2 MAIN DRIVERS FOR THE INNOVATIVE APPROACHES

The main driver for the women selected was their strong individual wish to do what they had planned to realise. This applies to those coming from a farming or rural environment where fighting for their interests was needed from an early age. In addition, for the interviewees socialised in towns and cities, this wish to realise a dream is obvious. The interviewees share the conviction that other societal groups, being also daily consumers of farm products, need to know more about agricultural production and the economic and social situation of farmers, as well as the value of the maintenance of the land use systems. This driver emerges from the societal sustainability goals, to which the individuals aim to contribute. Social drivers such as the position in the family or the local community play a role in some cases. The following examples represent the main drivers for starting the innovative activities:

- Several interviewees have in common, they just to the opportunity to realise their dreams. *"We were aiming for self-employment and independence from employment and we did not want to have to live in a city anymore."* (DE_F_E_2/Int.2) In short, *"I wanted to do this."* (DE_F_EC_1/Int.7).
- The lack of knowledge and awareness about farming in public, and emerging from this observation nurtured a 'mission to message' about sustainable farming and high-value food production. *"People don't know anymore where their food*



comes from. We also need to bring rural areas back to life. They need to learn about sustainability and understand more about products and production. We need to stop throwing away food.” (DE_F_E_1/Int.1) Another interviewee explained: “When we sold cheese on the market, I realised that people have no idea that cheese making will always lead to meat production also. They need to understand that eating cheese is coupled with meat.” (DE_F_EC_2/Int.8).

- Ensuring the farm’s viability through diversification was also an important driver. “My incentive was to make more out of the mix of industry and agriculture when I quit my job and took over the family farm.” One interviewee explained it from the perspective of the parent generation: “A vocational school teacher classified our farm as non-viable for the future. This cannot be true. I started to put my head around options on how to diversify our farm business, and at the same time address the social issues I was facing more and more.” (DE_F_S_1/Int.4).
- The insufficient and ineffective protection of endangered ecosystems has also been a driver. “I did not want to work anymore for those who are destroying fauna and flora” (DE_F_E_3/Int.3).

3. INNOVATION PATHWAYS

3.1 MOTIVATORS FOR INNOVATION

Some of the interviewees aim to continue family traditions (DE_F_S_1/Int.4, DE_F_EC_3/Int.9, DE_F_E_1/Int.1). The women are landowners and therefore, do not need to pay a rent or pay back a loan. “My motivation was to combine a new economic branch with training/learning and the creation of a meeting point for the village community and customers. However, I needed funding, and no farming or diversification scheme worked for me. I was motivated to find an alternative support measure and insisted until they could not exclude the support of my project anymore. Now, some others have also applied for this local business measure that is usually not applied for farms.” (DE_F_S_1/Int.4). DE_F_EC_3/Int.9 wanted to realise her own ideas in parallel to her parent’s activities (self-realisation).

Others wanted to engage in farming but came from outside the industry and wanted to become farmers (DE_F_S_2/Int.5, DE_F_C_/Int.10, DE_F_E_2/Int.2, DE_F_EC_2/Int.8). Those who entered farming had to focus on repaying the investment at a certain point in time. Some of them were in the fortunate position to rely on the long-term financial commitment of others. “I wanted to do this. As soon as the transformation of the political system took place, it was possible to change professions and have access to former socialist farms.” (DE_F_EC_1/Int.). DE_F_C_/Int.10 also was driven by the wish to start farming as a newcomer (without a family farm). She wanted to engage in animal husbandry. In the beginning, she earned an income from working outside the farm. When the farm business covered the costs, she focused on the dairy herd. “I wanted to try out and show that animal production systems can be improved for animal welfare reasons.” (DE_F_C_/Int.10).



3.2 CONSTRAINS AND FAVOURABLE CONDITIONS

The activities of the interviewees are located in different areas of Germany, which have distinct characteristics. The difference between regions is more prominent than differences between the regional typologies such as 'Rural village' and 'Close to city'.

Excellent education and training as a starting point for successful engagement in innovation. However, access to land and long-term leases is an obstacle everywhere. In one case, the contracts lasted only for 2-3 years (DE_F_E_2/Int.2).

All interviewees highlighted legal or bureaucratic issues that caused problems along the way when realising the innovative idea. Sometimes they were more challenging than technical (machinery) or organisational problems (childcare, animals). The interviewees confirmed they had not been aware of the legal and administrative challenges they would encounter. However, they managed to overcome these hurdles.

Several women mentioned the support of family members and others as crucial by. *"We do this together."* This refers also to finances and values as well as joint decision-making. The women share their will to stand up and fight through what they (always) wanted to do. For example, two have been daughters of a farming family, which took over the farm instead of their brothers. Another interviewee was not expected to take over the farm initially because she was a girl (no brothers in the family). However, the role of stereotypes has changed since then several interviewees confirmed.

"The former workers from the village did not believe in our business model. This has changed over time. Nowadays, it's accepted due to its success. Many hurdles had to be overcome in the last decades but we managed as a team." (DE_F_EC_1/Int.7) *"It was not easy to convince the granting authority to make this programme available for a farm business. I insisted because the legal documents of the programme did not exclude farmers. Finally, I got there and convinced them."* (DE_F_S_1/Int.4)

Several interviewees confirmed workload was more than expected. In particular, the newcomers in farming had this experience. *"We underestimated how much work it is."* (DE_F_E_2/Int.2). DE_F_E_1/Int.1 highlighted as a main concern *"Who helps out in case of illness?"* and *"There's always something [going wrong]. But then, there are good days again."*

3.3 IDEA AND PREPARATIONS/DECISIONS AND PREPARATORY ACTIVITIES

The FLIARA typology did not affect the analysis apart from general aspects when comparing 'Remote' with 'Village' and 'Close to City' (Section 2.1).

Section 4.2 shows preparatory activities such as the seeking for financial resources. Capacity building and the establishment of networks have been an important ongoing process. *"A good network is important"*. All women needed particular skills. Some of these were difficult to develop such as dealing with legal or administrative requirements.



However, for innovation-specific expertise, it was difficult/impossible to find training or advice due to the novelty of the concept.

In addition to the development in the past, the interviewees answered the questions for their plans. These are very diverse depending on the individual situation of the women and their businesses. *“No more growth; we can both make a good living from it; we don't want employee management.”* (DE_F_E_2/Int.2) However, DE_F_S_3/Int.6 confirms *“Definitely! You're always learning.”* DE_F_E_3/Int.3 said; *“I would do it again. And we expand if it fits.”*

They seem to have arrived at a level for consolidation of the activities: *“Our goal now is to optimise the operations and produce in a way that protects physical health.”* (DE_F_EC_3/Int.9), and DE_F_EC_2/Int.8 confesses to have *“No free capacity for expansion”*.

3.4 CONCRETISATION OF INNOVATIONS

Animal husbandry, cropping and direct marketing are closely connected as well as the promotion of biodiversity. Moreover, they want to bring people closer to agriculture by linking their products to stories. This aspect is important for not only the organisation of the production system (organic certification, animal welfare or high-value food) and the farm's sustainability, but the interviewees also aim to raise awareness of agricultural production and the amount of labour involved. This 'mission to message' about farming is an outstanding commonality of all interviewees even when the individuals phrased it in slightly different ways.

This relates closely to the strategy of being present in public media. All women have a story to tell and pictures to show. Public media such as newspapers or local TV are interested in these stories. Some villages were visible in the media because of the women's activities. *“Our village is more present in the media.”* (DE_F_S_1/Int.4).

Several of innovative farming women use social media for their business model and their 'image campaign' fighting against the widely spread bad image of 'the polluting farmer'. The FLIARA selection process included the example of DE_F_S_3/Int.6 who is an innovative farming woman well known for her social-media community talking about cropping, marketing and the farm life.

The contribution to local/regional economics depends on the size and economic potential of the farm. The farms created 1-2 jobs, some of them much more when they engaged in direct marketing. However, the topic of regional economic contribution of farming did not emerge from the interviews. Technical innovation developed or piloted by women did not play a role in the selected examples of female-led innovation either. However, this might not reflect a general trend for farm innovation of women.

3.5 IMPACTS OF INNOVATIONS

The self-assessment of the interviewees concerning the impact and the radicalism of the innovative solution is diverse. However, most interviewees are rather careful and do not



give their achievements too much weight. *“Nope, we are not a lighthouse project.”* (DE_F_E_2/Int.2) *“A Country and sports hotel has organised gourmet events; star chef invited, presentation of regional producers. Unfortunately, the operator changed and continued without us. [] Our concept has not yet been copied”* (DE_F_E_1/Int.1).

The interviewed farmers aimed at improving their farm including awareness raising among customers or other interested visitors. The perceived impact of the innovation tends to be rather small or slow talking about e.g. a *“gentle change; slowly through the network.”* DE_F_S_3/Int.6 concluded: *“General awareness changed during the demo period thanks to education. But I can hardly assess the changes we might have made. Our platform has a wide reach. Media representatives were interested and asked for interviews.”*

“Women on the farms are good at communication, visual appearance of the business as well as diplomacy. External impacts are more the social effects. The level of awareness increases which has an impact” explains DE_F_EC_3/Int.9 *“Women have not received any targeted support. If I needed something, I got it myself. Self-confidence is crucial.”*

Instead of having a substantial impact themselves, they rather see themselves contributing to a big movement such as *“organic has been growing quickly”* (DE_F_EC_1/Int.7). This has been slightly different when looking back at the early phase of the transition in the Eastern regions. Here the innovative idea was comprehensive and quite radical. Alternative ways of doing ecosystem services have also been disturbing for conventional nature conservation activists.

4. INNOVATION ECOSYSTEMS

4.1 POLITICAL

None of the interviewees described the political aspects associated with their farm innovation. They rather saw it as their idea and a business or individually driven strategy. Policy measures were supportive but none of the programmes used, e.g. funding, was initiating or driving the women's activities.

“I am rather disappointed by politics. We are standing on our own two feet” *“We are unfortunately dependent on subsidies.”* Therefore, DE_F_EC_3/Int.9 has to comply with the funding-related requirements. DE_F_E_1/Int.1 explained: *“Politics taught me that I'm on the right track”* (engaging for sustainability). *“Politics should be involved, but it is not about steering. ...A premium marketing system is missing and support programmes are not well targeted (e.g. we have a grazing premium per cow, but not for steers).”* Moreover, DE_F_EC_2/Int.8 added; *“Global markets are absurd.”*

The women did not perceive themselves as influencers for policies or regulations. Only one interviewee mentioned that she was invited to the regional Ministry for Agriculture when they drafted a new value chain support measure. This way, she could contribute to the development of this measure but she does not know how relevant her contribution was.



4.2 ECONOMIC

This section assesses the incentives or support that the women received. The majority explained that financial support was crucial for the realisation of their innovative ideas. Four of the interviewees highlighted financial support from partners or family members in particular, when setting up, taking over or running the farm. Three confirmed they had not received any support from families. Five farms received public funding for their innovative idea.

Apart from financial support, civil society or customer involvement also plays a role in the economic situation and incentive for the development and success of the innovative approach. Four interviewees mention that civil society is represented in their innovation.

None of the women ran a crowdfunding campaign or something similar. Interesting is the involvement of

- a) volunteer work and scientific input from the civil society-driven Food Policy Councils (DE_F_EC_2/Int.8)
- b) civil society as land owners in the very special ownership construction of the foundation that purchased the land when the local estate was sold by the Federal State (DE_F_C_/Int.10).

4.3 SOCIAL

The selection of individuals aimed to represent the diversity of female-led innovations in farming and for farming women. They include dairy systems, cropping, on-farm processing, rural tourism and specific support measures. All such topic-related innovations include an important social sustainability dimension. As mentioned above, the German interviewees are driven more or less by their 'mission to message' about farming, good food and associated sustainability performance (see section 3.1). For that reason, it was a challenge to allocate this wish to tell stories of food and farming because communication is a cross-cutting topic affecting all sustainability dimensions. Since communication relates to human social interactions, this aspect was allocated to the social dimension.

Three of the ten interviewees agreed stereotypes in the sense that *"Farming is not for girls"* played a role for them in their current role or previously. *"Yes, when I was a girl, my parents did not allow me to enrol for an agricultural apprenticeship. Instead, girls went into rural house economics."* (DE_F_S_1/Int.4) The young female blogger confirms to encounter prejudices that she overcomes through competent replies and trustworthy first-hand information (DE_F_C_/Int.10). The other seven confirm gender stereotypes are not relevant; instead, it is all about proving knowledge, experiences and self-confidence in the own competencies. Three women never encountered lacking recognition (DE_F_E_1/Int.1, DE_F_E_3/Int.3, DE_F_EC_3/Int.9), while five confirm they had to overcome a first reluctance when e.g. talking to business partners. However, this initial reservation disappeared when they were convinced through competent engagement. *"Women have to assert themselves more, but I never perceived it as a problem."*



(DE_F_EC_3/Int.9). Two still encounter lacking recognition (DE_F_EC_2/Int.8, DE_F_S_3/Int.6). Five of the interviewees engage at the community level (DE_F_S_1/Int.4, DE_F_EC_1/Int.7, DE_F_EC_2/Int.8, DE_F_C_/Int.10, DE_F_EC_3/Int.9); two mainly abstain from local engagement (DE_F_E_2/Int.2, DE_F_E_3/Int.3). However, all women perceive networks as crucial for the success of their activities. Two women are active in national-level networks (DE_F_E_3/Int.3, DE_F_S_3/Int.6); one is involved in a regional network (DE_F_E_2/Int.2), and one in a local network (DE_F_E_1/Int.1). All the others engage in sectoral and regional or local and regional or on all levels in various networks, which gives evidence of the core importance to engage in professional networks for success and visibility as a female innovator in the farming sector.

4.4 TECHNOLOGICAL

Often the technological dimension dominates the image of farm innovation, maybe, because technologies are visible on the market and they tend to be more visible than social or organisational innovations. For the sample of ten German interviewees, innovative technologies used or developed by the women play a minor role compared to innovation driving economic and/or social effects. Five women use innovative 'hardware', the other half does not rely on innovative facilities or machinery. *"New technologies were not important for us. Important was that grazing animals and grassland farming create biodiversity and protect the climate"* (DE_F_EC_2/Int.8).

Two of the interviewees use innovative software such as social media apps (DE_F_S_3/Int.6, DE_F_E_3/Int.3), and three women use innovative management technologies (DE_F_C_/Int.10, DE_F_S_3/Int.6, DE_F_EC_3/Int.9). When looking at the development of innovative technologies, DE_F_EC_3/Int.9 co-created new processing machinery/facilities. Two women were involved in software development, and five women developed new management techniques/technology.

4.5 ENVIRONMENTAL

As mentioned above, the environmental dimension of sustainability is crucial for all interviewees. Six of them address the topic of biodiversity and the protection of ecosystems. Therefore, five address the protection of soils and water bodies at the same time. The remaining one (DE_F_E_2/Int.2) focuses on the protection of rare plants or animal breeds together with DE_F_E_3/Int.3. The issue of climate change mitigation or adaptation is highly relevant for half of the examples assessed.

Several of the farms have organic certification, which relates to the protection of biodiversity, soil and water protection. The protection of rare breeds and animal welfare might also relate to organic farming practices. The decision to change to organic was based on ecological values, never driven by economic incentives only. However, economics are very important for organic farms also to ensure the viability of the business.



As explained in section 2.1, the proportion of animal welfare-related activities in the sample is high with five examples. This does not over-represent the topic of animal husbandry and animal welfare but is in line with the findings of the German study assessing women's contribution to farm work¹. The assignment of animal welfare-related issues to one of the three sustainability dimensions is challenging for various reasons.

- I) Animal husbandry-related innovations refer to environmental sustainability when animal welfare is classified as natural resources such as biodiversity or water. Is this an appropriate solution? Ecological sustainability aspects seem to be different. Animal husbandry represents a controlled production system, which affects environmental systems instead of being affected by externalities.
- II) If the focus is on the herd's behavioural health, it might refer to the social sustainability dimensions because the topic refers to social structures – however, not of humans but of the animals. When the social sustainability dimension refers to social aspects of humans, then animal behaviour and social interaction of the animals might be allocated to a fourth sustainability dimension
- III) The additional dimension usually covers aspects of climate change, which do not fit with the three classic sustainability dimensions. Animal welfare might fit best into this additional category. Instead of climate change, we call this fourth dimension 'Other' to include animal welfare.

The Thünen Institute⁵ team develops a sustainability module for dairy farms including the definition of four dimensions. The fourth sustainability dimension for animal welfare as defined by Thünen corresponds with the assumption made in this report.

5.MAINSTREAMING ACTIONS

5.1 SCALING UP

In most cases, the innovative women and their achievements received recognition. This recognition affected social relations in the near environment. The aim to raise awareness for ecosystem services or animal welfare provided by farming was successful. The relationship building resulted in e.g. more direct marketing. However, changing laws, policies or norms were not highlighted. One woman was invited to the Ministry of Agriculture to join a working group that developed a specific value chain support measure under the Rural Development Plan.

5.2 SCALING OUT

In this sample, the topic of the dairy calf-cow system came to the foreground with two women pioneers in calf-cow dairy systems and two additional women practicing brother

⁵<https://www.thuenen.de/en/institutes/farm-economics>



animal marketing. Animal welfare with respect to the raising of young animals is a typical field for women working in farming. For that reason, it is not unexpected to have more female-innovations representing these types of innovation. The system was a novelty 20 years ago because all calves are separated after birth in common systems. Two of the interviewees represent the early pioneers with this system. They contributed to the establishment of the national wide network of cow-calf dairy systems.

In terms of economic independency and entrepreneurship of farming women, one interviewee engaged in a local farmers' women network, which contributed a lot to the personal development and financial independence of some of their members.

In addition, the innovative nature conservation system scaled up with others aiming to learn and establish a similar system in their area. The transfer of lessons learnt played an important role.

5.3 SCALING DOWN

All women are highly trained as shown in Table 8. If their original professional training did not relate to farming, they participated in courses or study programmes in particular those that did not have the opportunity to do so from the outset. In Germany, all levels of farming-related education and training are accessible for women and men. No gender specific support is available. Funding models and courses are available.

The forms of professional education differ but the interviewed women have either a university degree or Meister Certificate², which represents a high level of practice-oriented formation including the right to train and teach apprentices.

There was no women-specific support. The interviewees highlighted that men and women are facing the same problems when implementing this or a similar innovative solution or product.

5.4 SCALING IN

This section focused on the capacity of organizations/institutions and particular support provided for women-led farming innovations. Moreover, the knowledge of the AKIS (Agricultural Knowledge and Innovation System) was covered.

One interviewee explained that her innovative production system contributed to widening the understanding of the advisors in the area. They would have not been aware of such an innovative solution. Apart from that, advisory services were not mentioned explicitly. Education and training as well as administration (bureaucracy has been addressed in other sections above).

The interviewees did not know the term of the policy concept AKIS. Knowledge and innovation institutes or public authorities do not use the term in front of farmers or applicants. In addition, many officials do not have a clear understanding of the EU Commission's expectations when asking for the "strengthening of the AKIS" as noted in the guidance document for the development of national CAP strategic plans.



In Germany, access to training and education is no problem. Women as well as men can start whatever they aim to learn if the person is determined to do so. Hampering factors might be finances and social context but in general, access is not limited. The same is true for advice for various production systems or farm diversification. Even when regions do not offer public advisory services, ministries offer voucher systems or officials who help with compliance with legal obligations.

Figure 2 shows that the concept of the AKIS refers to several dimensions. These are listed below, and – if obvious – the connections are relevant for the interviewees:

- AKIS - education: all women (apart from the DE_F_E_2/Int.2women) have received professional training; they went to schools or universities. For that reason, they have been in contact with teachers and trainers. However, the DE_F_E_2/Int.2 cooperated with HNEE and learnt a lot from the cooperation project for sheep farmers.
- AKIS – research: DE_F_C/Int.10, DE_F_E_3/Int.3, DE_F_E_2/Int.2 cooperate with researchers when questions or projects emerge.
- AKIS – advisory services: All interviewees know their public advisory service if the Federal States provide public farm advice. However, the role of farm advisors was not mentioned explicitly.
- AKIS – private support businesses: Consultants and banks play a role when investments are taking place. All women have been in contact from time to time. Private vet services are relevant for those who work with animals (DE_F_E_3/Int.3, DE_F_EC_2/Int.8, DE_F_S_1/Int.4, DE_F_E_1/Int.1).
- AKIS – value chain SMEs: The integration in the value chain, which includes cooperation including sometimes-contractual agreements between business partners, plays a role in several of the innovative approaches (DE_F_S_2/Int.5, but also DE_F_E_1/Int.1 and DE_F_EC_3/Int.9).
- AKIS – NGOs including civil society: DE_F_EC_2/Int.8 and her cooperation with the Food Councils in the area; DE_F_C/Int.10 and the business and asset management model with the foundation; DE_F_EC_1/Int.7 with her engagement as vice president of a large farmers' organisation.
- AKIS – policy and administration: All women know their local authorities, which are in charge of land use-related activities (agriculture, water, nature conservation, local economy, training and learning, certification etc.). They have been in contact with them when needed.



Figure 2. AKIS dimensions

Source: SCAR-AKIS 2012

5.5 SCALING DEEP

The interviewees did not know about their indirect impact on gender norms or behaviour.

- Several women tell the story that they encountered lacking trust in their competencies when they met first with an unknown man (or female). They interpreted this perception as gender-related, “*because I was a woman*”. However, this attitude seems to disappear when the evidence is given that competencies are behind the female image.
- DE_F_S_3/Int.6 reports that she was often the subject of comments that refer to her attractive appearance. Even more, she aims to impress with her knowledge and competence to explain farming issues to the external world.
- Several of the interviewees shared the experience that they were able to convince through their competencies. Usually, prejudices or unclear attitudes of the male peers or counterparts disappear. Hence, the dialogue or the cooperation focused on the issue.
- The mid-aged interviewees such as her from the remote rural area in Bavaria do not expect young women to encounter the same limitations as she did. Her mother did not allow her to apply for an agricultural apprenticeship.
- DE_F_S_3/Int.6 remember that her father/her teacher told her not to be trained in agriculture. This is the past for them.
- DE_F_E_1/Int.1 was supported by her parents when she decided to study agriculture.



6. CONCLUDING REFLECTIONS

AREA TYPES

The distinction between Remote rural areas and areas close to cities worked well. However, the classification of rural villages did not work well for the selected cases from Germany. One reason refers to the category itself and its applicability for Germany because rural villages are very heterogeneous depending on the Federal State and the geographical characteristics (mountain, population density, distance to urban area etc). Another reason emerges from the selection process and the replacement of selected persons during the case study work. For that reason, the results for the interviews within the category 'Rural villages' are not substantially different than from those classified 'Close to cities'.

The activities of the interviewees are located in different areas of Germany, which have different characteristics. Moreover, the difference between German regions is more relevant than the differences between the FLIARA categories within the same region ('Rural village' versus 'Close to the city' etc.). Moreover, the FLIARA categories do not address the Eastern German transition history, which is another layer that interferes with the interpretation of 'Remote rural', 'Close to city' and 'Rural village'. Regionalisation of structures and policies has the German case study in common with the Italian case study but the East/West transition history of the social, political and economic system is unique. These German specificities need to be taken into account in the cross-country analyses.

GEOGRAPHICAL AREA AND COMPARABILITY

Germany is a large country with 16 Federal States. Three of these are city-states, which can be neglected in rural analyses. Some of these states have more population and land (and number of farms) than numerous EU Member States. The selected interviewees from Germany are examples from seven Federal States (Mecklenburg-Pomerania, Brandenburg, Northrhine-Westfalia, Rhineland-Palatine, Hesse, Baden-Wuerttemberg, Bavaria). The natural conditions, infrastructure, advisory, and administrative structure differ substantially. The political context also differs. Even when regional policy programmes partly refer to national legislation or co-funding programmes (Gemeinschaftsaufgaben), the implementation on the regional level and the rules of the managing, granting and funding authorities can be fundamentally different. Even the National CAP Strategic Plan does not work as a linking programme because the regions have defined their individual support measures according to their regional policy and traditions. For that reason, the comparison between farms under one (non-existing) national context does lead to consistent insights. The differences between German regions might be as substantial as between Bavaria and Flanders or Finland and Hesse. On the other side, a comparison between e.g. advisory systems shows that the structures and funding context of Sweden and Brandenburg have more in common than the States of Brandenburg and the neighbouring Lower-Saxony.



FEMALE STEREOTYPES AND POTENTIAL DISCRIMINATION

All women have searched for and “taken” what they wanted “to have”. Gender did not play a role in their innovation or the self-understanding of their engagement. The socialisation in eastern and western Germany played a role in their self-understanding but did not hamper or enable these women. The urban versus farming socialisation played a role in how to approach farming practices and (animal welfare) and local embeddedness in the community.

Gender does not matter anymore when women were able to establish personal relationships with those who initially reduced their characteristics or professional competencies to “being a woman”. Access to education, administration, banks or farm advice was not an issue. The interviewees all highlighted that they could overcome stereotype reactions very quickly when they could convince due to her competencies.

CARE WORK

The interviewees did not highlight care work and the associated time required for it as a hampering factor. This result might be driven by the selection criteria because only women who were strong innovators and engaged already in the past – even when children were small. Consequently, they must have established a system that allowed for their innovative activities and having small children at the same time. For several of the interviewees, this period in life had already passed for several years. Some mentioned that it was not easy because the development of the farm business was at a crucial time when we were young.

SUPPORTING FAMILIES AND/OR PARTNERS

Several of the interviewees highlighted the big role of support from their close family and partners. Without this workload and financial and consultation support, they would have not been able to reach their goals. This is not different to men when they have family, houses etc. and perform in their professional life. One difference might be that men highlight less explicitly the role of their closest family but this would have needed to be studied with a comparable approach as this analysis to allow for conclusions. These findings resonate with the results of the German ‘Women on Farms in Germany’ (by Thünen Institute and Göttingen University).

LEVEL OF EDUCATION AND PROFESSIONAL TRAINING

The women were selected because of their achievements. They all have outstanding capacities. The type of secondary/tertiary schools they visited did not result from the interviews but the level of professional training is impressive. The practitioners who did not go to university have a Meister certificate, which many male farmers do not have because it requires extra effort, and study time while working at the same time. The certificates of the agricultural apprentice (Gesellenbrief) and the Meister² are the



internationally recognised characteristics of the German professional training for practitioners. Several of the interviewees have a Master's degree from the university or even a PhD. The level of professional education and training related to plant production or animal husbandry is outstanding (with one exception of DE_F_E_2/Int.2 who started farming as a newcomer in the industry).

Some of the interviewees highlighted they were originally trained in other disciplines or had earlier work experiences outside agriculture but confessed that these competencies contributed to realise their innovative ideas such as office administration, food technology or the interpretation of official documents.



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FARMING WOMEN-LED INNOVATIONS IN IRELAND

CASE STUDY REPORT 1

Authors: Maura Farrell, Aisling Murtagh and Louise Weir



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ACRONYMS & ABBREVIATIONS

| | |
|-------------|--|
| DAFM | Department of Agriculture, Food and the Marine |
| DRCD | Department of Rural and Community Development |
| LEO | Local Enterprise Office |
| CSO | Central Statistics Office |
| EU | European Union |
| EEC | European Economic Community |



1. THE NATIONAL CONTEXT

Traditionally, Ireland was considered a country largely dependent on family farming and the agricultural industry. In 1973, Ireland joined the European Union (EU) and at this time has approximately 250,000 farms, which accounted for nearly one-quarter of the total workforce (Teagasc, 2012). Since then, Ireland's agricultural journey has seen a decline in a productivist agricultural regime and an increase in multifunctional farming. This change runs alongside an increase in education and a modernisation in society. The result of such change has been a decline in the Irish farm family to its current figure of 135,000 farms (CSO, 2020). The average Agricultural Area Utilised (AAU) (1991-2020) was approximately 33.4 hectares, which increased slightly since 2010 by about two thirds of a hectare. This continuous decrease in farm size in the last twenty years corresponded to the regular increase in AAU.

There are typically eight farm systems operating in Irish agriculture, namely, Specialist Tillage, Specialist Dairying, Specialist Beef Production, Specialist Sheep, Mixed Grazing Livestock, Mixed Crops and Livestock, Mixed Field Crops and Other (CSO, 2020) and these vary depending on the geographical location.

The ten interviewees engaged in this case study were all located in a rural area, but typographically described for the FLIARA project as a rural village or a rural area close to a large town or city. Six farms were located in the west of the country, two in the south, one in the midlands and one in the north.

When considering the regional farm systems, it is interesting to refer to the work of Leonard et al. (2019), who suggested that there are predominantly two farm systems in Ireland, beef and dairy, with dairy farming receiving a considerably higher average income in comparison to beef.

In addition to this farm system categorisation, these farms are also regionalised, with a higher concentration of dairy in the south of Ireland and beef farmers in the west and midlands. In the west of Ireland, in particular, farms tend to be smaller, and viability is less certain. As a result, many farmers have off farm jobs and farm diversification is increasingly considered an option to enhance viability.

Women in Irish Agriculture:

Ireland's Census of Agriculture (CSO, 2020) highlighted a 1.0% increase in the number of female farm holders from 2010 to 2020. Nonetheless, the reality of women's ownership of farms in Ireland is poor, with 29% of female farm holders managing farms under 10 hectares, 25% handle farms between 10 and 20 hectares, and only 3% have farms exceeding 100 hectares.

In relation to farm succession, in 2020 less than half of the farm holders in Ireland had a succession plan in place, but only 16.2% farmers named a female as a successor.



Women in Irish farming are largely engaged in mixed farming (23.7%), with a percentage also involved in specialty sheep (17.1%). Farm diversification is increasingly an option for women on farms, and these diversifications range from farm tourism to social farming.

To encourage the engagement of women in all types of farming, production and diversification, Ireland's current Common Agricultural Policy (CAP) Strategic Plan (CSP) for 2023-2027 has included specific measures for women.

These include the On-Farm Capital Investment Scheme, where women ranging from the age of 18 to 66 can access specialised women farmer support and can avail of the opportunity to benefit from a 60% grant allocation designated for young and women farmers. The CSP also offers female focused knowledge transfer groups for women to influence peer-to-peer learning while addressing shared challenges and gender balance. Ireland's CSP also commits to including representatives of organisations representing women in the Monitoring Committee to strengthen the equality dimension in implementing CSPs.

2. THE INNOVATION

Ten women were interviewed for this case study, and all were situated in a rural village or rural area close to a larger town or city. All women were based on farms, which were either family owned, rented, or personally owned.

The innovations ranged from organic farming, farm diversifications, farm influencers, wool producer, and social farming.

The sustainability dimensions of the ten farms ranged from five economic, three environmental and two social, however as we will see further into the report most farmers also identified within the other dimensions.

The ages of the women ranged from mid-twenties to one woman in her early seventies.

The farm sizes were varied with some over forty hectares, while some women were operationalized in farms as small as two hectares.

The ownership was straight forward in some cases with women owning the farms alongside a partner or husband, while in two cases the women were using land on a family farm with limited prospects of inheriting the farm. There were two women who were farm owners, having had inherited from a family member directly, while several others were married or partnered with the farm owner. Two women had established businesses on the family farm but were not owners or renting.

Some women were on the farm since the 1980s while some others only started their on-farm innovation in the last two to three years.



Table 1. Farm Case Study 1: Interviewee Details

| No. Interview | Age | Educational Level | Farm Dimension (ha) | Property Rights(own; rented) | Legal Form of the Farm | Year Started operating in the farm |
|-------------------|-----|-------------------|---------------------|------------------------------|------------------------|------------------------------------|
| IE_F_EC_2/int.11 | 56 | Third Level | - | Owner | Company | 1989 |
| IE_F_E_3/int.12 | 52 | Third Level | 4 | Owner | Family Farm | 2016 |
| IE_F_S_2/int.13 | 26 | Third Level | 1 | Rented | Family Farm | 2021 |
| IE_F_EC_2/int.14 | 50 | Third Level | 16 | Owner | Family Farm | 2012 |
| IE_F_S_3/int.15 | 26 | Third Level | 30 | Owners | Family Farm | 2018 |
| IE_F_E_3/int.16 | 48 | Second Level | 2 | Owners | Family Farm | 2018 |
| IE_F_E_3/int.17 | 38 | Third Level | 29 | Rented | Family Farm | 2009 |
| IE_F_EC_3/int. 18 | 70 | Second Level | 2.5 | Owner | Family Farm | 1985 |
| IE_F_EC_3/int.19 | 42 | Third Level | 1 | Owner | Family Farm | 2018 |
| IE_F_EC_2/int. 20 | 55 | Third Level | 33 | Owner | Family Farm | 2014 |

IE = Ireland; R = Rural Innovation; EN – Environmental Sustainability; S =Social Sustainability; EC = Economic Sustainability; C=Cultural Sustainability. 1 = Remote Rural Area; 2 = Rural Location Close to a City; 3 = Rural Village. Number = Interviewee Number.

3. INNOVATION PATHWAYS

3.1 MOTIVATORS FOR INNOVATION

There were a variety of reasons the women in this case study started an on-farm innovation, but similar in all cases was a deep love, and attachment to the farm, the land and animals. Women who had travelled for educational or work purposes felt compelled to return home to the farm, while women who married into farms developed a deep bond with the farm. One woman stated, *“I’ve done a lot of different jobs, traveled a lot, but I always wanted to come back to my roots anyway, so I was thrilled as much as he was, probably more. I was very excited about farming again and having animals again and having the opportunity to have more land to grow”* (Interviewee, 19). Some women also had a background in farming from growing up on the farm or an educational farming background, *“It was just in my DNA and it has never left, so I took myself off to agricultural college and I did my national cert in agriculture there”* (Interviewee, 12). Some women also had a deep love for nature and felt compelled to work in the area of farming, where they found a sense of freedom in working in the area they loved.

Alongside this passion for farming, some women were also motivated by a desire for independence and entrepreneurship. Starting a farm business allowed them to earn money while living on the farm but also forged them an opportunity to enhance the viability of the farm. One woman stated, *“One cheque coming in for your crop every year be it blackcurrants, be it apples to industry is not enough to feed a family”* (Interviewee, 12). Other women were motivated by a passion for good food, organically grown in a sustainable manner, a passion which often led them into organic farming. Two women, who started social farming had a background in social care and felt they wanted to use



their farm, their education in social care and their experiences to diversify their farm. This was similar for another woman who had a background as a chef and felt she could add value to the farm through her skills and started a cookery school. Motivations were diverse for each woman, however all had a passion for what they wanted to diversify into or the innovation they were taking on, so this motivated each of them.

ASPIRATIONS

The production of good food was an aspiration for a number of the women who felt that we are living in a time where good, locally produced food, grown organically is essential. The women who spoke about this felt a need to educate people about our food and ensure the next generation had high quality, local food. One woman stated, *“I just loved the idea of producing food locally - that’s a huge driver for me. I get great satisfaction out of people enjoying our food that I know is good and clean and organic and produced you know to the best standards and hasn’t destroyed the environment in the process”* (Interviewee, 19). Some women did have an aspiration to make money, but only enough to maintain the business and enhance the viability of their farm, rather than make, *“Obviously I want to make money, but it wouldn’t be the main driver”* (Interviewee, 19). For other women, there was a keen sense of pride attached to their aspiration, especially those who had a skill or education. These women felt the need to prove they could achieve something with their business, that they could be successful. This was especially true for women who had inherited the farm.

Some women were also wanted to inspire other women to engage in farming or diversification. They were very aware of the opportunities in farm diversification and the need to add value to a farm in order to enhance viability. Their aspirations were to show other women that it is possible to successfully engage in a male dominated world. Some women also aspired to create jobs within rural areas for other men or women, with one woman stating, *“So just to kind of create a business that could generate jobs here in this place was really important to me”* (Interviewee, 14). Some women also wanted the opportunity to work from home, while rearing their own children, but at the same time having their own business. One woman responded by saying, *“I think it is to have a complete life, to run my own business and be my own boss yes but to have a complete change from office life”* (Interviewee, 20). A few women spoke about their communities and having an aspiration around bringing pride to their community around the business they have established and enhancing the tourism, culture and heritage of their local community.

Several women were confident that their innovations and businesses fulfilled a definite need within their communities or within the area of innovation. In one instance, an interviewee set up a supply chain for farmers selling wool and obtained an improved price for the farming community for local wool. The wool industry in Ireland is hampered by poor prices for farmers, so this innovation was very welcome by local farmers and fulfilled a definite need. Any woman engaged in food production was adamant that growing, selling or cooking organic, homegrown, local food fulfilled both a food supply need and an educational need. These women felt held strong views around a need to



education people about the value of good organic or homegrown food. The tourism industry and community development were also mentioned by some women, who felt their innovations fulfilled a need for additional tourism needs. In relation to the viability of the farm, the women all felt they filled a specific need. Their additional income from the business or innovation was often a key factor in the longer-term viability of the farm. From a personal perspective, most women felt their innovation filled a need within them to carve out a career, use their skills, education and for some it fulfilled a need to remain at home and raise their family.

3.2 CONSTRAINS AND FAVOURABLE CONDITIONS

This case study was conducted in rural areas closer to a larger town or city and in rural villages. Consequently, the constraints associated with rural locations were not as cumbersome compared to those in case study 3, where remoteness posed a greater obstacle.

PERSONAL CONSTRAINS AND CONTEXT CONSTRAINS

Personal constraints were discussed by all women, but all showed exceptional tenacity in overcoming issues and problems and finding solutions. Issues of succession were difficult for a small number of women who didn't have direct access to the farm or who had to wait through difficult times to access the farm. One young woman spoke of her love for the farm, but her disappointment in not being considered to inherit the family farm, which will go to her brother. Although now renting a small portion of the family farm, her disappointment was evident, while another woman spent several years minding elderly relatives prior to her inheritance of the family farm. One woman who has established a good business on her family farm is still unsure of her position long-term in relation to inheritance. As such, inheritance and property rights are still both precarious and discommoding for many women, particularly once they establish a business on-farm, but have no long-term stability or property rights.

In relation to family, childcare for some women was an issue, however, proximity to larger town provided most women with options around schools and childcare. A couple of women also spoke about difficulties in getting the family to engage in their farm diversification. They felt supported to an extent, but also sensed there was a different level of support given to male members of the family. Most women were confident they either had the skills to undertake their innovation, or else they knew where to obtain skills, with most satisfied that organisations provide skills upgrading if required.

A bigger issue for most women was the paperwork attached to grant applications, planning permission and any programmes or assistance. Most women felt this role fell to them, even if they were partnered in the business or their husband or partner engaged in the innovation. Adding this role to all their existing tasks meant they often do not have time to apply for grants or funds. One woman stated, *"It's this paperwork, it really is the heavy load a lot of the time. Because we all love what we do. I love digging and I love my animals. You know, so it's the paperwork"* (Interviewee, 19). Alongside these



constraints, other obstacles emerged for some women regarding insurance for farm diversification projects, particularly those which required engagement with children or adults on the farm. Although the woman concerned about insurance costs did not currently have any specific problems, she harboured concerns, which resulted in making key decisions around progression and advancement on the farm. One fundamental issue for a number of women was finance, the lack of finance but also their inability to access funds. Most women were concerned about getting into debt and not being able to finance a bank loan and the 'red tape' attached to any micro-financing business loans was also very concerning. One woman was of the opinion that, *"The main constraint is money, and it always is. Finance. Yes, there is a certain amount but there's plenty of mentoring and plenty of support. But I always said that if someone had given me five grand in cash it would have really helped but that does not happen"* (Interviewee, 11). Another woman had a similar opinion suggesting, *"We had premises. We had a farm. We had assets. So, you've got things that you can utilize, but it would move much quicker if you had finances on that. So, I think finance is the one"* (Interviewee 12). Another woman felt her business is increasingly impeded by the availability of seasonal staff and changes in climate. In previous years, she was sowing crops much earlier, but in the last three years the ground has been much wetter, and this is causing considerable concern.

FACING ISSUES

Many women spoke of the strength of character of women in general and in particular, rural and farming women. One woman emphasised this by saying, *"I think there are strengths to being a woman and being a farmer. I think there are strengths to it"* (Interviewee, 19). The women also spoke of their ability to 'compartmentalise their lives, into home life, business, and friends and in doing this, they could concentrate fully on their business or innovation. Others spoke of their ability to problem solve, which allowed them to find solutions to issues which arose in their business. This they felt was part of life on a farm, where problems materialised all the time and they needed to be solved. Women solved these farm problems while also dealing with the farm household issues. These character traits all added up to make women more resilient in business and 'tougher' than people expected, and more able to deal with issues than expected.

FAVOURABLE CONDITIONS

Access to a larger town or city meant that the interviewees had additional services and facilities, namely, improved broadband, transport, access to markets and community services. One woman stated, *"Very well serviced. Not isolated. Good for marketing. Good for distribution because we're sort of southwest central if you like in Ireland"* (Interviewee, 11). Nonetheless, there were a number of the women, who still had relatively poor broadband, although all except one woman felt it had improved in recent years, due to the National Broadband Scheme. One woman, although living near a larger town had no broadband and depended on 'a dongle hanging', which she felt has negatively impacted on her business (Interviewee, 16). One woman, who is ideally



positioned in a rural setting, but between two larger towns, felt her location was excellent for someone who produces and sells her own produce via an organic café.

Place was also immensely important from a personal perspective and as a favourable condition to most women. One woman spoke of her love of the land and the rural setting where she was based, stating, *“I’ve grown up around here and we take the good with the bad, but there’s a lot more positive than negative. We’re not in the heartland here of organics or the heartland of much but it’s a beautiful spot”* (Interviewee, 19). Some women spoke of the satisfaction they gain from working from home and raising their children on a farm, while others spoke of the pleasure and enjoyment, they gain from producing good food or maintaining a culture or heritage around their product.

The assistance some women received from national programmes, such as the ACORNS Programme, the Local Enterprise Office (LEO) and the LEADER programme was reiterated by a number of women, who gained skills and funds via these national and regionally based programmes. Some women also highlighted the positive aspects of awards or gaining access to a national broadcast show. One woman stated, *“Our lovely Nationwide and Ear to the Ground programmes, who have both been here and supported us. The media I never mentioned them, but our media is wonderful, they create an incredible awareness of what’s happening”* (Interviewee, 11). All women spoke of the support of family in one way or another, either via partners who had assisted progress of a husband or partner who was hugely supportive either directly in the business alongside the women or as an encouraging partner.

3.3 IDEA AND PREPARATIONS/DECISIONS AND PREPARATORY ACTIVITIES

If not the farm owner, some of the women first sought agreement with the family about accessing resources on the farm, including land or farm buildings. Once this was obtained, most women sought training if needed. Some women felt under prepared for their journey and unsure where to access resources, training, and advice. One interviewee highlighted her lack of knowledge by saying, *“I definitely wasn’t as familiar with all of those supports or institutions that were available when we were starting”* (Interviewee, 13). The Local Action Groups appear to be a starting point with some women who knew of the LEADER Programme but were very unsure of what it was able to offer them. However, most ended up going to the Local Enterprise Office for training in business development. Others, who were already skilled in their area of business, did obtain skills in business start-ups, but felt they were happy to depend on their own expertise and knowledge to get ‘their business off the ground’. One woman, who trained as a chef, just kept building her business without too much planning or training. She stated, *“The farm hadn’t any plan, had no plans in the cookery school. People wanted me to do a feasibility study, but there were no studies done here”* (Interviewee, 16). She did, however, gain additional skills as she developed an online presence during Covid, which enhanced her business long-term. Irrespective of what preparations the women did prior to establishing their business, all women felt that knowing their own area, their individual skill was paramount to their success. Very few spoke of mentorship when



establishing their own innovation, although they did feel they would have benefited from this type of process, and even those established still feel mentorship is important.

Every woman was adamant about the importance of networking. Some felt grassroots farming organisations held a lot of significance in disseminating technical knowledge, with one woman stating, *“I love to go to the biological agricultural conference and there are some great speakers from all over the world about soil and different things there. And it’s lovely to meet other farmers doing other things. It’s really exciting doing different things”* (Interviewee, 19). Some were selective in their networking finding it hugely worthwhile but also time consuming, *“I would find networking a great help, not only networking for the sake of it, but networking with people that have a similar interest or a similar goal you know”* (Interviewee, 13). Some women engaged in local business organizations, while some women veered more towards businesswomen’s organization, although these were less common for some women and those tailored to rural and farming women were even less frequent. As some women gained success and distinction, they were increasingly approached to speak at events, which resulted in increased networks. Although most women saw the importance of networking with other likeminded women, others also emphasized the importance of connecting and networking with men in the business. This they felt was hugely important in the area of farming where men needed to see how women approach the profession and also how they have successful diversification ideas and practices; *“Networking through you know other women that are in business. It’s really important to support each other. But also, men. I think the men have to come at it with a different perspective and we need to see both sides”* (Interviewee, 17). Most women had very little issues around networking except the time it takes, although geographically positioned near a larger town or village did provide additional options for networking.

3.4 CONCRETISATION OF INNOVATIONS

The tangible outcomes of the innovations enacted by the ten women were varied. Four of the women would have successfully employed a number of people on both a part-time and full-time basis, with one woman employing more on a seasonal basis. The longer one woman was in business the more opportunity she had to employ people and in doing so she felt she enhanced the opportunities for both her employees and her business. She suggested, *“There is now a lot more work attached to the business, but it enables you to employ people which can have multiple task jobs which maybe you would have been alone on the farm working. It allows you to get into different industries and different ways to see and look at exports and look at other ways people are working with farms”* (Interviewee, 11). Another interviewee employed numerous people since starting her business in the 1980s and as the business progressed, she increasingly employed more professional people as well as farm labourers, which increased the type and professional nature of jobs available within her rural area, *“We had to employ and we did this, employ a nutritionist, an animal nutritionist to advise us”* (Interviewee, 18). Another woman spoke of her potential to employ additional people in her business, but this came at a cost of her increasing her own workload. She was confident the potential was there to expand; just unsure she personally wanted it to. She stated, *“I’m trying to keep it to a place where*



I don't employ a lot. I get help now and again you know. I don't employ a great amount of people. If I were to build another tunnel and employ a few more people I would definitely have a market for it" (Interviewee, 19).

All women either produced a product, products or supplied a service, these included, social services, baked goods, organic food, high end fruit drinks, eggs and lavender products. Some women sold via Farmer's Markets, some established farm shops on their farms for product sale and sell online.

The interviews provided a mixture of responses when exploring the issue of outcomes and how those outcomes manifest. A number of women felt their innovation outcomes manifest as a mixture of economic, environmental technological and so on, while others were adamant that their outcomes were focused in one area. For example, one woman engaged in the wool industry felt her outcomes were probably strongly within the social and environmental bracket, however, she also felt that there is great heritage and culture attached to branding her wool business, which has strong links to culture and tradition. She explained this by saying, *"Wool to me is very much part of our heritage and culture. Why do we get so skittish when we mention the word wool and we don't see the biofiber potential of our forbearers and what they were able to do with wool. They used it for building bridges, building houses - they used wool for everything back then. Now we can only think about socks and hats and gloves"* (Interviewee, 12). One businesswoman engaged in a social enterprise was adamant her innovation outcomes were currently social, although she also hoped it would have an economic impact.

Some women who were struggling to enhance the viability of their business felt that their outcomes were not financial. Most felt that their innovations were doing well, but in all they had invested a lot of time and money, with one woman saying, *"Overall it's still been a huge investment, all our life savings basically and the return is definitely not there yet. So we're trying to make the numbers add up. And we're getting closer to it"* (Interviewee, 14). Another woman who was much longer in the business did feel that over time she did have financial gains, but this followed huge investment as well as a life of dedication and hard work.

3.5 IMPACTS OF INNOVATIONS

Every interviewee was humble in answering a question related to impact on their community, responding that they 'hoped they had an impact' on their surrounding area and their local community. Investigating this further it became more than obvious that this was indeed the case, and most if not all women, had a considerable impact on their community, although reluctant to confirm this. For some the impact was social with local people gathering around a farm shop, café or organic farm. These social gatherings brought local people together enhancing community engagement and community spirit, with one woman saying, *"I know our Saturday shops are really social and people get to meet and they have a tea and a coffee and a brownie and they sit down and chat. During Covid it was a chance for local to come here and be outside and chat to people – so, it provided a bit of a lifeline"* (Interviewee, 19). Another woman who established an event for sheep shearing called a 'Meitheal' (an Irish work for voluntary work team or party),



brought people together from all over the region. This event had a huge impact on the local community, but also on the wider community of farmers who were able to come together to chat and exchange stories and news. Particularly after Covid these types of occasions are highly valued in rural society.

Several women, whose innovations attract the public, found that their endeavors not only appealed to tourists, but also contributed positively to the growth of other local businesses. One woman spoke of a strong community spirit that still exists in farming, and she played a role in ensuring that is maintained, *“I think it definitely brings that linkage to the community. We haven’t lost community in farming I don’t think. It’s the one area where people still drop in you know and talk to each other and whatever. But I think it links it even more”* (Interviewee, 11). Another community linkage revolved around awards granted to the women. Most who had received an award for their innovation felt that the local community felt a great sense of pride that this award was coming to their community as well as to the women themselves.

The innovations could be considered incremental in so far as many women had started at a certain lower point and gradually progressed their innovation, while the innovations explored could also be considered sustaining as most innovations were connected to a family farm, but also the women themselves were hugely committed to their innovation or business. Some projects, particularly a wool project could be considered radical in that the industry itself is male dominated within an Irish context, so a woman leading a wool innovation is groundbreaking. In some respects, many of the innovations could be conceived disruptive in that rural businesses or women-led innovations are not the norm in traditional Irish society so having a strong rural business led by a woman, particularly at farm level is adding to a more acceptable norm, one that is consistently changing the narrative around women-led innovations.

4. INNOVATION ECOSYSTEMS

4.1 POLITICAL

Most if not all the women interviewed were impacted and motivated, both positively and negatively by policy and political decisions. Many receive support from government via policies and/or regulations at both national and local levels. The ACORNS Programme is a popular mentoring programme funded by the Department of Agriculture, Food and the Marine for rural women interested in setting up a rural business or farm innovation. However, only one of the Interviewees had engaged with the programme, although she did find it very beneficial. Others looked towards their Local Enterprise Office and the LEADER programme, and although they did find value in their collaborations, they also found them administratively cumbersome.

Most women were heavily engaged in Agricultural policy, although none were familiar with the new Agricultural Knowledge Innovation Systems thinking within the current CAP programme. This, however, is not a failing of the women in question as this appears to be as much of a concept as a practice in current Irish agriculture. Some women were critical of the current CAP Strategic Plan and the policies dedicated to women. Firstly,



one woman spoke of the enhanced TAMS (Targeted Agricultural Modernisation Scheme) and the disconnection with the system and how quickly you need to move in business to advance. She stated, *"We've often filled out the TAMS applications, gone the whole way and then the next thing we need to move on it and the grant aid isn't coming and we have to just go for it. You know sometimes it's just too long to wait or the spec is too high that you would have it done cheaper yourself. The TAMS grants often the spec is very high and if you were to do it yourself with a slightly lower spec you would save money. So, you know it's not they're not always the shiny package they appear"* (Interviewee, 19). Another woman engaged in food production is hampered by the paperwork attached to policies and regulations, saying that the paperwork is draining any creative spirit she has. A number, if not all women were critical of the CAP Strategic Plan's Women Only Knowledge Transfer Groups, feeling that further isolation of women into these groups was not allowing men to see the genuine capacity of women in agriculture or for women to learn from men. In all they felt that such policies would fail to change the narrative around women engaged in farming or innovating at farm level.

A small number of women alluded to broader rural policies that impacted services in rural areas, which in turn impacted their business. This included childcare. Women who had accessed training services around business development were happy with these, but also felt that funds and grant aid was still a huge issue for them and not readily available via policy. They also felt that if funding was available it was embedded in conditions which they could not fulfill, including accessing funds if you employed more than a certain amount of people, which did not apply to some women.

CHANGES IN POLICY

Most women felt that dedicated policy for women in rural business was needed, but meaningful policy which could really change the dynamic of women in agriculture and farm diversification. A number of women were unsure if policy changes would create much impact in their lives, particularly those who felt that the housework and childcare still falls unproportionally to women. Consequently, some women felt that additional assistance that would help in this area would be welcomed. This potentially would be additional childcare and after school care.

Education around enterprise and business development targeted at the farming community was also suggested, with an emphasis on women and farm diversification. One woman suggested that greater access to business development education for rural and farming women, but also highlighting that a "living can be made on farms by considering side enterprises" (Interviewee, 19). Other women spoke more broadly about education, suggesting there was a great need to encourage female entrepreneurship within the formal educational system and from a young age. Another viewpoint revolved around food policy and the need to introduce policy directives that encouraged the use of locally produced food, in addition to a fair price for the farmers produce, irrespective of the farmer being male or female. Another woman also spoke on this issue, suggesting that policy can follow demands from people, and she feels that people should be encouraged to demand locally grown produce which is better for them and for the



environment. She stated, *“Change comes because you kind of generate a demand. You know people are demanding better food and better produced food and therefore producers are making those changes because they want to meet that demand”* (Interviewee, 14).

One woman spoke of current policies and how they can be disconnected from reality, *“I don’t believe the policy makers really get down to the farm gate. And I just feel that a lot of the pie is sliced up and by the time it gets to the farm gate... and when policies are being driven by policy makers as opposed to farmers”* (Interviewee, 12). She went on to suggest the importance of having women at decision making levels when it came to policy making and the only way to improve things for women in agriculture is to give them a voice at the policy making table. Another woman went on to discuss issues around succession and inheritance and the difficulties associated with women inheriting the farm. She was cognizant of the issues of farm succession in general in Ireland, but also felt the issue was far greater for women. Even within the educational system, she felt there was little or no encouragement for girls to consider farming or agriculture as a career, therefore the narrative is unlikely to change, when it is not changing at the grassroots level.

4.2 ECONOMIC

Crowd funding was not alluded to by any interviewee, although some had received financial incentives from the LEADER programme, which was used to enhance her premises for a social farming venture. One woman spoke of her journey to gain access to funds, but this failed to materialise, so she took out a personal loan. Another woman also obtained LEADER funding for equipment needed for her on-farm diversification. Both women who accessed LEADER funding highly commended the Local Action Groups who assisted them in their funding journey, but they were also critical of the paperwork attached to the funding process.

In general, most women attempted to either access loans, which were also difficult, but not in comparison to accessing grants, which were limited, not available for sole traders or not available at all. In relation to loans, two women discussed the difficulties they had in accessing loans with one woman suggesting the issues around farm loans are not just connected to females but lending agencies who failed to understand the farming communities, she stated, *“If you go into the credit union or go to any bank, and this is reflective of our environment as well, they’re so far removed from what farmers do they don’t understand. So, when you put ordinary staff behind a counter that’s not specialised that has no background in farming”* (Interviewee, 16). One woman who has a successful on-farm business, enhanced her funds via contracts for her produce through one of the main supermarkets. This was also the case with a number of other women, who felt that making a success of their business was the best way of impacting funds rather than looking for grants or loans.



4.3 SOCIAL

Cultural norms and gender roles were high on the list of most interviewees' considerations. Some women spoke of the changing perspectives around women in agriculture and particularly around women and farm diversification, with one woman stating, *"I think farmers are beginning to realise that you know women are not just good at administration, they're good at getting stuff done"* (Interviewee, 12). Others spoke of the need to see women in more pivoted positions and how this can create greater change around gender norms. Many women were motivated by the changes they gradually see in society around women, they felt women in farming and in rural business were gaining recognition, although considerable work was still to be done, to achieve a 'level playing field'. Some women felt that the media can play a key role in promoting women in farming and in rural business, with one woman saying, *"You see programmes like Ear to the Ground and Nationwide and if they can focus maybe more on young farmers, or younger girls, breeding sheep or breeding cattle, things like that help obviously. The more it's seen and the more it's publicised, it's breaking down kind of stereotypical barriers"* (Interviewee, 20).

One woman spoke of always being introduced as 'the farmer's wife', but when it came to the business, she was indeed the driver of the diversification. Nonetheless a number of women doubted their ability and position on the farm and in their innovation. Many spoke of 'impostor syndrome', with one woman saying, *"You know I have constant imposter syndrome. Like I say I don't let it stop me doing anything but I'm always doubting myself and why am I doing this and what do I know. And then when you get something wrong or you mess something up, it's that emotional kind of like you know kick to the stomach"* (Interviewee, 14). However other woman felt they faced very little discrimination for working in a male dominated employment, feeling that most people just wanted you to do a good job and they didn't care if you were male or female. One woman suggested that *"They've seen us doing things on the farm. So, they know that yes, they have an interest in the farm, and they know what they want. But being women makes no difference"* (Interviewee, 15).

All women spoke of the difficulties and attitudes at the beginning of their innovation journey, particularly around an expectation of failure from the community and some family members. One woman spoke of her frustration around seeing the recognition and acceptance for women in farming and business in many countries she had travelled around the world but failed to see this in Ireland. She talked about the Inka women and the Philippine women and how they are celebrated in their history and their heritage and their homeland and how proud and connected and how they *"got rewarded for their skill and for their craft and for their design and that they were rewarded in the end too with the results that they were empowered by that"* (Interviewee, 18). She felt frustrated that Irish women do not have the same recognition. Most women however, felt that a level of recognition occurred the longer they were in business and also if they had received an award.



All women spoke highly of their husbands or partners and acknowledge that their support was central not only to the original commencement of the innovation but also the longer-term sustainability of the business.

4.4 TECHNOLOGICAL

The importance of technology in driving the progress of rural business or innovations was hugely significant, as emphasised by all women interviewed. Amongst the various technologies alluded to, they women unanimously identified the paramount importance of reliable broadband. A number of women spoke of having recently obtained fibre broadband due to the National Broadband Scheme, however others spoke of issues obtaining reliable high-powered broadband off the main road into their homes, even though they were in close proximity to a main town or city. Covid was a turning point for many women who used the internet to sell produce, advertise their business or deliver educational YouTube videos. Consequently, the internet and reliable broadband is now considered an essential element of business rather than a luxury to do without. One woman reiterated this point when she spoke about the importance of social media to her business, saying, *“Yeah social media - sometimes I worry we rely too much on it but social media has been the 100% platform in creating awareness or of making the bridge from the public street the main street into our website. The social media gets us out there. That was the one great thing about Covid. We all got good at editing and making videos and I still continue to do the little videos. Maybe before Christmas I might do something Christmassy. And I actually should be doing more of them because they’re a brilliant way to pull in business”* (Interviewee, 16).

One woman spoke of the various technologies she needed to advance her business down through the years, including various accounts packages that were central to her businesses and how upgrading these to newer systems was essential for her. She also spoke of grading machines she needed on her farm which were imported from the United States and how each advancement resulted in her business becoming less intensive. Another woman talked about technologies being a ‘game changer’ for women in agriculture and how the heavy-duty work can now be replaced for women, allowing women in agriculture to carry out almost any tasks on a farm. She stated, *“Yes technology is important. It’s innovation. It’s trying to drive on trying to reduce labour and get more technology based and be more innovative. So, we’ve put a lot of money in through pressers, a new curd pump, a new drain table, a new pasteuriser. We bought a cheese cutter there this year and we’re buying a cheese washer to try and speed things up. It’s about getting faster and being more efficient”* (Interviewee, 17).

4.5 ENVIRONMENTAL

Over and above social factors, environmental issues were highest priority for the women interviewed. For a certain number of the women, environmental factors influenced the type of innovation they established, in particular the women engaged in organic farming. Nonetheless, environmental factors did play a key role in the rest of the women’s innovation and business decisions. Some of the women were organic farmers, one saying she was *“Always mindful of what we use, what we do, how we treat the land. We*



would even have prior to becoming fully organic we would never have used bagged fertilizer - we always use our own animal dung. We have hens and we use the poultry manure. We use the dung from our cattle and we would never spray anything, I wouldn't dream of it. I wouldn't dream of" (Interviewee, 19). Another woman who sells her organic produce in her restaurant told us there are very little if any produce they sell or use in the restaurant that she does not organically grow or else she sources it from additional organic growers.

One woman highlighted how her awards for sustainable food production she has won two years running, largely due to her commitment to environmental farming and food production. An increasing number of women have added solar panel energy to their farm business for costs but mostly for environmental considerations. However, another woman said she is increasingly concerned about her business as a result of climate change, particularly the increase in rain, which has had a huge negative impact on her crop for three years running.

5. MAINSTREAMING ACTIONS

5.1 SCALING UP

Most women felt that laws and institutional norms were changing or beginning to change, but only recently. Consequently, the majority were of the opinion that Ireland had a distance to go yet until women in rural areas and farming had reached parity. Ireland's CAP Strategic Plan is a good example of change within the system with gender issues being considered for the first time. However, a number of women voiced their concerns around the policies attached to the plan for women in agriculture. The TAMS grants were generally welcome, but many were skeptical about 'Women Only Knowledge Transfer groups', considering it opportunity for including into the sector limiting rather than progressive. One woman stated, *"You'll get nowhere with segregation like that – I love chatting to men about farming to be honest. I find it very refreshing and I think it's good for them. It's good for them to hear my side you know. It might be just a different view on animal husbandry or something. Because we're women we have a totally different take on you know birthing animals for example, so they need to hear what we have to say. And I think you'll get nowhere when you divide, and you know you have a woman only group. I wouldn't want. I don't think I'd want to participate. I would only want to participate in a group that had mixed views men and women"* (Interviewee, 19). One woman did however feel that there was a place for women-only groups, particularly for women who found it too intimidating to join a larger male group.

Such policies and increasing media coverage of women engaged in farming assisted a change in norms and attitudes within the public but may not as much within the actual farming community. One woman stating, *"I think within our wider community it has. You know I definitely see it changing for the men that I meet. Within the farming community I wouldn't have seen as much change. I still walk into most farming events as the only or one of the few females in that room and it's always the same language or conversations used when we are in those spaces"* (Interviewee, 13). Another woman felt that education



has a significant role to play in changing policy. She felt we need to education the general public around women's engagement in farming and in business in general; she stated, "I think education - we've a lot of girls schools here and wouldn't it be nice to have sort of lecturers going in there to just say women in business, women in farming, women in the food sector" (Interviewee, 11). She went on to say that perception played a bit part in keeping women out of farming, young women in particular, *"It's a perception - I think the reality has been broken down a lot which is why its crumbling that way but it's a perception still. If you draw a tractor, you'd draw a man driving it, wouldn't you?"* (Interviewee, 11).

5.2 SCALING OUT

Business and rural business in particular also needs a change in perspective. This was the opinion of some women who felt that women have a considerable amount to offer, especially in farm diversification and adding value to a farm. Within these areas, a few women felt there is also a need for additional policy which can enhance the options and opportunities for women in business on-farms. Along these lines, some interviewees have seen greater change in particular areas of farming such as social farming and organics. These two areas appear to be increasingly more open to women, with some encouraged to go into social farming.

Most women collaborated with their community via community development communities that they volunteered on or via business collaborations which benefited their business and the community. Tourism, food production and social farming were innovations which saw greater collaborations occurring within communities. A number of women felt that they regularly influence other women to consider farming, farm diversification as an option on their farm. Some women also saw a change in attitude of male farmers who sought out their experience and knowledge when considering a change. Making the changes visible was important to some women who felt that people seeing changes that women are making and the success of those changes can influence change. Two influencers were interviewed as part of this case study and both felt that visibility of the innovations online can reach huge audiences, allowing people to see positive change and in turn replicate this change.

5.3 SCALING DOWN

As discussed previously only a small number of women received financial support via government funds, but a larger number obtained technical skills again via national, regional and local government funded agencies. The inclusion of women in Ireland's CAP Strategic Plan has been welcomed by all women and can only improve in the future, if a greater number of women feed into what is required on the ground.

One woman who lives in the Gaeltacht region of Ireland (Irish speaking region) spoke about Údaras na Gaeltachta, a government funded organisation, aiming to maintain the Irish language. She obtained funding from this organisation in addition to LEADER funding but only for segments of her farm. Although hugely complementary of both programmes and organisation, she also felt that the time delays in obtaining funding



delays progress in general and at times it is more efficient to move ahead with your ideas without seeking assistance from government bodies.

5.4 SCALING IN

Only one of the ten women interviewed knew of AKIS, with one woman suggesting that women in business looked at the ‘bottom line’ when considering such ‘thinking’ within the system and if it afforded them no financial gain, they rarely explored it. One issue repeated by some women was the issue of succession and how it impacts women in getting assistance, let that be grants or training. She stated, *“In terms of the grants that are targeted towards women in agriculture I struggle with those because I think they’re missing a step. There’s still so many female farmers or women that are involved in the farm that aren’t even being recognized and the male farmer whether that’s their husband or father or whoever isn’t going to look at going into a partnership, that they’re not going to look at putting the woman’s name on the information or on the grant schemes or you know that side of things”* (Interviewee, 13). In the longer term, this official exclusion from the ownership of the farm or from a farm partnership was holding back progress or advancements that the women could consider that would ultimately enhance the viability of the farm. The same interviewee went on to clarify her above statement by saying, *“I would see it on farms locally as well that there are so many women involved on the farm and that there’s only one person pulling those grants or pulling those schemes and that is the male farmer you know”* (Interviewee, 13).

5.5 SCALING DEEP

Societal change is something that most women felt are coming, but many also felt they do play a small role in this change, particularly if their innovations are visible. Consequently, most women felt that visibility of their innovations and farm work is essential in changing opinions. Some women felt that the farming organisation had a greater role to play in advancing women in farming and it’s not all down to policy. One woman stated that non-farming, business orientated organisations have given her more support and help than farming organisations where she had expected the most support, she said, *“The people that have given me the most platform and have been the most effective in me building my career is the associations that are non-farming”* (Interviewee, 16). Opening farms to the public was also a key suggestion by some women, who felt that women can change societal values and attitudes by allowing people to see, firsthand, how they work on farms or how they have established a good business on their farm.

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FARMING WOMEN-LED INNOVATIONS IN IRELAND

CASE STUDY REPORT 2

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ACRONYMS & ABBREVIATIONS

| | |
|-------------|--|
| DAFM | Department of Agriculture, Food and the Marine |
| DRCD | Department of Rural and Community Development |
| LEO | Local Enterprise Office |
| CSO | Central Statistics Office |
| EU | European Union |
| EEC | European Economic Community |
| TAMS | Targeted Agriculture Modernisation Scheme |



1. THE NATIONAL CONTEXT

The interviewees for Ireland's second farm case study were all based in a remote rural setting. Consequently, the national context for this report will focus more specifically on farming within this context.

In general, the Central Statistics Office (CSO) in Ireland utilise an urban/rural classification to discuss Irish statistical data. One key aspect of data analysis is an urban/rural classification, and although Ireland has five main city areas, it is still considered a predominantly rural country.

The FLIARA project uses a three-part typology, rural village, rural area close to a city and remote rural area. This report will focus on the classification of remote rural areas.

The women interviewed are engaged in on-farm innovations, businesses, or diversification all within a remote rural farming context.

The 2022 Census of Ireland showed that Ireland's population continues to grow, including growth within rural areas. Remote farming in Ireland is largely carried out via a family farm system, however the non-viability of the system results in many farmers engaging in off-farm work.

The Teagasc National Farm Survey uses the Family Farm Income (FFI) to explore farming for farm family labour, land and capital as its principal measure in Ireland. In 2018, FFI for all Irish farm systems was registered at €23,333, although dairy farming is consistently more profitable with the highest FFI registered at an average of €61,446 (Table 1).

Remote rural areas however tend to have less dairy farming and more tillage, cattle and sheep rearing. The FFI details can be an indicator of the viability of the farm income, which in turn can indicate the need for either farm diversification or off-farm income.

Within the remote context of this case study report, small scale farming is most relevant.

According to the 2020 Census of Agriculture by the CSO, there was a 1.0% increase in the proportion of female farm holders from 2010 to 2020.

Among female farm holders, 29% manage farms under 10 hectares, 25% handle farms between 10 and 20 hectares, and only 3% have farms exceeding 100 hectares.

In 2020, the percentage of male farm holders was higher for larger farm sizes. Around 91% of those managing farms above 50 hectares were male. For smaller farm sizes, the percentage of male farm holders decreased: 89.3% for 30–50 hectares, 87.2% for 20–30 hectares, 85.1% for 10–20 hectares, and 81.1% for less than 10 hectares.



Table 1. Family Farm Income (FFI) and UAA by Farm System 2018

| | No of farms in sample | % of Farm population | Family Farm Income (FFI) | UAA (Ha) |
|-----------------|-----------------------|----------------------|--------------------------|----------|
| Dairy | 311 | 17.4% | 61,446 | 58.7 |
| Cattle Rearing | 164 | 27.8% | 8311 | 30.8 |
| Cattle Other | 214 | 30.4% | 14560 | 37.2 |
| Sheep | 125 | 15.4% | 13297 | 48.1 |
| Tillage | 67 | 7.4% | 40650 | 60.2 |
| Mixed Livestock | 16 | 1.4% | 56029 | 77.6 |
| All | 897 | 100% | 23,333 | 43.1 |

2. THE INNOVATION

Ten women were interviewed for this case study and all women were within a remote location, some more remote than others, and a considerable distance from a rural town or village, while others were on the coastline of the west of Ireland.

The innovations were varied, but all originated on the family farm in most instances, with farm size varying from over 200 hectares to one hectare.

The innovations on farms were cultural in two instances, two were economic, social in two occurrences and the remaining four were environmental. A number of the women produced an on-farm product, while engaging in an on-farm diversification.

All women were based on family farms, with some people inheriting from family, or women marrying into their husband's family farm. One woman purchased a new farm alongside her husband, while one woman produced her products via her family farm but was not due to inherit the farm.

Nearly all women have been engaged in farming for a number of years, and most since childhood. Some women continued to carry out their full duties on the farm alongside running their farm diversification innovation.

Nine of the ten women have reached third level education and most to a Master's Level.

The innovations undertaken by the ten women were varied and dynamic, and all at a different stage and scale. Six of the women started their innovations and businesses in the last five years while others were running for nearly ten years and longer.

The innovations focused around on-farm tourism initiatives, organic farming, product development and the craft industry. A number of the women were also engaged in social farming as an addition to their innovation, while most of the women were actively engaged in the daily running of the farm.

Geographically, five women were based in remote locations in the west of Ireland, two in the south of the country, one in the north, one in the midlands and one in a border county.



Table 2. Farm Case Study 2: Interviewee Details

| N. Interview | Age | Educational Level | Dimension of the farm (ha) | Property Rights | Legal form of the farm (family farmer; company) | Year when she started operating in the farm |
|------------------|-----|-------------------|----------------------------|-----------------|---|---|
| IE_F_EC_1/int.21 | 44 | Third Level | 40 | Renting | Company | 2019 |
| IE_F_E_1/int.22 | 42 | Third Level | 202 | Owner | Family Farm | 2019 |
| IE_F_E_1/int.23 | 55 | Third Level | 26 | Owner | Family Farm | 2011 |
| IE_F_E_1/int.24 | 39 | Second Level | 20 | Owner | Family Farm | 2022 |
| IE_F_C_1/int.25 | 56 | Third Level | 10.1 | Owner | Family Farm | 2012 |
| IE_F_EC_1/Int.26 | 48 | Third Level | 42 | Company | Family Farm | 2010 |
| IE_F_S_1/Int.27 | 50 | Third Level | 10 | Owner | Family Farm | 2021 |
| IE_F_C_1/int.28 | 51 | Third Level | NA | Owner | Family Farm | 2016 |
| IE_F_S_3/int.29 | 42 | Third Level | NA | Owner | Company | 2022 |
| IE_F_E_3/Int.30 | 63 | Third Level | 1 | Owner | Company | 2022 |

IE = Ireland; R = Rural Innovation; EN – Environmental Sustainability; S =Social Sustainability; EC = Economic Sustainability; C=Cultural Sustainability. 1 = Remote Rural Area; 2 = Rural Location Close to a City; 3 = Rural Village. Number = Interviewee Number.

3. INNOVATION PATHWAYS

3.1 MOTIVATORS FOR INNOVATION

All ten women innovators are located within a remote rural context, which was in itself a motivator for their innovation. Some farms were located within a reasonable distance from a local town or village, however all innovators still considered themselves remote. The remote rural context meant that most women (although not all) required additional finances to ensure the viability of their farm. Some women were motivated by a need to preserve local cultures, while others were driven by environment responsibility via organic farming.

ASPIRATIONS

Few women spoke of an aspiration to make money and gain financially from their innovation, yet all hoped they would be reasonably well compensated. Most wanted an improvement to their farm and enhance the longevity of their farms for the next



generations. However, some women also had individual aspirations, such as one woman who has a craft business and aspired to '*preserve heritage crafts*' (Interviewee, 29). She fears that our craft industry, heritage, cultures and traditions, particularly around the wool industry will be lost, if we do not access schools and encourage a generation of young children to engage in crafts as an industry or a hobby. One older woman, aspired to enhancing her income, however she also aspired to boost the viability and visibility of local food producers. She stated, "*I aspire to run a business that really helps me promote and support what I love which is rural Ireland, rural food, small food producers and if what I do, in any way, contributes to being sustainable then I'm happy because I genuinely fear we'll turn around one day and we'll say where are they all gone and it will be too late*" (Interviewee, 30). One woman aspired to partnering with a government organisation so she could retain her business which educated people about the importance of nature and biodiversity. She aspired to this largely to retain her business and she stated, "*We can't even avail of funded staff, or any of the heritage grants, any of the grant funding. We can't avail of any supports like that. So, I don't see our future unless we can partner up like that*" (Interviewee, 25). A couple of the women aspired to advance their business seeing a solid direction in expansion. Alongside these individual aspirations most women wanted to enhance the viability of their farms, while also working from home. Remote, homework was important to most if not all women, who wanted to carry out family duties, while also working from a home base. One woman reiterated this point by saying, "*An income and a business that allows me to work from home and live the kind of lifestyle that I want in rural Ireland, that's what's important*" (Interviewee, 30). Addressing issues around sustainability was hugely important to all women and most aspired to protecting the environment and contributing to climate action.

FULFILLING A NEED

Most women were confident that their innovation or on-farm business fulfilled a need within the community. A number of women spoke of their innovations feeding into a wider tourism plan for their rural area and how their business impacts by adding services, visitors and additional spin-off industries. When discussing the environment and sustainability one woman outlined how her business provides visitors with an overview of the heritage and biodiversity of the Burren regions, which is important for overall knowledge and learning as well as for disseminating the importance of climate action. Another woman discussed the importance of opening up the farm to visitors, as she does with her business. This experiential experience not only provides a break for tourists, but it also allows people to see the reality of farm life, the work that farmers carry out on a daily basis and the manner in which farmers care for the environment. Two women spoke of opening up their farm for the social care of people with special needs or mental health issues. She outlined how in, "*The social farming was extremely busy after Covid. We provide a day service to the HSE for people with intellectual disabilities and mental health. It was extremely busy after Covid. And after Covid everybody wanted to get outdoors and interact and become social again*" (Interviewee, 27).

Two women engaged in craft industries spoke of a considerable need for a revival of heritage cultures through crafts. They also spoke of a considerable need for children and



young teenagers to engage with craft making for enhanced well-being, hand and finger dexterity and hand-eye coordination. Crafts that utilize wool they felt are also hugely important, as it shows young people the importance of the circular economy. A second woman engaged in the craft industry also spoke of using locally sourced material, which is considerably important to the wool industry. She also felt that the education system increasingly recognizes a need for school children to engage in *'making and doing and getting children away from phones and screens. She also stated, "It's also the sustainability element for them that it meets the sustainability end of what they want to bring them"* (Interviewee, 28).

One woman engaging in food tourism spoke of her business fulfilling a real need for people, by informing them where food is produced, but also by filling a need for the farming community, who hoped to make additional income by allowing people to visit their farm. She stated, *"I think opening the gates of farms is a really important thing and I think that it can contribute to their sustainability. It's not going to make anybody a fortune but I think it's adding to their sustainability locally because I pay them or whatever"* (Interviewee, 30).

Most of the innovations fulfilled a need within the community, but also resonated greatly with the personal aspirations of the innovative women. Economic gains were definitely a consideration for all the women interviewed, but in all cases their motives ran far beyond mere financial achievements. They were guided by a sincere dedication to environmental stewardship, with an enthusiastic desire to reduce climate change, preserve biodiversity, and maintain traditional farming practices. Consequently, their innovations not only contributed to their own personal goals but also the greater good of the environment and future generations.

3.2 CONSTRAINS AND FAVOURABLE CONDITIONS

PERSONAL CONSTRAINS

All women faced personal challenges, including family obligations, skills development, limited access to land or inheritance of land, but most notably issues around financial resources or the lack there of. More specifically, one woman spoke of facing local prejudice and unfairness around her farming methodologies. She spoke of the attitude of her neighbours suggesting they considered her a hobby farmer, *"Oh, she's a hobby farmer. You know what I mean, I'm successful. I'm making my money out of farming. And just because I do a bit of teaching does that make me less of a farmer just because I'm quite successful in Agri-tourism which is something I went into in the last couple of years and bringing people to the farm for tours or for lunches and doing talks. Does that make me less of a farmer? I feel everything I'm doing is agriculture related"* (Interviewee, 23). These attitudinal challenges were often compounded by family issues and concerns. One woman spoke about this saying, *"You know it's terrible you know that you're not there or you are there but you're not there, because you're working so hard. And so, the mammy guilt is awful. And men don't get that. You know and I was always laughing at my husband going, you come home from work, and you don't have to worry about it"*



because I'm in the house I was I had to train myself not to keep going back to it in the evening. But I suppose when I was starting off, I had no choice because I had to keep at it, I had to keep plodding away at it" (Interviewee, 28).

Alongside these attitudinal challenges, most women also faced financial constraints. One woman spoke of the difficulties around accessing funding, planning permission and a constant stream of paperwork, all of which is time consuming and adds to the struggle of starting and maintaining a business, particularly added to her normal family and farm duties. Similarly, a woman who recently set up an on-farm innovation, spoke of her difficulty in accessing funding, although she was hugely complementary of mentoring support she received: *"I was trying to get financial support, but it has been just a nightmare, a nightmare. I did approach my local enterprise board. Now I did manage to get mentoring and he was fantastic. I had hand picked him"* (Interviewee, 29). A number of the women spoke of updating or gaining skills, but most were able to negotiate this aspect of starting up their innovation themselves or by seeking training, which didn't appear to be an issue. Many felt that skills training around business start-ups were readily available, however more technical, or specific skills within the business, they used the internet for further education. The remote nature of their location did not appear to be any hindrance to their constraints, however as with other interviews a number of women again spoke about 'Imposter Syndrome' and feeling inadequate in starting up or running a business. This lack of confidence lasted until the business expanded or gained momentum.

CONTEXT CONSTRAINS

All the interviewees spoke of the centrality of the internet in their business or innovation. From marketing to exploring skills training and delivering on-line courses for their business, the internet was a key factor in their innovations. Consequently, good broadband was an issue for some of the women although others had seen a considerable improvement in recent years due to the roll out of the National Broadband Scheme.

Issues around planning permission at farm level were also alluded to by a couple of the women, particularly by those who sought to convert existing premises to accommodate their new on-farm innovation. One woman who spoke of her issues around accessing funding also had planning permission issues, she stated, *"I've got planning permission which was very hard to get to convert my sheds to change use"* (Interviewee, 23). Additional issues around planning also caused delays and concerns for the women and these were compounded by difficult funding and grant processes. One woman spoke of her delight in getting a LEADER grant but then her absolute frustration in dealing with public services, *"We were successful in acquiring a Leader grant, but the main obstacle was accessing public services to bring to the glamping site. We had to have a connection into the public sewage system and to bring power supply, those kind of things. Accessing services to the glamping site was quite challenging"* (Interviewee, 27). Additional key concerns and delays revolved around obtaining accurate and multiple quotes, navigating complex paperwork, and complying with rigorous regulations. Although the women



generally felt these stringent regulations were somewhat acceptable, they also felt that they were disconcerting for people starting out in business, with little experience and funds. Alongside these issues, some women felt the bureaucracy attached to the funding and grant system was considerably difficult, with some women removing themselves from the system entirely, *“Bureaucracy is a huge thing and to be honest with the boundaries they put up in applying for a lot of those things it has tarnished my views, so everything we’ve done bar a trading online voucher has been under our own steam”* (Interviewee, 21). This woman went on to say that dealing with people that have little or no experience in business is also an issue, she qualified this by saying, *“It’s a complete drain. You meet somebody with a laptop, and they start going ‘yeah and what age’ and you know all these questions that are actually getting you nowhere and nothing done and they’ve never had a business themselves”* (Interviewee, 21).

Distribution of a produce or produce was also an issue for some women, particularly due to the remote location of the business. Online sales in particular cause difficulties due to the additional transport and delivery costs and these are exacerbated for small producers. One woman felt that if you scaled up and could get a contract with a local shop or chain store then distribution was less of an issue, but if you were at a smaller scale then distribution was expensive and challenging.

FACING CONSTRAINS

Most if not all the women, faced the challenges differently with some speaking of the support they received from partners and families to overcome difficulties, while others spoke of the sheer determination they felt once they had started their innovation and refused to give up or fail. A number of women aligned their determination and tenacity to their upbringing, where they were raised on farms where issues had to be overcome all the time and this developed in them an inner strength, while others spoke of, a father figure in particular, who gave them great courage and strength and belief in their ability to do anything. One woman stated, *“It’s a great upbringing – there was no such thing as you can’t do this, or you can’t do that. I mean I learned what spanner opened every different thing on a tractor, but even now when I have to fix something or something breaks down or something needs repairing, I’ll look at it and you logically will approach and you’ll sort it. So yeah every kid should grow up on a farm because you do you learn so much more than you do”* (Interviewee, 28).

Several of the women spoke of their networks and how they solved problems through seeking advice within a specific network or within their family units. Most also felt unashamed about asking for help and guidance and this was an advantage rather than letting things go wrong. Most women also alluded to their ability to multi-task, which was a huge advantage in overcoming issues and getting work done. They felt they could carry on running their business, while also caring for their family, marketing the business and considering different strands that could advance their innovation. Some women did not feel they had to face additional constraints, due to gender, although some did feel that the burden of family care is disproportionately attached to them, which makes facing challenges even more difficult. Other women felt that getting assistance from key



agricultural organisations was more difficult for people who diversified their business and again even more difficult if you were a woman.

FAVOURABLE CONDITIONS

Family was one key favourable condition that most if not all women remarked on. Most women receive assistance (labour, financial etc.), advice as well as land via the family farm. This assistance and support were invaluable to most of the women in starting and advancing their businesses. Many women spoke of initiating the innovation but could not have developed without the family support. This viewpoint was reiterated by one woman who stated, *"We had consent within the family, my son, my daughter, my husband and myself we all agreed. I love when we all work together as a team when we do the farm tours. The energy among us is very good. We're a good strong team together. And I suppose that was always a given that we knew we would give it our best and 100% commitment"* (Interviewee, 27).

Some women spoke favourably of the organisations and groups they went to for assistance and help with many suggesting the system was challenging but the people that helped along the way were excellent and hugely encouraging. Some women also alluded to the additional people they were able to assist along their journey and having an opportunity to do that, this included an occasion to employ people or to encourage people to consider spin-off industries alongside their innovation. This was the case with one woman who has a food tourism innovation and encourages local farmers to open their farms for her tours and in doing so, they receive an additional payment.

The remote or rural geographical area where the women had their farms and businesses was also a favourable condition mentioned by most women, with many women feeling 'blessed to live and work in such a place' and in turn raise their families in a rural or coastal setting.

3.3 IDEA AND PREPARATIONS/DECISIONS AND PREPARATORY ACTIVITIES

DECISIONS

Making the initial decision to embark on a business development or take on an innovation often followed long, detailed and intense discussion with family, particularly as the innovation would alter the course of the farm work that all family members were engaged in. Once the business was initiated, a number of women spoke of key decisions they made which changed the direction of their innovation. Two women spoke of deciding to expand their on-farm tourism business which required using additional farm sheds and farm space. These decisions were given careful consideration, requiring the families' consent and agreement as well as reassurance that the extra business was viable. One woman spoke of the lack of support for such decisions saying, *"We converted our farm shed and we put in a playground and you know various other facilities. That was a huge decision. And at the time we only had two supporters, one guy who was laying blocks for*



us who was saying this is a brilliant idea you're great, and everyone else was just had the normal kind of why the hell do they think they're doing that kind of begrudging" (Interviewee, 25).

The interviewees also spoke of Covid and key decisions made during this time to take their business online. These included selling their products online and carrying out training and skills development online. Issues of broadband were key during these decisions, but most women persisted and felt it was a positive move forward for their business. A couple of women spoke of making decisions based on work-life balance and once they were established in their business having the luxury and opportunity to do this. One of these women stated, *"When you're on your own working it gives you a bit more freedom. I penciled out the weekend because I'm going away. I don't open seven days a week because I open by appointment, and it gives me a lifestyle. There's a bit more work/life balance. So, if you're open all the time, you're stuck there it won't work. I want the freedom as well to have a life as well as a business"* (Interviewee, 28).

PREPARATORY ACTIVITIES

In addition to business training and development, most women talked about the preparation work that was required on the farm as most important. A key aspect of this preparation for some of the women was the impact changes to the farm would have on the landscape of the farm, biodiversity and sustainability. One woman stated, *"That was because of my concern for biodiversity looking after insects and just feeling that the farm needed to be a home for wildlife as well as for food production. I felt that the two went really closely together. You couldn't wipe out wildlife and you know the eco system in order to produce food in kind of a sterile environment. So that was really an important part of what I was doing"* (Interviewee, 23). Another woman spoke of using sections of her family farm to produce her product and not only having permission from the family to do this, but also making sure, it didn't impact the running of the farm.

Seeking out information was also key for all women at the start of their journey, from a technical perspective, information on funding or upskilling themselves. The women in general prepared very well, making sure they were well informed as they moved through their respective journeys. If producing a product, the women also talked about the level of preparation in getting this aspect of the business up and running. They needed to develop a viable and high-quality product but needed to market this correctly as well to ensure it was bought. Two different women spoke of the having to pitch their product to buyers to make sure they had a market, with one saying, *"I'm after getting the juice ready for the shelf, the nutritional analysis done and everything passed, but the hard part was only starting because I had no customers. I had a shelf life of what we estimated to be twelve months, so I had to start pitching and pitching fast"* (Interviewee, 21). Another woman, producing organic food, felt that her reputation preceded her, and she was sought after, but she was also cautious in progressing her innovation, *"The Hawksmoor restaurant in Dublin found us actually online. I didn't approach them, they approached us. So, the way I approach things is to do it slowly and with our vision in mind so with*



conservation and with animal welfare and to fit in a family friendly environment. So, everything happens very slowly, very organically” (Interviewee, 22).

Most women accessed some form of skills development as part of their preparation for setting up their business or innovation. One woman developing a completely new product from scratch had to go outside Ireland for both design help and manufacturing. In doing so, she sourced most of her information and details via the internet. Although considerably concerned she would have numerous issues, she had a very good experience, *“The company I deal with are from China and they have fluent English but they’re so respectful, so kind. They’ve just been lovely to work with”* (Interviewee, 24). This woman also spoke of excellent help she received from within Ireland, via Enterprise Ireland, where she received some good training but also met so excellent like-minded people.

The main family resource for the women revolved around the use of the farm as the base for their business or innovation. One young woman was not the successor on her family farm, however her father provided use of a section of land to grow her produce and develop her product. Her family, including her two brothers, was also on hand to assist in harvesting her crops and packing her product, so she was very aware of the help and assistance she received from home. Another woman spoke of ‘tapping into the skills and education of her family and seeking their help in areas of marketing and selling of her product as well as putting her produce online.

3.4 CONCRETISATION OF INNOVATIONS

The tangible outcomes of the innovations were very impressive, yielding a spectrum of substantial impacts, products and outcomes at both farm level and beyond. These outcomes spanned across economic, technological, social, cultural and environmental domains. From an economic perspective, women engaged in the production of new products from organic foods, beeswax and honey crafts to a line of women’s clothing and wool products. Additionally, and again from an economic perspective, jobs and spin-off industries were created as a result of the innovations. One woman spoke of her employment record by saying, *“It also offers employment. We have staff employed here so it offers employment to the local community. And it’s a point of interest indicated along the wild Atlantic way now”* (Interviewee, 27). These jobs have the added impact of stimulating the local rural economy, which within a remote rural context is considerable. Additionally, in using both EU and national funds within their businesses and innovations, these women again added to the economic development of the area.

The implementation of the women’s innovations also resulted in tangible technological advances, particularly in the wool industry, as children and adults were enhancing their skills via wool-related workshops. In turn, social and cultural outcomes were also engaged here with the revival of cultural and heritage skills. Environmental outcomes were key to many of the women’s innovations, with many women engaging in sustainable practices on-farms, which preserve agrobiodiversity. The development of educational facilities around biodiversity and sustainable farming also has the bonus of educating



adults and children about sustainable farming practices as well as promoting wool as eco-friendly products.

All the innovations undertaken by the women drive the growth and development their respective remote rural areas. Additionally, they play a key role in cultivating an appreciation for the work of the farming community, the importance of biodiversity and environmental stewardship of the farming community. One woman summed this up very well by saying, *“It’s not just about the meat and milk we’re exporting. It’s about you know the rural life. I’m employing you know and putting money into the local economy with my bees wax and honey craft business and you know there’s people doing food for me and people making things and dispatching things. You know there’s a lot. I’m pulling money in from the EU and sending it out to the local district. So yeah, that’s agriculture I feel. It’s part of it”* (Interviewee, 23). Consequently, there are a number of tangible outcomes via the innovations, but additionally the outcomes reflect a holistic approach to farming and farm diversification, which benefits the women, the farm, the farm family and indeed the wider remote rural community.

MANIFESTATIONS OF THE OUTCOMES

Broadly speaking each interviewee felt that the outcomes of their innovations had a variety of manifestations. Some women felt their results could largely be considered environmental, due to the organic nature of their produce and the tourism innovation they have around biodiversity and the environment. Nonetheless, these women also felt that their manifestations were economic and cultural. Another woman was more inclined to consider her manifestations as social and cultural, due to the connection her project has both with Ireland’s heritage, culture and how it connects people. In all, the viewpoint was strongly in favour of considering they have mixed outcomes connected to their innovations.

3.5 IMPACTS OF INNOVATIONS

The innovations and businesses led by the women interviewed resulted in impacts on a personal basis and within the context of business and the remote rural economy. On a personal basis, many of the women spoke of their sense of pride and fulfillment in seeing their idea and innovation come to fruition. In a number of cases this sense of pride was rewarded or heightened as a result of their innovations receiving awards. This sense of recognition and satisfaction was often felt by the entire family as well as the women leading the innovations. From a business viewpoint, the innovations created growth and expansion, with an emphasis on tourism and cultural education as well as food production, which highlights a diversified impact alongside an enhance revenue for the women and their farm family. The impacts of the innovations however also highlighted challenged the women faced, including access to markets, bureaucratic hurdles and difficulties in navigating supports and funds. Nonetheless, most if not all the women showed a determined resilience in setting up, running and attempting to expand their innovations.



EFFECTS ON PLACE

All innovators felt humbled but enthusiastic about the impact their innovation was having in their local environment, with some having a regional or an international impact. A number of women spoke about the media attention and the awards they had received, but not on a personal basis or with a sense of self, but on how these impacts had an effect on their locality. One woman spoke of the delight and pride of the local community when a senior dignitary person came to open and launch an expansion of her business. Another woman spoke of her success and the impact it had on her community, stating, *“It actually brought a lovely community feel. I do laugh because as I said from a very rural area to be farming, I don’t think before I started the business that there was many beetroot juice drinkers in our small town, and to say the amount of people that drink beetroot juice in the local area now sales are strong at home. And they’re all new to a product”* (Interviewee, 21).

Another woman spoke of keeping her business low key to avoid large tours but to attract those who really want to witness a real farm experience. Nonetheless, she says the success of her business has brought additional benefits to her local community with other farmers asked to supply different foods and local people working for her during the summer months. Alongside this woman a number of other women spoke of either employing people or aspiring to employ local people so they can bring additional badly need finances to locals. One woman provided an example of engaging other farmers in her tourism business and also in the wider practice of opening farms to visitors; *“My farming neighbour had no intention of having anybody on his farm. So I went to him and asked if he would open his farm to tourists and visitors. Last summer he had I think ten to twelve open days himself where he put it up on Eventbrite and he had just random people coming from Galway and everywhere else to spend a day hearing about how he grows organically. And he says that was purely down to me bringing a group to the farm. He would never have done that without me doing that”* (Interviewee, 30).

One woman spoke of the “great lift”, her business gives local people and how it allows them to gain or retain a sense of pride in their community. Two women engaged in the craft industry spoke of the revival of crafts around wool, which have had a bigger national recognition of the importance of wool to the craft industry but also its importance to Ireland’s culture and heritage.

A number of the innovations could be considered incremental, as their progress has been gradual, but continuous and measured, with the women taking their time making decisions, and only investing if they had funds, rather than borrowing money to advance the business. Additionally, a number of innovations, particularly around the craft industry could be considered niche businesses, therefore incremental. Sustaining could also be used to describe and consider a number of innovations, particularly within a remote rural context which previously would not have had an abundance of female-led innovations, therefore the presence of these women leading rural businesses can and is leading to enhanced considerations around gender equality. Product development on-farms, led by women can be considered radical, again within an agricultural perspective and also



within a remote rural region. Most innovations can be recognised as disruptive in that they are all novel within their own right, but the success, resilience of the innovations and the women behind them is indeed playing a key role in changing the rural narrative around women in farming and in business.

4. INNOVATION ECOSYSTEMS

4.1 POLITICAL

The response to this issue was mixed a number of women receiving government support, but in a variety of forms. Some women received financial assistance from the LEADER programme, and the Targeted Agriculture Modernisation Scheme (TAMS) and some farming organically gained farming subsidies. A number of women accessed training from government sources, including Skillnet, National Organic Training Skills, while a small number engaged in the ACORNS programme which provides mentorship for rural women engaged in business in rural areas. One woman on the west coast of Ireland also accessed training and funds from Údaras and found their assistance highly satisfactory.

The women did not feel hindered by local policies or institutions. In fact, they were less than complementary about the bureaucracy and paperwork attached to the grants systems and accessing funds or mentorship programmes. However, most were very satisfied with the personnel who assisted them in their journey along with the training they received. Training, mentoring and advice on starting up a business was positively received, but most felt that funds and direct grants were minimum and even less so for sole traders or independent businesses. Some also felt that predisposed notions and ideas were present amongst those who assisted in start-ups, which often interfered with progress in starting a new business. For example, some women spoke of official's reluctance to fund projects related to wool, as a preconceived and negative idea prevailed regarding the wool industry. Some women also felt that they received small amounts of funding or narrowly focused mentoring as a 'tokenistic' gesture as they were a woman entering business and there was little confidence in their ability to progress the business.

POLICY CHANGES

Direct funding aid appeared to be a policy change many women want considered alongside peer to peer mentoring. Funding for advancing businesses as well as start-up was also strongly recommended. Assistance in areas of VAT and tax was also alluded to by a number of women and in particular for people who struggle with innovations and business development in remote rural settings. A couple of women spoke of their work within Special Areas of Conservation (SAC) considering the need for small education and conservation innovations to be directly funded by government. Her suggestion was as follows, *"I think for rural farms we've got to look at the just transition. We've got to get away from intensive farming and organic farming is one of the ways but there is no reason why people couldn't set up a nature sanctuary in different areas of the country which would be so valuable for biodiversity if it was funded"* (Interviewee, 25). This



interviewee went on to suggest the development of micro-SACs, which would be invaluable not only to the public but also to the farming community in these areas where farming is no longer viable. Another woman spoke of these areas as 'assets to the country' therefore they require additional and persistent funding.

In general, all women felt that women have a huge role to play not only in rural development but also in farm diversification. Within this role of farm diversification, women can play a leading role. Some women suggested women in this position have a new sense of vision and direction on the farm but required additional and consistent assistance. One woman suggested, *"I think women generally speaking are not afraid to embrace change. I think as women we're more accepting of change and adaptability and we can maybe think outside the box and look at the bigger picture and then share those ideas and hopefully gain consensus to move forward"* (Interviewee, 27). One woman also spoke of the practical way of thinking which women can envelop, but this practical thinking also requires government assistance in the form of funding and continued mentorship.

4.2 ECONOMIC

A number of the women received LEADER funding, some received Innovation Vouchers, which allowed them to connect with educational centres to obtain technical assistance, some women had applied previously and were applying again for a TAMS grant and some women obtained funds from more local organisations such as Úadaras. Access to finance was considered highly difficult to obtain and very much directed at early start-ups rather than established businesses, which some felt hindered progression. Only one woman attempted to crowd fund, and this was during the Covid period, but her efforts were in vain with a very poor result. Some women also spoke of the difficulty around getting 'match funding' for a number of grants available, which is exceptionally difficult when running a business on very small margins. One woman did receive a large €200,000 award for an educational programme via a 2022 Field Exchange.

4.3 SOCIAL

Social factors such as cultural norms, gender roles play a significant part in motivating and shaping challenges faced by women engaged in farming and in rural innovations. From the outset, farming in Ireland is traditionally a male dominated practice with women's roles predominantly as helpers on the farm and running the farmhouse. The women engaged in this case study are increasingly challenging these norms not only within farming but also within the realm of business. Most women were actively engaged in their local communities either through volunteering, the provision of employment or the instigator of spin-off industries around their business. Despite this progress however, some of the women still encounter difficulties in having their roles recognized, by their own employees and within industrial circles. Some women spoke of the stereotyping that prevails around women in business who need to be 'tough' and outspoken and can often be deemed or labeled 'crazy' or 'difficult', when they are only asserting themselves in a



male dominated world. These issues in turn lead to feelings of isolation and frustration with both the system in place and the business at hand.

There are also positive signs, with some women feeling there are positive changes underway, and Ireland is increasingly witnessing a greater acceptance for women in agriculture, farm diversification and business development. Women are increasingly recognized for the roles they are playing in farming and the unique perspective they bring to rural business and farm diversification. Awards from various organisations and articles in the national Farm paper, *The Farmers Journal*, were welcome forms of recognition that reach a national audience and can assist in changing the narrative around women in farming and rural business.

4.4 TECHNOLOGICAL

Technology was considerably important to all the women engaged in the case study, with usage ranging from basic internet searches around their business, marketing, and networking to the use of new technologies on farm to advance their innovations. Most women spoke of their absolute need for good quality broadband to run their businesses and although it had improved, some women still have issues. Additional technological use came in a variety of uses, including one woman who farms organically and via a research project she explored social media and technology use amongst farmers. Another woman who produced a new product on-farm connected with food science technologies in Teagasc to assist in her production process.

A number of women use video to market their innovation or to deliver on-line training courses, which have become increasingly popular since Covid. One woman who delivers wool craft training also uses technology to deliver a six-week training course, which has been hugely significant for the business. This has also resulted in an international audience for her business. Another woman spoke of putting her sales online during Covid and since then have remained online and is not a considerable part of their business sales. The various software they use for selling as well as the marketing and social media needed to sell their product are all very technical and hugely significant to the business.

4.5 ENVIRONMENTAL

All women interviewed were hugely influenced by environmental factors, ranging from the natural resources on the farm to how their innovations impact climate change and their need to support environmental sustainability. Five of the ten women producing on-farms were all engaged in organic farming and followed a strong organic and environmental ethos. One organic farmer felt that women were more open to environmental farming and with training could lead the way in this aspect of future farming. She also felt that training in the area was essential, and women were again more open to this, but also to consider the importance of new entrants into farming, including women. She stated, *“Women farmers tend to be much more open to organic and ecological thinking. But don’t forget about new entrants because new entrants to farming quite often are coming in with ideas from (like I’m a new entrant like a mid-career*



new entrant) coming in with ideas from you know way outside the traditional agriculture education” (Interviewee, 23).

Another woman, although not an organic farmer did feel that her farm ethos was very environmental and in turn her product was produced with this same thinking, *“I feel like we’re very green, because the farming principal at home is farming with nature. There are no pesticides used in the growing of the crop. I mean I myself from a health perspective would be very conscious of pesticides. And we’re not organic farmers you know but very much the farming model has changed for a lot of people over the years. Eyes have been opened up to the fact that there’s a way to farm with nature that you know you can avoid the use of fungicides and pesticides and all the chemicals or whatever. So that’s the kind of the greener side of things”* Interviewee, 21).

Another woman felt that environmental thinking is the *“Cornerstone of everything we do”* (Interviewee, 22) and in line with this ethos, she educated herself and her family around environmental issues and also trained as a conservation ranger, which has become part of her business in guiding people on her farm and in biodiversity and nature.

Two women working in the craft industry work with wool as it feeds into their sustainability and environmental thinking and ethos. In developing an educational box system for schools, this innovator wanted her product to be, *“Very much about sustainability. It’s all Irish wool. Everything in it is sustainable. And then of course developing the online program that had to link in with climate change and the STG goals and things like that and really connected into the school curriculum. And that has taken a long time”* (interviewee, 28).

Another woman who engages in the tourism industry was one of the first organic farms in her region and now carries that ethos into her tourism business. She won’t visit any factory farms on her tour visits and is keen to educate her visitors in areas of biodiversity and sustainable development. She stated, *“I have a strong sustainability spaced to my project. In the main I visit organic farms if they are my preference or you know I don’t visit, I wouldn’t visit any factory farms for example, nothing like that. We would always include some foraging. I am very keen on the leave no trace wherever we stop and for me it’s really important that while yes I was organic and certified organic (and that’s not for everybody especially smaller growers and that) that they would at least have the same ethos that I would have around that”* (Interviewee 30).

In general, all the women engaged in the case study had a strong sustainable ethos and worked hard in their area to make sure that environmental thinking, education, training and practice was key to their innovation. A couple of women had received awards for sustainability and were exceptionally proud of this standing. Many didn’t feel they had any choice in making environmental decisions on their farms or with their business, they collectively felt this was moral and ethical and what should be expected of everyone engaged in farming and rural life.



5. MAINSTREAMING ACTIONS

5.1 SCALING UP

Some of the women interviewed felt that we were going in the right direction with current policy for an increase in women in agriculture and women in farming and rural businesses. Many felt the new CAP Strategic Plan measures in Ireland is be applauded for including women, however most if not all were critical of the measures in place, particularly the 'Women only Knowledge Transfer Groups, which they felt further segregated women instead of bringing them into the current agricultural environment. A number of women felt that farm diversification in particular, was more open to women and women were in fact leading the way in this area. One woman suggested that *"I suppose I just felt ignored as a woman you know. My grandmother was a farmer- you my grandfather had a stroke when he was young and she looked after him all her life but she was the one on the farm. Women in agriculture is not a new thing. We've always been there. Yeah I just felt ignored"* (Interviewee, 24).

5.2 SCALING OUT

The women spoke of the interest in their businesses and innovations from both men and women in farming and in rural areas. This interest in turn, has led to a widening to the range and scope of innovations as more women become inspired by what these women are achieving. Some women spoke of the ridicule and mockery their innovations or farm diversification were treated within in the early days, however this attitude appears to change the longer they are established. One woman stated, *"I remember when I first put in wild bird cover which was you know part of the Blás scheme, farmers thought I was completely off my head putting in weeds. And then a couple of years later a local farmer came and asked me what mix I had put in because it seemed to work really well"* (Interviewee, 23). Although reluctant to admit it, many women did speak of people coming to them for advice on how to make changes on farms or how to establish a new business. This recognition in itself and others starting new innovations as a result is a clear indication or a widening of innovation as a result of the work and efforts of the women interviewed.

Women spoke of engaging in awards, interviews, research, public talks etc. to engage the public and promote their business. This dissemination was invaluable, not only in getting the business disseminated but also in showing the work carried out by women on farms and in rural business.

5.3 SCALING DOWN

In addition to training supports offer and taken up by the women for mentorship and finance a few of the women engaged in the Acorns programme for rural women interested in starting a farm or rural business. Some women received mentoring via this programme as well as via programmes from Úadaras na Gaeltachta, their Local Enterprise Office and the LEADER Programme.



5.4 SCALING IN

Only one of the ten women interviewed were aware of AKIS and failed to see either its relevance to them or to the wider farming community. Some of the women felt we are still a long way off a concrete acceptance of women in agriculture and business, with one woman suggesting she was given funding for her business more as form of tokenism rather than a belief in her business ability. Most women had received supports, either funds, training, or mentorship and this was welcome by all, however, they also felt that their experience was undermined in some of this training.

5.5 SCALING DEEP

Although somewhat reluctant to see themselves as change makers or leading change, some women did feel they play a role in changing societal values and behaviours in relation to gender equality. One woman spoke of her pride in her achievement, saying, *“I am quite proud of myself ultimately, I have to say. Yeah. I’m in my fifteenth year and I’m still here. I’m still at it. I’m enjoying it. I love collaborating with people and working and getting the best out of people and helping them find you know new confidence and income and you know status so that’s really positive”* (Interviewee, 23). Some women also spoke of the need for men to be included in this journey with some saying some of their best supporters were men. She suggested that *“Woman have so many skill sets that the men don’t even have and vice versa. You know you do need men on your team too”* (Interviewee, 21). This attitude was reiterated by a number of women who felt that their journey was never a solo one and they had a lot to learn from men who have farmed for generations, however they also felt that if things are to change, they need to be given respect and recognition within agriculture and not just token gestures within policy or key organisations.



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FARMING WOMEN-LED INNOVATIONS IN ITALY

CASE STUDY REPORT

Authors: Silvia Sivini and Irene Leonardelli



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ACRONYMS & ABBREVIATIONS

| | |
|--------------|-----------------------------------|
| CAP | Common Agricultural Policy |
| CSA | Community Supported Agriculture |
| ISTAT | National Statistical Institute |
| LAG | Local Action Group |
| NSP | CAP National Strategic Plan |
| SNAI | National Strategy for Inner areas |
| UAA | Utilised Agricultural Area |



1. THE NATIONAL CONTEXT

In Italy, according to EUROSTAT data (2022), 63.8 percent of the municipalities are classified as rural areas, with 17.1 percent of the population residing in these areas.

In order to distinguish between different types of rural areas, we have looked two different lines of classification of Italian territories established by two different public policies. One is related to the implementation of the Common Agricultural Policy (CAP) and the other to the National Strategy for Inner Areas (SNAI).

Rural areas are classified by the Italian CAP Strategic Plan 2023-2027 as follows:

- “A. Urban and peri-urban areas: include provincial capitals that are urban in the strict sense and the groups of municipalities with a rural population of less than 15 percent of the total population;
- B. Rural areas of intensive agriculture: include rural municipalities located mainly in the lowlands of the country, where, although in some cases the average population density is high, the agricultural and forestry always appear to have a significant weight;
- C. Intermediate rural areas: Intermediate rural areas: include hilly and mountainous rural municipalities with a consistent population density and where there is an intermediate development with stable relations with other sectors of the economy;
- D. Rural areas with development problems: include rural municipalities in the southern hills and rural municipalities in the mountains with lower population density in all the regions” (NSP, p. 447).

The SNAI classifies as “Centers” the municipalities offering essential services related to mobility, education and healthcare. All the other municipalities are classified as follows, depending on the minutes needed to reach the nearest Centre:

- peril-urban areas (less than 20 minutes to reach the Centre)
- intermediate areas between 20 and 40 minutes to reach the Centre)
- peripheral areas (between 40 and 75 minutes to reach the Centre)
- ultra-peripheral areas (more than 75 minutes to reach the Centre)

Considering these classifications and based on the literature analysis, we have considered “remote rural areas” those municipalities classified D by the CAP and the peripheral and ultra-peripheral areas of the SNAI. These are areas with low population density and with limited access to services (education, transportation, healthcare). They are often mountainous areas.

We have considered “rural areas close to the city” those classified as peri-urban areas by the SNAI. These are areas located close to urban centres where access to education, mobility and health services is closely available.

We considered “rural villages” all the remaining municipalities.

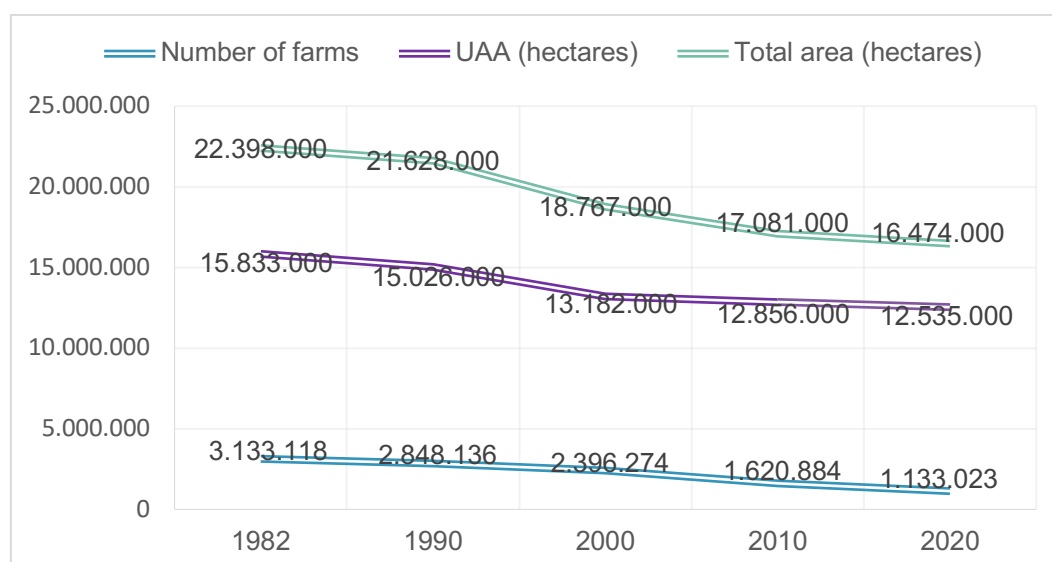


This categorization does not aim at homogenizing different rural typologies. Differences may exist among municipalities belonging to the same rural typology.

AGRICULTURAL SECTOR

Italian agriculture is still characterized by a high number of farms and especially in the last decades, by a process of land concentration. In the last 20 years, the number of farms has more than halved, while the UAA has decreased by about 5%. (Table 1).

Table 1. Number of Italian farms, UAA and Total area (hectares) from 1982 to 2020.



Source: Our elaboration on Agricultural Census data (2020)

Over the last 10 years (2010-2020), more than 487.000 farms have been lost. Mainly small-scale farms are diminishing. In fact, data have registered a decline of about 42% of farms of less than three hectares. In contrast, holdings of more than 100 hectares increased by almost 18%. Although about 51% of Italian farms are of less than three hectares (in 2010 there were 61.4%), the reconfiguration of the agricultural system is clearly moving in the direction of an increase in farm size. The average farm size has gone from 7.9 hectares (2010) to 11.1 hectares (2020) (Sivini, 2023).

A process of ageing farming population is also a feature of Italian agriculture. The number of farmers aged 65 and over increased by about 5% between 2010 and 2020, representing more than 42% of the total number of farmers.

Over the same period, the proportion of female farm managers is increasing (31,5% of total farm managers in 2020). Farms managed by women are mostly located in the south of the country.

Moreover, Italian agriculture is still characterised by family farms, where family members provide a significant labour input. However, the employment of non-family labour force



(in number of persons) has increased significantly over the last 10 years. Statistical data shows that the female labour force decreased among both the family and non-family labour force.

Italy is one of the top ten organic producers' countries in the world. The area under organic cultivation is increasing and in 2020 has reached 2.2 million hectares, i.e. 17.4% of the overall UAA.

Multifunctionality is a choice that characterizes farms managed mostly by young people. Italian farms with other gainful activities are 5.7% of the total but this percentage rises to 27% in farms managed by young farmers. Multifunctionality is mainly articulated in the offer of agritourism services (about one third of the multifunctional farms), contract work, product processing and solar energy production. The number of agritourisms where female farmers are engaged is constantly increasing in all areas of the country (Bertolini, 2015).

The overall weight of the agricultural sector on the national economic system is at 2.2% of GDP, when the entire agri-food system is considered - from primary production to retail trade – the incidence rises to 15% (CREA, 2022). The agri-food sector (agriculture and food processing and beverages) represents almost 60% of overall value of production.

2. THE INNOVATIONS

The innovations analysed are implemented in different typologies of rural areas in northern and southern Italy. They are characterized, from an analytical point of view, by a prevalent sustainability dimension.

We selected three women innovators for each dimension of sustainability (environmental, economic, social), one for each type of rural area (remote rural areas, rural villages, rural areas close to city). Another woman, located in a rural village, is included in the sample in relation to the cultural sustainability dimension.

Environmental innovations on farms include organic production, new products based on the reduction of agricultural waste with a particular focus on circular economy and on enhancing biodiversity (e.g., recovering local traditional crops), or on the sustainable use of natural resources. Two out of three women promoting these innovations have a university degree. They are all young women (ranging from 31 to 40 years old). Only one of them inherited the farm.

Social innovations include innovative educational approaches (e.g., farm kindergarten) and services for the community to satisfy basic needs. Two out of three women in this category have a university degree and their ages range from 27 to 45. They all started their farming project from scratch.

Economic innovations are heterogeneous extending to several areas (tourism products, educational services, food processing, etc.). All the three women in this category have a



high school diploma and their ages range from 42 to over 50. Two inherited the farm, and the third, although she started her activity from scratch, has a family farming background. Of all the women interviewed, the economic innovators are the ones with the largest farm size.

The selected cultural innovation is related to the recovery of abandoned local land and to the enhancement of traditional agricultural products and artisanal food processing systems. The woman behind this innovation is a very young woman (27 years old) with a university degree. She is committed to preserving and promoting local cultural diversity to foster sustainable rural development. She started her farming project from scratch.

Although women were selected in relation to a prevailing sustainability dimension, research findings clearly show that their innovations intertwine multiple dimensions of sustainability. Notably, environmental sustainability is a common feature of all the 10 women interviewed.

In remote rural areas (4 experiences analysed), women tend to create/lead innovative agricultural projects related to the valorisation of local resources. These projects allow them to live in areas often characterized by depopulation and where services are very limited. These are projects that female respondents started from scratch and not by inheriting an existing business. Innovations, in this case, are related to new products, new services and new ideas. Organic or natural production is a hallmark of these experiences. Product processing and direct sales are another feature of these projects. In two out of four cases, the provision of land or facilities by the local authority enabled the initiation/consolidation of the projects analyzed. All the women have had work experience in other contexts, sometimes abroad. Two out of four are university graduates (not in agricultural fields), and the knowledge they have acquired is the basis for the innovative practices they have developed. Choosing to move/to return to rural remote areas is often linked to a desire to develop a new lifestyle characterized by greater contact with nature and to contribute to the social and cultural regeneration of the area.

In rural areas close to the city (3 experiences analysed), the innovations focus mainly on providing services for children (e.g., kindergarten) and educational services for adult. Two out of three experiences examined are biodynamic farms. In all cases, sales are made through local short supply chains (e.g., at the farm shop, in local markets, through a CSA). The recovery of traditional crops is another element that characterizes these experiences, as is the processing of products. In two out of three cases, these are takeovers of family farms. Women's management made it possible to initiate significant transformations in production processes and expand the services offered.

In rural villages (3 experiences), women-led innovation is diversified. It may entail the creation of new products or new services offered by the farm, with an emphasis on educational or tourism services, characterized by a focus on reuse and anti-waste in the context of a circular economy and a special sensitivity to environmental issues.



Table 2. Interviews list and details of women interviewed.

| N. Interview | Age | Educational Level | Dimension of the farm (ha) | Property rights | Legal form of the farm | Year when she started operating in the farm |
|--------------|-----|-------------------|----------------------------|-----------------|--------------------------|---|
| IT_F_EN_1 | 31 | High School | 15 hectares | rented | Family farm | 2020 |
| IT_F_EN_2 | 33 | University | 2 hectares | own | Family farm | 2023 |
| IT_F_EN_3 | 40 | University | 14 hectares | own | Family Farm | 2017 |
| IT_F_S_4 | 45 | University | 2 and a half hectares | own and rented | Agricultural cooperative | 2018 |
| IT_F_S_5 | 43 | High School | 3 hectares | own and rented | Family farm | 2016 |
| IT_F_S_6 | 27 | University | 10 hectares | own | Family farm | 2020 |
| IT_F_EC_7 | 42 | High School | sheep and goats | own | Family Farm | 2009 |
| IT_F_EC_8 | 50 | High school | 33 hectares | own | Family farm | 2015 |
| IT_F_EC_9 | NA | High school | 60 hectares | own | Family farm | NA |
| IT_F_C_10 | 27 | University | 20 hectares | rented | Family farm | 2023 |

3. INNOVATION PATHWAYS

3.1 MOTIVATORS FOR INNOVATION

A common aspiration for the women interviewed, regardless of the type of rural area in which they now live, is the search of a sustainable life. They underline the willingness to live close to nature, far away from crowded and trafficked urban areas.

Most of them experienced urban life while studying or working but also travelling abroad.

“It’s madness! I mean, how can people live there [in the city]? They open the window and there is another building in front of them and there is always noise...!” (IT_F_EC_7);

“At a certain point I got really annoyed at seeing people pissed off for nothing, for instance to find parking, it was something I couldn’t tolerate” (IT_F_EN_1);

“Why am I here [in a big city] just getting sick?” (IT_F_EN_2).

Escaping the chaos and stressful dynamics of the city and fulfilling their desire to live closer to nature and to work outdoors was the main reason to move/return in a rural area and to start a farming business.



"At the end of my master's degree, I really felt that I had to do something myself... and then I had the opportunity to experience these places [where she now lives], also the sustainability, precisely the lifestyle, that one can potentially achieve compared to living in a city: more space, clean air... I moved on with this dream... and then I saw that it was possible to draw another horizon of possibilities" (IT_F_C_10).

Among the women interviewed, only 3 inherited the farm and were also driven by the motivation to continue a family tradition while finding ways to rethink and innovate it through multifunctional and polycultural strategies and with a focus on environmental issues.

"My heart is here, my identity is hereI could not let this place be lost! On a sentimental level, because it's my home, but also on a professional level because this, I think, is a very special reality!... my basic idea is ...to diversify the production" (IT_F_EN_2);

"It was always the dream in the drawer [running the family farm] that I had... that sooner or later I would take this step... I introduced new activities such as those related to agritourism" (IT_F_EC_8);

"We could give our own mark [to the farm]...the farm has evolved ... recreating the balance between man and nature ... we have become an organic farm" (IT_F_EC_9).

However, personal motivation is accompanied by an awareness of the time of crisis and the challenges associated with a vision of a sustainable future. The women interviewed show a critical view of mainstream consumption and agricultural production patterns. They relate this critical view with a great concern for climate and environmental change; trying to address these issues in their everyday life by taking on and spreading more sustainable and ethical ways of living, particularly in relation to food consumption and production. Respecting nature's rhythms, relying on existing resources without exploiting them (e.g. water, soil), getting involved in short food supply chains, preserving local ecosystems and not producing waste are the distinguishing features of their actions.

"I clearly wanted to create a circular economy in our [she and her husband's] farm... how to do it? Using a raw material that we already had, meaning a waste... and creating a new product" (IT_F_EN_3);

"I started farming for us as a family, then seeing that there was a surplus and being against food waste I said, I'll try to open a farm. I started taking a lot of courses, mostly paying, on organic, synergic, regenerative farming and permaculture... I got a diploma from an agricultural institute and then opened my organic farm" (IT_F_S_5);

"Therefore we have embraced the principles of organic and regenerative agriculture which involve much more work and much more expenses but they are worth it." (IT_F_EC_9).

A vision for a sustainable future is central also when the innovation is related to new services activated, such as farm kindergarten, educational workshops, cooking workshops, women circles, hospitality, small shops or restaurants. These activities are promoted not only to increase the economic sustainability of the farm but also to share



with others the importance of getting to know, valuing and respecting local ecosystems and of embracing sustainable consumption habits, becoming aware of how different foods are produced. For example, farm kindergarten offers an education that focuses on outdoor activities, learning about farming, plants and animals as well as about environmental sustainability (IT_F_S_5 and IT_F_S_6). Other types of activities (educational workshops, cooking workshops, women circles) target specific groups, often vulnerable (e.g. disabled people, women victims of violence). In these cases, the motivation to engage in such projects also stems from the idea that farms are special places where people can feel in harmony with nature and experience a peaceful, healthy environment - enhancing their well-being and healing processes.

Innovation mainly starts from a personal idea, which is related to the environmental awareness acquired by the women during their working or studying experiences prior to entering the farm, and often also to the awareness and valuing of existing knowledge, resources, cultural habits and traditions. For example, rediscovering traditional local cultivars and putting them into production; organic farming; product processing; and selling through short supply chains are common elements in many of the experiences analysed.

Sometimes, personal ideas also fulfil a need of the area. For instance, in all types of rural areas, publicly managed kindergartens do not exist or can accommodate only a few children. Hence, farm kindergartens address these issues. Another example relates to collective farming projects, which are useful particularly in areas where it is difficult for certain groups of people (e.g. vulnerable people) to find work. Finally, in rural remote areas where supermarkets are not available, small shops opened next to the farms become an important service.

3.2 CONSTRAINS AND FAVOURABLE CONDITIONS

CONSTRAINS

Being a woman engaged in farming is in itself often challenging. Rural environments, being close to the city or located in remote rural areas, are still governed -both in the North as well as in the South- by patriarchal social norms. Most women mentioned how they often felt like they were not taken seriously both within their localized social context (e.g. interacting with neighbouring male farmers or people living close by) or when trying to access local offices, dealing with bureaucratic matters. This was particularly the case for women who did not inherit a farm from their parents. It seemed that they took more time to gain credibility and support within their rural context.

A woman made it very clear by stating: *"First of all, for me, the obstacle of being a woman, mother of three children, living in the mountains and then starting a business from scratch, the obstacle was huge... because if you are a woman but your dad gives you the farm, people think you are good, you are on all the newspapers because you are the boss..! But if you're starting from scratch, and you don't even have a meter of land, then people think you'll never make it! Especially if you don't cultivate grapes for wine or*



apples [most common local commercial varieties of crop] and you cultivate vegetables, they think you're a loser!" (IT_F_S_5).

Moreover, many also noted how farming is still very much seen as a male activity, and this can be noted in very practical ways. For instance, a woman underlined how *"farming machinery is calibrated for male builds and work clothes are made for males only"* (IT_F_EN_2).

Besides, many underlined the challenges of being a mother managing a farming project, juggling between domestic works, taking care of children and working. In fact, six of the women interviewed are mothers. Women receive very limited support from the state during pregnancy and immediately after childbirth. Maternity benefits are paid only for a maximum of five months and at minimum wage. If the pregnancy is at risk and the abstention from work is prolonged in time this can cause serious damage to the business, especially if it is still young.

The support received by their partners and from other family members was mentioned as important to cope with this challenge. In addition, in rural remote areas, also the local community can represent an important support because *"you have a much more direct reference than you might have in the city, so far I have never been on my own ... that's the aspect of community that I recognize... of the humanity that is there in these places ... without asking anything in return"* (IT_F_S_4).

Lack of financial resources or difficulty in accessing bank credits, grants and financial support in general is a challenge. Women without a family farming background are the most disadvantaged in this regard as they often need bank credits in order to develop their farm/innovation, first of all for acquiring land. Still, also women who inherited a farm or had resources available to start their own business often complained about the scarce possibilities of accessing bank credit to develop their businesses.

In the South of Italy, applying for grants and accessing financial support programmes seems to be particularly difficult. Often it is not easy to get proper information or support about a grant or programme, and women feel overwhelmed by bureaucratic requirements and procedures.

Many grants require advancing funds, which will be repaid by the funding agency over a relatively long period of time and only after the expenditure has already been made. This often entails already owning a significant amount of assets to access bank credit or a capital. Women who did not inherit a farm and start one from scratch often get intimidated by these requirements, as they do not want to get into debt.

"Maybe I'm more into the strategy of developing my business by myself little by little, without having to go into debt, which then could be much worse...concretely starting from scratch, if you are not supported by a good technician, ...It is not easy..." (IT_F_C_10).

"The funds are also made for people who already have money that they can use and that they can anticipate...and who can do that ...if you don't have collateral? Nobody!" (IT_F_EN_3).



The strategy adopted to cope with these difficulties is mainly to proceed by introducing changes and innovations slowly, experimenting on a small scale, evaluating the results, and only then consolidating/enhancing the service/increasing the production.

In other experiences, the way forward is to find a good technical advisor to support them in accessing grants. Some women, especially younger women who have started their businesses in recent years, work part-time or occasionally off their farms to have an income while continuing to develop their agricultural project.

According to the women interviewed who started their farm from scratch, finding land that is available for renting or for buying is a challenge particularly in the North of Italy. What is available is very expensive and therefore inaccessible to most young people. In the South of the country, there seems to be more options for buying or renting plots of land, especially in remote rural areas and rural villages.

To face this constrain women often access abandoned land that has been uncultivated for a long time and requires a great deal of cleaning up before it becomes suitable for farming. Furthermore, in other cases, the land is parcelled, and this requires a good organization of the farm work.

“...Now we have to do a lot of work with the tractor, the shredder in order to clean the plot....So yes, I have a lot of land for rent, but it all needs to be cleaned..” (IT_F_C_10).

In one of the experiences analysed, the local government has provided public land to support the innovative project promoted by the young women.

Women who needed to develop specific farming skills attended often paying-training courses on organic, regenerative and/or synergic agriculture. These types of courses are mainly organized by private associations and networks.

Being part of networks is also a mode adopted to foster the exchange of knowledge and know-how. In contrast, the interviewed women pointed out how training courses provided by public agencies are often focused on mainstream agricultural patterns.

In remote rural areas, particularly in the South of Italy, roads are not always in good conditions and public transport is irregular, scarce or even non-existing. For this reason, it is easier for women entrepreneurs living in remote rural areas to feel isolated and of course it becomes more difficult for local people and for tourists to reach their places. In this regard, lack of services is also often mentioned as a challenge, especially in remote rural areas, both in the North and in the South of the country. Women entrepreneurs recognize that many people are moving out of these areas because it is very challenging to live where basic services (schools, supermarkets, post offices) are not available.

FAVORABLE CONDITIONS

Despite the difficulties highlighted before in accessing financial support, and the idea that national and European political programmes mostly support large farming businesses



rather than small-scale farming projects, most of the women, at least once, have received a grant to develop parts of their farming project and innovation activities.

5 women accessed the CAP intervention “Setting up young farmers”. This financial aid consists of a lump sum capital that can vary in different regional contexts. Another woman had access to other national financial aid programmes (the programme “Resto al Sud” - Remaining in the South).

The possibility and capacity to engage in different networks and work collaboratively with other farmers and other actors is considered a favourable condition to develop a successful business/innovation, gain specific skills and knowledge and feel supported on an everyday basis as well as in the long run.

For instance, a woman managing a farm in an area close to a city in the north of Italy, is engaged in several local critical consumer groups that connect different local farmers to a community of consumers: this fosters economic sustainability for her business but it also creates a space where both people and farmers can learn together about farming practices, environmental sustainability and critical consumption. Similarly, in the South of the country, it emerges clearly that participating and selling products at local farmers markets is a great way to connect to other farmers and consumers and feel part of a larger community of people committed to the principles of environmental sustainability and circular economy. This is particularly important in the case of projects located in rural villages and remote rural areas.

“This is a beautiful territory, but it is very complex. Each village is at a distance that sometimes feels infinite. This is why the networks are so important...networks allow you to create a union where there is none because there is too much distance... like the... [Name of the local organic farmers market]” (IT_F_EC_9).

Besides markets, other types of networks involving not only farmers also can turn out as fundamental to develop successful businesses and to feel supported.

For example, a woman operating in a remote rural area in the North of Italy mentioned that she was able to develop her business with strength and enthusiasm also because there were other young entrepreneurs developing small businesses in the same territory. Meeting regularly to share ideas, challenging and supporting each other with bureaucratic matters, they built a strong network of young people actively engaged in local rural development. Similarly in the South of the country, other two women, operating in rural villages, mentioned the relevance of co-creating and being part of a women's collective. This network was fundamental for them to build strengths, share knowledge and experiences, create collectively managed events to sell their products and discuss local issues, including violence against women and women's rights.

In a few cases, local governments (especially at the municipal level) have supported women through the provision, albeit usually for a fee, of public lands or facilities. These actions undoubtedly constitute favourable conditions for facilitating and supporting the



development of innovations. In many cases, however, municipalities do not seem to support innovative initiatives.

Two women (one in the North and one in the South) won prizes promoted by one of the main Italian agricultural organizations. These were of course also experienced as favourable conditions, as they provided above all much visibility to women's activities.

Finally, women who inherited the farm or were significantly supported by relatives (by disposing of their land and water resources, of agricultural tools and knowledge) were much more advantaged in the development of their business than women entrepreneurs who had to acquire resources by themselves.

3.3 IDEA AND PREPARATIONS/DECISIONS AND PREPARATORY ACTIVITIES

Preparatory activities vary widely between women who inherited a farm and those who started a farming project from scratch; the type of rural area in which they operate, in contrast, does not appear to be a significant variable.

The first (women who inherited a farm) mostly focused on designing how to re-think and innovate the farm, which aspects of the farm they wanted to keep, and which ones they wanted to change and innovate. The women were supported by family members in their preparatory activities. Started cultivating traditional cultivars, for example, required a research work to find out which cultivars were historically cultivated and where seeds could be found. In a similar way, when the idea was also related to a change in the farming techniques, embracing the principle of organic and regenerative agriculture, there was a need to develop specific skills through study and training courses.

Furthermore, gaining specific skills and knowledge to develop the innovation, was a common preparatory activity, even in the case of new services activated. Women including those with farming family background- mentioned different experiences and courses that were relevant to start their business. Most women had to find specific courses (e.g. on organic and agroecological farming practices, on outdoor education, on cheese making, etc.) outside the public educational offer; these were mainly organized by informal farmer networks or associations.

Taking specific courses or workshops has also enabled the development of networks that have proved useful for knowledge exchange.

"I signed up for different self-organized pruning courses and little by little I created my own network of people" (IT_F_C_10).

In some cases, previous works or study experiences were also useful to stimulate the idea of innovation.

Although women mentioned different experiences, courses and programmes that helped them to develop and expand their enterprise, they also emphasized how they learned



(both as farmers and as entrepreneurs) a lot by doing, by trying, making mistakes and re-trying and by giving space to their creativity and determination.

Women who did not inherit a farm or other family assets had to find ways to acquire lands and spaces to develop their farms: exploring rural areas and available resources (land, water, quality of the soil), getting to know the people living and working there, negotiating renting and sales contracts.

Several women -both those who inherited the farm and those who started from scratch- sought financial resources for developing the innovation: applying for grants and support programmes or asking for bank loans. In fact, while all women developed their business/innovation little by little, mostly with their savings and with the financial resources that they could afford; others developed specific innovations also thanks to grants and financial support programmes.

3.4 CONCRETISATION OF INNOVATIONS

A main outcome is related to agrobiodiversity conservation which also leads to the development of new product offerings.

Regardless of the type of rural area in which women operate, cultivating local traditional crops is one of the outcomes of the practices analysed. Revaluing local knowledge and believing that traditional local crops are well suited to the ecosystem of the specific area, the women offer “new” products that few or none of the farmers in the area still cultivate. These products range from different types of local sprouts and bitter roots, wild artichokes, traditional grains, white beans.

Furthermore, nine out of ten of the experiences analysed practice organic farming, even if they do not all have the official certification. Several projects go even further by integrating biodynamic and synergic farming practices.

Moreover, often agriculture is accompanied by animal husbandry, with practices that are very much attentive to the health and well-being of different types of animals, and that contribute to the sustainability and harmony of the whole local ecosystem (e.g. in the cases of IT_F_S_5, IT_F_EC_8, IT_F_EC_9).

In this regard, often women come up with innovative solutions to environmental issues, without resorting to the use of chemicals or invasive substances. For instance, countering invasive animal species through the introduction of new antagonistic animals on the farm:

“I had a big problem with red snails eating all the salad... Since I am against the use of plant protection products... I discovered these Indian running ducks that eat only red snails... since I have them, there isn't a red snail here anymore” (IT_F_S_5).

The adoption of the rational grazing technique, which allows the regeneration of soils without the use of chemical interventions, is another innovation implemented, as is the



raising of hens on local pastures for the sale of organic eggs and the grazing of goats and sheep only on local pastures in the mountains.

“I raise goats because they are better suited to the kind of flora that grows here, but also especially to this kind of terrain which is very steep, terraced” (IT_F_C_10).

New products are also linked to the innovative use of available territorial resources, as in the case of birch sap. This is a production that is really limited in the Italian context. In the case analysed, the amount of sap extracted from native birch forests leased by the municipality is limited so as not to interfere with the natural growth of the plants and not to alter the ecosystem.

In addition, upcycling ideas through the reuse of agricultural waste are the basis for new products. This is the case with the transformation of garlic tunic into paper, an innovative process that has also been patented. The paper is used for different creative projects and according to clients' demands: to produce postcards, paper decorations, wine labels, etc.

The processing of agricultural products is also developed to increase the added value of the products, which, in most cases, are sold through short food-supply chains. In many cases this also means making traditional local products (e.g. *Cilentano* ricotta cheese, a Slow Food Presidium; breads or pastas made from ancient grains, etc.).

These outcomes are manifested as environmental changes that also produce economic and cultural changes.

Other outcomes are related to the provision of new services. In six of the experiences analysed, adopting a multifunctional approach to agriculture was one of the ways women embraced to innovate on the farm.

Agritourism or educational and social farms have been developed. The innovations involve, in rural villages, a different organization of hospitality linked to a slow tourism approach. For example, by removing the television from the rooms; by reorganizing the restaurant, by accepting only clients who had made a reservation and by offering a fixed menu, to limit waste; using in the restaurant, organic ingredients mostly produced by the farm itself; by organizing a book sharing space and workshops and educational activities on farm productions; by offering the possibility to explore the surrounding rural area (also in cooperation with local guides).

Furthermore, activities are organized in collaboration with local schools as well as workshops for adults and vulnerable people are offered. Currently one of the experiences analysed hosts a monthly women circle targeting women who find themselves in difficult situations. The circle is held by a psychologist, and it entails sing and knitting together while discussing common problems. The idea is to create a safe space in a beautiful natural environment where women feel comfortable to share their stories and get psychological support. Moreover, the items produced by sewing and knitting are sold at small markets and the proceeds are donated to charity.



Spaces within the farm are made available to celebrate special occasions such as birthdays; furthermore, specific activities are offered to give a special taste to these occasions (e.g. cooking workshops using local traditional grains, courses about local wild herbs, making aromatic salt). This allows people to learn new skills (e.g. cooking a dish, etc) as well as to experience what farming entails, spending time outdoors together with their friends and family.

Innovation is also linked to the opening of farm kindergartens where new educational approach is performed. In one case located in a rural area close to city, the educational offer focuses on teaching children (0 to 6 years old) how to live in harmony with nature, reflecting on how food is produced, relating to other animals in horizontal ways, and experiencing the outdoors throughout the year. The educational approach is about using all the five senses to experience the surroundings. Furthermore, educational farming workshops for families (during the weekend) and for disabled people are organized. The idea is that spending time in a harmonious natural environment, close to several animals and plants has a healing power that fosters mental and physical well-being, and this is particularly beneficial for people who suffer from different health problems. In another case, located in a rural village, an anti-speciesist educational approach is adopted. In this regard, animals, and particularly donkeys are treated in a very horizontal way - meaning a way that sees them as deserving a healthy, long, and non-exploitative life as much as humans (donkeys are indeed autochthonous animals in the area as most local families traditionally used to own at least one). For this reason, donkey trekking tours are organized to learn about the local rural area in a slow and respectful way.

Finally, in a remote rural area, innovation can also be linked to the opening of a multifunctional space that not only attracts tourists but also becomes a meeting place for the community residing in the village and neighbouring villages. In fact, in the experience analysed, a space owned by the municipality was taken over to open a restaurant (that offers mostly products from the farm itself and from other local organic farms) and a small store (where basic necessities can be purchased) and to organize events (such as a film festival, public debates, etc.). Providing new services also means creating new jobs. Different professionals are also employed within a multifunctional farm, such as psychologists, art therapists and educators. These outcomes are mainly manifested as social changes that also produce economic and cultural changes.

3.5 IMPACTS OF INNOVATIONS

The innovations proposed by women entrepreneurs had several impacts on the sustainability of the different contexts in which they were developed. First, they all represent concrete examples of environmentally sustainable businesses as they all entail farming practices that take care of local ecosystems and try to be respectful of nature's rhythms, producing very little or no waste. In this regard, they represent examples of what it entails to live and work in a rural area (all types of rural areas) in a sustainable way, that does not involve extractive practices or forms of agriculture that are detrimental for the local ecosystem.



Secondly, all the women promote local, healthy, and ethical food consumption habits that most often directly connect producers and consumers. In fact, most products are sold locally through short supply chains (e.g. local markets, CSAs, farm shops) or is used in the catering activities that some of the experiences analysed have activated. People re-learn the value of eating local and seasonal food, and what is behind the farming production. This is something completely different from going to a supermarket and finding products available at any time of the year, without knowing where they come from, how they are produced and by whom.

Thirdly, cultivating local traditional crops means preserving, valuing, and passing on the cultural heritage of a specific rural area, making sure that traditional farming practices and crop varieties are re-introduced into diets. It takes time to change local people's habits and costumes, it takes time to educate them to conduct a more sustainable and healthier life, but definitely these women are contributing, in different ways, to promote socio-ecological justice. In the words of a woman interviewed: *"Little by little even the people who always asked for white bread come back to buy whole wheat bread... It takes a long, long time to accept the philosophy, and for people to be open up to new habits"* (IT_F_EC_9).

Moreover, multifunctional farming enables women entrepreneurs to interweave environmental sustainability with economic, social, and cultural sustainability. As mentioned, many of the projects involve educational activities that target children, as well as adults (both tourists and local people) and people who find themselves in particularly vulnerable situations. The demand for such activities and workshops is increasing and the women get very positive feedback from their clients. Farms that are able to diversify their offer become unique places where different groups of people can connect to nature and to different animals, learning the importance of spending time outdoors and of conducting a healthy life, especially in terms of food consumption habits, as well as to be creative.

In these ways and by co-creating and strengthening networks of local entrepreneurs, all women positively contribute to the development of a rural area (being close to city, rural villages or remote rural area). They motivate the local population not to migrate to cities or large urban centres, as they contribute to a liveable and pleasant living environment, and they demonstrate through their activities that farming is a job that offers women the opportunity to satisfy different personal needs. It is not only about having a chance to earn an income, but also about satisfying other needs such as creativity and seeking contact with nature. Simultaneously, they attract tourists, encouraging the further development of local services. In these ways, women's entrepreneurs also help counteracting depopulation dynamics in different types of rural areas.

The practice analysed have a clear positive impact on the local areas (being close to city, rural villages or remote rural area) showing how innovative can be farms/activities managed by woman. Although they are sometimes initially considered by local people as "crazy" as they start their innovative ideas in contexts that are still male dominated, the results of their activities are changing this vision. Women are recognized as



innovative farmers: some of them have received national awards that increased the visibility of their work; others have gained popularity among the local community. Many of them are the sole owners of the farm and have decided independently, even when supported by relatives, to start a farm from scratch. Their actions fundamentally challenge the patriarchal “normality” that often dominates the agricultural world. It shows how these women introduce new outlooks and modes of action that are characterized by a strong focus on environmental sustainability, while still making their farms economically viable. Choosing to operate with a multifunctional and agroecological approach allows them to have impacts on the sustainable development of their territories; stimulates the adoption of behaviours and habits, food and lifestyle, that are socially and environmentally sustainable; and allows them to offer new educational approaches that are aimed at reconnecting with nature and overcoming gender inequalities. Their innovations can therefore be considered as incremental because they represent a gradual and continuous improvement of gender equality within the area in which they operate.

4. INNOVATION ECOSYSTEMS

4.1 POLITICAL

Political decisions do not impact on the motivations of the women interviewed to start farming and innovating; at the most, in some cases, were helpful in addressing the challenges these women faced.

The decision to start/innovate agricultural activity is independent from the existence of a national policy or from CAP-related interventions. In any case, when some sort of support was received, it was in the context of policies not specifically targeting at women.

At the local level, the support received from local institutions varies; it depends greatly on the sensitivity of local governments rather than organic policies. In one case, the woman was able to develop her agricultural project by finding and renting a forest owned by the local municipality at a very advantageous price. In a few other cases, the support received was helpful in further developing activities. For example, the provision of a public facility made it possible to expand the services offered, and the adoption of a *Denominazione comunale d'origine* - Commune Denomination of Origin (De.CO)⁶ for traditional cultivars is useful to increase the demand of the products.

In any case, it seems that gender equality is not what drives local governments to support these experiences.

⁶De.Co. is an Italian recognition created and granted by the Municipal Administration to protect and enhance a typical product, a traditional recipe, an agri-food business, or a handicraft product (food and non-food) closely linked to the territory and its community, without overlapping with existing denominations of origin. The Commune Denomination of Origin, unlike denominations such as PDO, PGI and TSG, is not an indication of quality but a certificate of typicality.



In most of the cases, local governments are not really collaborative. Many women felt they were not supported. In particular, they highlighted the lack of infrastructures and public services as well of bureaucratic support to develop a business and to access financial and other support programmes.

Some women noted that it would be important for women entrepreneurs to be more involved in institutional bodies and local initiatives to influence positive change and support women's innovative practices. Some of them already started to be actively involved in institutional bodies.

Several changes in the actions of local institutions and governments are suggested by the women interviewed. The first is to support/promote local farmers' markets, critical consumption networks, and women's entrepreneurial networks in general as a way to raise awareness of environmental justice and gender equality, and to support local rural development in general.

Besides this, public administrations could support women-led innovations by improving infrastructures and availability of services in rural areas. As mentioned by several women, public infrastructures, and services (public transport, schools for children of different ages, women's clinics, afternoon activity services for school-age children among others) are fundamental both to enable women, and more in general local people, to stay and continue living and working, especially in rural villages and rural remote area, as well as to attract tourists.

Moreover, support could be in the forms of granting public spaces so that farmers/entrepreneurs can meet and network, renting public buildings for favourable rates or giving them to entrepreneurs through loans for use so that they can develop farming-related projects (kindergarten, food shops, restaurants, and processing laboratories).

Public administrations, especially at the local and regional level could also make sure that entrepreneurs, and particularly women entrepreneurs, have access to proper information about different financial support programmes (e.g. those developed nationally in the context of the CAP) to further develop their businesses - for instance by promoting networking and information events. This seems important particularly in the southern regions of Italy where women entrepreneurs often complained about lack of information and services to access incentives to develop their businesses. Moreover, more training programmes are suggested in rural villages in the south of Italy:

"Trainings are important because I have noticed that there is no culture of entrepreneurship in these areas. It happens that there are people for example who have the idea of opening, for instance, a library, because there are no libraries in these areas. They maybe have the capital to do it; however, they are always afraid because they don't know what they are going to get into, whom to turn to, the security of succeeding, so maybe this could be helpful..." (IT_F_EN_3).



Bureaucratic procedures to expand and diversify farming businesses as well as to apply for different financial support and capacity building programmes should be easy and straightforward to understand. All women complain about the complexity of bureaucratic procedures. They often do not apply for incentives and support programmes only because they do not have the skills (and time to learn) to fill in different forms and applications. Hence, public administrations and/or private agencies and organizations should provide services to support women with bureaucratic and financial matters.

In this regard, LAG action can also be important although so far there was not a specific focus on actions/interventions aimed at fostering gender equality.

Finally, the possibility of receiving grants/financial support without having to first invest an existing capital would greatly help those who do not have initial capital and who face great difficulties in accessing bank credit. This is particularly useful in the case of young people and women who do not have the possibility to provide collaterals and who therefore are refused credit by the bank.

4.2 ECONOMIC

Financial incentives were received by most of the women; however, these are contributions that are not specifically reserved for women. The typology of rural area does not seem to be a relevant variable to access financial incentives.

5 women accessed the intervention “Setting up young farmers” of the CAP (this intervention does not target women specifically, but young people in general). Other CAP incentives are also received such as those for organic productions.

Other women received an incentive from the national programme “*Resto al Sud* - Remaining in the South” to develop new educational activities for children from 3 to 13 years old. The programme supports the establishment and development of new entrepreneurial and freelance activities. It does not specifically target women, as it is reserved for people who reside in the southern regions of Italy and are under the age of 56.

Often it is not easy to get proper information or support about a grant or programme, and women entrepreneurs feel overwhelmed by bureaucratic requirements and procedures, especially in the South of Italy, regardless of the typology of the rural area. Being able to access financial resources requires finding a good consultant that can follow all the procedures or activate personal networks to get the information.

In general, women entrepreneurs highlight how they feel so many political and economic factors pushing against their business ideas. They have the impression that national and European political programmes mostly support large farming businesses that are not so attentive to environmental sustainability or to the impact they have on local rural communities.

One of the women has promoted a CSA with other farmers and researchers of the local university, to receive financial support also from consumers. In another case, support by



the regional government has been received through a grant supporting the establishment of a “*Bottega dei servizi*”: a multi-functional shop where people can buy basic goods and additional services are provided (e.g., home delivery, co-working space, postal point, etc.).

4.3 SOCIAL

Being a woman engaged in farming is in itself always challenging. Rural environments, being close to the city, rural villages, or remote rural areas, are still governed - both in the North as well as in the South- by patriarchal social norms.

Most of the women reported that when they started their businesses, they often felt that they were not taken seriously, either in the local social context (e.g., when interacting with neighbouring male farmers or people living nearby) or when trying to access local offices to deal with bureaucratic issues. This was particularly the case for women who did not inherit a farm from their parents. It emerged that they took more time to gain credibility and support within their rural context, especially as they were engaging in innovative way of farming. As mentioned above in section 3.3 “Constraints and favourable conditions”, women entrepreneurs who inherited a family business were much more advantaged in the development of their business. Having a family farming background often means an established network of contacts and spaces (e.g. at local farmer markets) to sell products. It means that the business is already known and integrated within a local context.

In general, all women (mothers and non-mothers) indicated that support from partners or close family members was critical to carrying out a project/innovation. In all cases, even when women are the sole owners of the business, support from them was important. The help and support took different forms, in some cases it was support for some jobs in the company, in others it was related to raising children, much more often it was motivational support and shared choice.

All of the women interviewed highlight how networking is fundamental to shape the challenges faced. Networking allows exchanging knowledge, access information, increasing the economic sustainability of their farm. Regardless the typology of rural area where women operate, networking is common at the local level, in some cases also at regional level. Some of them are also actively engaged in the national organisations of farmers.

It has highlighted that participating and selling products at local farmers markets is a great way to connect to other farmers and consumers and feel part of a larger community of people committed to the principles of environmental sustainability. This seems particularly important in the case of projects located in rural villages and remote rural areas. Engaging with or co-creating local consumer groups, actively engaging in short supply chains, including selling products on farm, are ways to connect and get support from the local community beyond farmer markets and also get to know other farmers and entrepreneurs involved in local rural development. Building collaborations with local schools as well as with other local organizations (e.g. those who work with disabled or



vulnerable people or promote territorial and touristic development) is also a way to strengthen the connection with a local context and bridge social and environmental justice.

Many of them are engaged at the community level in different ways, which also increases the visibility of their actions.

- They participate in the activities of local associations

“I am the president of the Proloco which is precisely an APS that has a very close connection with the municipal administration...I think that it is important to not be in conflict but to listen and also to learn to represent multiple segments of the population, not only those who think strictly like us but to learn to listen to those who maybe have different views. It makes you grow as a citizen” (IT_F_S_6).

- They are involved in networks of farmers

“I am part of the [name] bio district, where I am trying to bring my contribution. Most of them are winemakers and I'm trying to say: you can do it also in other ways [referring to organic, biodynamic farming], you can put flowers... I am the newest, the only woman, the smallest farm...” (IT_F_S_5);

“. I am responsible for the women of Coldiretti in the province of [name]. We...for example try to gather what are the needs of women in agriculture. Most are simply wives of some farmer who runs that farm. But so many are really finding employment with ... educational farm... social farm” (IT_F_EC_2).

- They are involved in networks, often informal including different realities (not only farmers) that aim at thinking how to work towards a more sustainable future: which actions to put in place to encourage quality tourism but also to cope with water scarcity, lack of services for citizens, etc.

“We opened a collective called “Meetings in the Valley”. We meet every two weeks. We are different realities including many young people managing small businesses. And we discuss about tourism in the valley. We discuss about the political management of the valley: for instance, about tourism without snow, about the lack of water, which is felt here very much” (IT_F_EN_1);

“I was a co-editor with two other people of a book [about the village where she lives]...it was a collective work that was really taken by everybody in the village, really everybody... even the hunters, the farmers, the shepherds, the old women and the old men. Those who had the historical memory helped to map the sites of interest...and that was also important to introduce myself to others” (IT_F_S_6).

4.4 TECHNOLOGICAL

Women entrepreneurs focused their innovative practices on re-valuing local and traditional knowledges and territorial resources, on the offer of new services (such as



kindergarten, social activities) on processing on farm and off farm their products. Thus, the technology employed is that typically engaged in these activities.

It was also pointed out that agricultural technology is often developed with men's use in mind. Very large tractors, heavy devices are difficult for many women to use. *"Machines are calibrated to male bodies"* (IT_F_EN_2).

Very relevant are the use of digital communications tools; they are mostly used to advertise the innovation and attract clients, both local people and tourists. All businesses but one use social media (mainly Instagram and Facebook) and websites to promote their products and services. Websites and social media are used to narrate the story of the farm and the territory in which they operate, announce events and updates clients on the type of products and services offered. WhatsApp groups are frequently used among the network in which they are involved. The women interviewed have good digital skills, and the use of the Internet is also functional in identifying training courses and acquiring information.

4.5 ENVIRONMENTAL

Environmental factors strongly influence the type of innovations developed by women entrepreneurs in all types of rural areas. In fact, as mentioned, respecting nature's rhythms, working the land without using chemicals, relying on existing resources without exploiting them (e.g. water, soil), getting involved in short food chains, preserving local ecosystems, and not producing waste are among the reasons that motivated women entrepreneurs to start innovating in farming.

Animal husbandry is also conducted with an ethical and anti-speciesist approach: grazing animals on local pastures, providing them with healthy fodder, respecting their needs and favouring their well-being.

Women entrepreneurs all show a critical view of mainstream consumption and agriculture patterns for they consider these unsustainable and detrimental for local ecosystems. They relate this critical view with a great concern for climate and environmental change.

"I chose this land also based on how the climate is going to change, thinking about scarce resources, like water certainly... And so I thought about those elements, most of the land I've leased has springs..." (IT_F_C_10).

9 out of 10 of the women adopt an organic approach to farming trying to address these environmental issues in their everyday life by taking on and spreading more sustainable and ethical ways of living.

Educational activities are also oriented towards healthy, local and ethical food consumption habits, living in harmony with animals and natural environments, respecting local ecosystem in a holistic way. In this regard, innovating is not just about practicing environmental sustainability but also spreading specific values and approaches, bridging environmental and social justice.



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5. MAINSTREAMING ACTIONS

5.1 SCALING UP

The impact of women's innovative practices can be noted more on an informal, everyday level rather than by looking at changes in formal laws, policies, institutions or norms. In fact, it is mostly habits, beliefs and social relations that are starting to change thanks to these women's everyday work and innovative actions.

In this regard, the active participation of women entrepreneurs in local institutional bodies could be relevant to support and enhance the impact of women-led innovations. Similarly, networks also turn out to be fundamental to make women entrepreneurs feel supported in the specific rural areas where they are enhanced.

5.2 SCALING OUT

All case studies analysed concerned local innovations that are specific to the territory where they have been developed. For most of the women, the focus remains on expanding and improving the existing innovation in loco or on adding other aspects/activities to their business rather than reproducing it elsewhere. In one case, however, in a rural area close to the city, one of the women interviewed (who has created a kindergarten on her farm) is working with local educational institutions to train on the outdoor education approach what could potentially lead to replication of her innovation.

While replication of innovation does not seem to be an explicit desire of the women interviewed, all of them are involved in networks and thus their actions and the innovative experiences they have developed can potentially influence others. Similarly, receiving a national award, which is the case of two of the women interviewed, has increased the visibility of their activities and this can be an inspiration for others. Social events and visibility of their stories on the television or on national newspapers may be a way to foster the dissemination.

5.3 SCALING DOWN

Most of the women have received funding support (mainly from the CAP; one woman from a national funding programme).

Some of them had to take a specific agricultural course to gain the necessary requirements to access the "Setting up young farmers" intervention of the CAP. Two of them underlined that this course represented an opportunity on the one hand, to get to know other young farmers and learn about agricultural techniques. On the other hand, it was also somehow challenging as they both wanted to engage in organic, permaculture farming and the courses almost only focused on mainstream agriculture.

One woman participated in the courses offered by the programme EWA (Empowering Women in Agrifood), sponsored by EIT Food, the European Institute of Innovation and Technology and co-funded by European Union, to get training on how to manage a farm-



related business. She mentioned that the course was helpful to meet other young entrepreneurs and learn how to develop a business plan. In her words *“it definitely gave me inputs, tools, like business plan creation which I didn’t know about. I mean it was a nice experience, mostly for networking”* (IT_F_C_10). However, she also complained that the tutors did not assist the students as she thought they would.

Overall, both in the North and in the South and in the context of different typologies of rural areas, women do not feel supported enough by local and national authorities. They often describe themselves as examples of “alternative” types of agriculture and farming practices that do not align with mainstream practices supported by governments at the local, regional and national levels. In this regard, most often, they find support and strength in creating their own informal networks, events, and spaces. They find courses to develop their skills and knowledge through informal networks and outside the public school system and they develop most of their skills in a self-taught way.

5.4 SCALING IN

As mentioned, women feel little support by organizations and institutions. In most cases, women had to learn skills by themselves or by self-financing courses and training promoted by informal groups and networks.

Only in one case, a woman who now successfully runs an organic and permaculture farm and an agricultural kindergarten, is called upon each year by professors from the agricultural school she had attended ten years earlier to share her experience and agricultural knowledge with new students. In this way, her innovation has in part influenced a local institution in a remarkable way.

More frequent opportunities for exchange between networks of women entrepreneurs and local administrative bodies have been suggested to foster change. This could help authorities at different levels understanding what kind of support is needed and develop different programs and trainings accordingly.

None of the women mentioned AKIS. Even when asked about them, they did not know what this was or how to get support from it. Information about this system should be widely improved throughout the country, through regional support programmes or through the local LAGs.

5.5 SCALING DEEP

All cases partly contribute in challenging patriarchal “normality” and in demonstrating that women can develop farming business of different kinds even when they face a huge number of challenges and constraints at different levels. Although this effect is in most cases not explicitly sought by the women themselves, it is their own actions that promote change. The contribution to changing societal values and behaviours in relation to gender equality are rather localized but still extremely important.

The creation of female networks can enhance gender equality. Two women are part of the same network and highlight how they often discuss gender-based violence and



patriarchal oppression experiences in and outside their home, supporting and learning from each other. They also organize public events to spread awareness about important issues such as gender-based violence (e.g. in relation to the International Women's Day).

Another woman also points out how the local network she is involved in -which brings together several local young entrepreneurs- promotes specific policy messages. Among these messages, gender equality is certainly one of the most important. Women (as well as men) who are members of this association actively advocate for the opening of women's clinics in rural areas, the right to abortion, and the availability of day-care centres, among other women's rights.

Besides the experiences of these networks, there are other more personal/individual experiences that are worth mentioning in relation to gender equality.

For instance, one of the women interviewed operating in a rural remote area mentioned that, at first, everyone in the local community was looking at her in a very sceptical way, as she was a single woman starting a business by herself. Everyone was talking to her father (who also managed a farm but separately from her daughter) even if they wanted to ask something to her directly. She struggled to gain credibility but after fifteen years of successfully running her business, she feels that now local people look at her with more respect and admiration.

Similarly, another young woman is struggling to gain credibility and trust, as she just (one year ago) moved to a rural remote area to manage a bed and breakfast and start a small-scale organic farming business's after growing up and studying abroad. Local people still look at her in a skeptical but also commiserating way. They think that it is very strange and undesirable that a young woman who lived abroad for so long can move to such a place and start farming. Hence, she is actively trying to challenge such gender stereotypes, while promoting and revalorizing farming as a positive and desirable lifestyle for women as well as for men. In her words: *"I walk around in boots because I want them [local people] to see that it is normal that a woman wears boots, dirty boots, and also that her hands get dirty! It is normal because we live in the mountains. (...) I think how they look at me is linked to the stigmatization of the farmer's work, of working the land, which is something old, linked to misery...."* (IT_F_C_10).

In general, women think that it would be important to spread awareness to start thinking about farming not as an ancient, male-dominated practice but as something else, something "cool" and extremely important in today's world and in the context of a global climate crisis. By looking at all the Italian case studies, it emerges clearly that innovation in farming -when led by women- is very much about taking care of the soil, of water resources, of different types of animals -in one word, taking care of the local ecosystem- by practicing "alternative" forms of agriculture: organic farming, permaculture, synergic farming, non-extractive farming, anti-speciesist farming, cultivating traditional local crops, among other practices. At the same time women-led innovation in farming is also very much about diversifying and educating: it is oriented towards environmental and economic sustainability but also towards social and cultural impacts. In this regard,



educational activities are often central. Such activities, which target different groups of people -tourists as well as local children, adults and people finding themselves in vulnerable situations- and most often focus on environmental sustainability, healthy and ethical consumption patterns, and human well-being in the outdoors, could be expanded to educate about women's rights and gender equality.

Both governments as well as public and private agencies and organizations at local, national, and international levels could support such educational activities that interweave gender and environmental justice by financing them and linking them more prominently with local schools' offer.

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FARMING WOMEN-LED INNOVATIONS IN THE NETHERLANDS

CASE STUDY REPORT

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ACRONYMS & ABBREVIATIONS

| | |
|---------------|---|
| BD | Biodynamic farming (Biological-dynamic agriculture) |
| CLT | Community Land Trust |
| EU | European Union |
| LEADER | Liaison Entre Actions de Développement de l'Economie Rurale (Cooperative actions for rural economic development) |
| LNV | Ministry of agriculture, nature and food quality |
| VOF | Vennootschap onder Firma which is corresponding to family farm company or General Partnership. |



1. THE NATIONAL CONTEXT

Official data on farm managers show a very low share of female farmers (Table 1; Table 2; Table 3). The figures show that the share of farms managed by females is very low (5.6% of all farms) and that this share is declining. Furthermore, the share of farmland managed by females is even lower and the same holds for production measured in standard output. As direct payments in the common agricultural policy are based on the area managed by a farm, this means that female farmers get a substantially lower contribution from EU direct payments, which is the main support the EU provides for farmers. The female labour force in farming is declining, both in absolute terms and relative to the total labour force. The overall picture is so of a very, very traditional gender imbalance in farming in the Netherlands.

As unemployment levels in the Netherlands are low, it may be possible to develop a hypothesis that females flew away from the farming sector (pushing females away) to other labour sectors that provide more opportunities to have a leading role. Farms are held by natural persons and in family farming there are traditional gender roles. The main pathway of farms is towards larger farms and producing raw products for the world market. This tendency of modernisation marginalised the traditional role of females in farms, which was of adding value to raw products to serve local markets, such as producing cheese on a dairy farm. These roles have been overtaken by industry. The yearly report states that the Netherlands has a second place (after the USA but before Brazil and France) as exporter of agricultural products. Although part of this is based on the food industry adding quality to products, it makes the Netherlands a central country in the world market for agricultural products and makes that Netherlands farmers have good access to the world markets. This shows that farming is not changing. Netherlands is a farming context in which every generation of farmers is half the size of the previous one. Farming is in a constant flux of scale enlargement. The Netherlands is one of the leading countries in Europe in this process of modernization.

The minister (Ministerie LNV, 2023) writes in a letter to parliament that this second place is a matter of pride. It is currently, however, debated whether this orientation to the world market should not be a matter of pride but of shame, based on the insight that it shows that necessary changes in the farming sector in the Netherlands - enhancing localised networks of food production and consumption - are lacking. In contrast to France, where major farmers' organisations are involved in local food planning, this is not the case in the Netherlands where food planning is the domain for alternative 'minority farmers' (Liu et al, 2024, page 965). There is a movement for alternative farmers producing for local markets but for them access to land is a major issue as farmland prices in the Netherlands are extremely high (Korthals Altes, 2021) and there is not much land available on the market. This latter is also an issue for modernist farmers. Transfer of farms to new generations is a complicated process, especially if siblings must be bought out of the farm in a context in which land prices are above what a farm reasonably can generate.



Table 1. Key farm data in the Netherlands

| | 2010 | | 2020 | |
|--|-------------|----------------|-------------|----------------|
| | All farmers | Female farmers | All farmers | Female farmers |
| Number of farms | 72,320 | 4,420 (6.1%) | 52,640 | 2,930 (5.6%) |
| Utilised agricultural area (UAA) (ha) | 1,872,350 | 55,850 (3.0%) | 1,817,900 | 60,900 (3.4%) |
| Average size of farms (ha) | 25.89 | 12.64 | 34.53 | 20.78 |
| Standard output (€ million) | 18,930 | 467 (2.5%) | 24,874 | 670 (2.7%) |
| Average standard output per farm | € 261,753 | € 105,730 | € 472,527 | € 228,689 |
| Average standard output per hectare UUA (€/ha) | € 10,110 | € 8,367 | € 13,683 | € 11,003 |

Source: EUROSTAT, Farm indicators by age and sex of the manager, economic size of the farm, utilised agricultural area and NUTS2 region [ef_m_farmang]

Table 2. Agricultural holdings by the economic size of the farms (Standard output in euro)

| | 2010 | | | 2020 | | |
|-------------------------------|-------------|----------------|-------|-------------|----------------|-------|
| | All farmers | Female farmers | | All farmers | Female farmers | |
| Less than 14,999 Euros | 15,210 | 1,960 | 12.9% | 6,390 | 880 | 13.8% |
| From 15.000 to 49,000 Euros | 11,250 | 1,070 | 9.5% | 7,720 | 690 | 8.9% |
| From 50,000 to 249,000 Euros | 23,890 | 940 | 3.9% | 12,710 | 730 | 5.7% |
| From 250,000 to 499,000 Euros | 13,370 | 280 | 2.1% | 12,150 | 310 | 2.6% |
| 500,000 Euros and over | 8,600 | 170 | 2.0% | 13,680 | 320 | 2.3% |

Source: EUROSTAT, Farm indicators by age and sex of the manager, economic size of the farm, utilised agricultural area and NUTS2 region [ef_m_farmang]

Table 3. Number of farm managers by age class 2010-2020

| | 2010 | | 2020 | | 2010(%) | | 2020(%) | | 2010-2020(%) | |
|-----------------|--------|--------|--------|--------|---------|-------|---------|-------|--------------|--------|
| | Female | Total | Female | Total | Female | Total | Female | Total | Female | Total |
| Younger than 35 | 230 | 2,610 | 180 | 2,430 | 8.8% | 100% | 7.4% | 100% | -21.7% | -6.9% |
| Younger than 40 | n.a. | n.a. | 370 | 4,830 | n.a. | n.a. | 7.7% | 100% | n.a. | n.a. |
| 34-44 years | 830 | 14,850 | 480 | 6,160 | 5.6% | 100% | 7.8% | 100% | -42.2% | -58.5% |
| 41-65 years | n.a. | n.a. | 1,940 | 36,540 | n.a. | n.a. | 5.3% | 100% | n.a. | n.a. |
| 45-65 years | 2,280 | 41,650 | 1,650 | 32,780 | 5.5% | 100% | 5.0% | 100% | -27.6% | -21.3% |
| Older than 65 | 1,080 | 13,220 | 630 | 11,270 | 8.2% | 100% | 5.6% | 100% | -41.7% | -14.8% |
| Total | 4420 | 72320 | 2930 | 52640 | 6.1% | 100% | 5.6% | 100% | -33.7% | -27.2% |

Source: EUROSTAT, Farm indicators by age and sex of the manager, economic size of the farm, utilised agricultural area and NUTS2 region [ef_m_farmang]

The Ministry of Agriculture, Nature, and Food quality has given increasingly attention to gender issues. Bock et al. (2000) have, for example, executed an emancipation impact assessment of a specific grant scheme. They found that women made less use of these



grants, which they explained from the structural inferior position of women, and they suggested some improvements in the grant schemes. Furthermore, Bock (2004), in a later study, suggests that the current support system for entrepreneurs does not adapt to female styles and types of entrepreneurship and needs restructuring to positively influence female entrepreneurship. Many females take rather 'small' steps to be recognized as 'real' entrepreneur, while the support systems consider that being an entrepreneur requires taking gigantic risks. Programmes providing a safety net are needed to support risk-taking.

In a study on side activities and rural female entrepreneurship, Markantoni and van Hoven (2012) show that side activities are an important part of women's everyday life, needs, identity and lifestyle. Even though side activities often entail a sacrifice of personal and family time, women experience such activities as a personal achievement and empowerment ' (page 514). In short, framing those activities as "side" ones does not do justice to the degree of significance women give to them. The situation sketched by Brunt-De Wit in 1975 that the practice of female action is not addressed by policy discussions in rural areas (female action is often urban and rural policies lack a gender component) seems uninterrupted for the last 50 years.

1.1 URBAN RURAL CONTINUUM

The Netherlands urban centre is the Randstad in the West of the Netherlands. The Randstad includes major cities as Amsterdam, Rotterdam, Den Haag and Utrecht and a range of intermediary cities, including Almere, Hilversum, Haarlem, Leiden, Delft and Dordrecht. Even in the Randstad, there are rural areas as it has been planned as a Green Heart Metropolis (Burke, 1966). Next to the Randstad in the West, also some rural areas in the adjacent areas in the South (including Breda, Tilburg, Eindhoven and 's Hertogenbosch) and the East (including Ede, Arnhem, Nijmegen) are part of a dense urban network.

Remote rural area is for the context of this report considered to be rural areas that are further away from the Randstad and adjacent urban networks. This means that, although some regional cities may be nearby, there are fewer jobs within an easy commuting range than in the areas closer to the main urban centres.

Rural villages. There are many rural villages in the Netherlands. Due to scale enlargements often shops are closing, resulting that community activities include schools and civil society (known as the association live) in villages. In many villages groups of citizens come together once or several times a week to be active in culture, sports of other activities. This includes a local department of one of the national female organisations, the local fanfare, sports clubs. Often the local authority has a multi-functional building in a village that can be used for these activities and in which volunteers (often including a village council of active citizens in a village) play a large role in operating it. In some areas these facilities have been sold as consequence of rural decline and choices made by the municipality. Political activities are at a level of the municipality, which has a municipal council. Due to amalgamation, rural municipalities



may include many villages. About 25 villages in one municipality is no exception anymore in rural areas.

Rural areas close to the city. These are the rural areas relatively close to the central urban networks of the Netherlands. These areas are under pressure of people that aim for combining a rural home with work in the city. This may impact the sense of community as ‘import’ people may not be well integrated in rural networks. From an entrepreneurial perspective “close to a city” means relatively easy access to urban markets and urban visitors that can be involved in a rural experience.

In the practices reflected on in the interviews the differences between these contexts are not as big. This may relate to the dense population in the Netherlands. In some cases, some experiences are a little different in the more remote areas and this is mentioned, but most matters are of relevance for all types of areas. Real remoteness is scarce.

2. THE INNOVATIONS

This study is based on in-depth interviews with 10 farming practices (Table).

Table 4. Overview of respondents

| N. Interview | Age | Educational Level | Size of the farm (ha) | Property rights | Legal form of the farm | Year when she started operating in the farm |
|----------------------------------|-------------|-----------------------|------------------------|-----------------|------------------------------------|---|
| NL_F_EN_1 Remote rural | 30+ | Tertiary (stopped) | 47ha | Owned | Family farm | 2012 |
| NL_F_EN_2 Rural close to city | 40+ | Tertiary, vocational | 54 ha | leased | Partnership (VoF), family company. | 2019 |
| NL_F_EN_3 Rural village | 40+ | Tertiary, vocational | 85 ha | Owned | Foundation | 2020 |
| NL_F_S_4 Remote rural | 40+ 30+ | Tertiary, theoretical | 20 ha | Leased | Cooperative | 2022 |
| NL_F_S_5 Rural close to city | 30+ | Tertiary, theoretical | 2 ha | Leased | General partnership | 2024. |
| NL_F_S_6 Rural village | 60+ | Tertiary, theoretical | 2 ha | Leased | General partnership; Foundation | 2012 |
| NL_F_EC_7 Remote rural | 60+ | Tertiary, theoretical | 141 ha | Owned | Family company | 1999 |
| NL_F_EC_8 Rural close to city | 30+ | Tertiary, theoretical | 6 ha | Owned | Family company | 2015 |
| NL_F_EC_9 Rural village | 40+, 50+ | Tertiary, theoretical | 3 ha | Leased | General partnership | 2006 |
| NL_F_C_10 Remote rural | 60+ 40+ | Tertiary, theoretical | Different potato farms | Renting sites | Foundation | 2008. |

Although Table 4 presents a specific year, the taking over of a family farm is often a gradual process in which first responsibilities are taken in a joint partnership and that



gradually this partnership is shifted to the new generation. Sometimes this happens suddenly (at the demise of a parent), sometime more gradually and that after 4 years being working as joint partners responsibility is shifted completely. In one of the cases the father, who is well in his 70s, is still supporting the female farm manager by performing a lot of physical farm work. In one case the farming took place for quite some time, but the transition to a biological farm is considered to be the innovative change studied.

3. INNOVATION PATHWAYS

3.1 MOTIVATORS FOR INNOVATION

There is a range of innovations. Part of the respondents is raised at a farm, others have a (sub)urban background and made a step towards farming.

A new entrant into farming was active in social movement during adolescence and during these meetings there was biological food. This was a step towards being an active producer of biological food. First, she started going to an existing farm that had an open practice of inviting people to join and to have good relationship with neighbouring (regular) farmers. Secondly, the initiator worked at various farms. In this process she learned also about different types of farming and what she preferred. Then there was an opportunity with a large landscape organisation that was in need of nature-based farmers and this was where she started her own dairy farm.

Another respondent has been growing up in a farm located in a more remote location where her sister still has a horticultural farm. She moved to more urban locations but after a while she became homesick for the countryside. Inspiration was also found from the study of biology and memories of the farm currently ran by her sister. Experience as teacher helps to disseminate messages, to tell things for a group and to organize people. This is used to organize a community supported farm for which there are supporters to get involved, politicians needed to support it.

Another female (raised in a suburban area) educated as an anthropologist got inspiration from her experience as a social worker in Brazil, where she moved to and became active in a cooking project managed by women in precarious position to provide food in poor areas. This inspired her to think that food can unite people. This lightened the spark of being active in food production, so she became active in promoting community-supported agriculture (CSA).

Another respondent was working for over 10 years behind a desk and was at the same time a member of a CSA. She decided that she wanted to make a shift to the other side of the CSA and was prepared to take on the financial consequences of this choice, meaning earning less money but feeling more fulfilled.

Other respondents have studied gender studies, so they are aware of the role of gender in society and have been aware of traditional role patterns in farming. Hence, they have been consciously working on changing these.



Another farmer has taken over the family farm and has also rented land from the landscape organization at the other side of the road, using a practice in two parts: one where regular farming takes place and another part where biological farming takes place. Her idea is that she has the best of both worlds. Some ways of working from biological area are also used in the regular farming area.

One of the respondents is next to being a farmer, a director of a foundation educating biodynamic farmers. Here the idea is that at this school “...our goal is to create a space where people can connect, learn, and work together, caring for the land and for each other. By aligning our efforts, we aim to build a fair and sustainable future for everyone involved.”

So, the inspiration is societal, related to making a better world, but also personal, living close to nature. We have no indication that this differs among the types of rural typologies (close to cities, rural villages and remote). We do however find that respondents inspired by living close to nature prefer a location that is a little outside the immediate vicinity of big cities. This is more the outcome of the process of aiming to find a location to settle a new farm than that we suspect that this is about the geography of motivations. The women in these areas are likely to be not more motivated to become a new entrant into farming than in other areas. This area seems to provide, however, a better landing place for this ambition, considering also the lifestyle choices taken.

3.2 CONSTRAINS AND FAVOURABLE CONDITIONS

As indicated already, only part of the farmers interviewed is originally from a farming background. One of the constraints for new entrants into farming is getting access to a farm. There are opportunities to learn the profession by working at running farms but the step to independence is a difficult one. Here specific opportunities allowing to rent land for a good price have been of importance. Often these opportunities promote nature-friendly practices of farming as these rent opportunities are provided either through landscape organisations or through organisations promoting agroecological farming. Relevant for agroecological farming are long-term rents. It takes time to build a good soil, which is the base for agroecology. However, scarcity of land makes that some initiatives have settled with a 2-years lease contract as the best outcome that can be reached.

Support from local politicians has been essential in some cases. Some other persons are facilitating the emergence of a CSA.

A new entrant to farming mentioned the Warmonderhof where she learned how to farm. This facility (with about 50% female students) is very important for the development of new, agroecological, farmers.

Another organisation mentioned is Toekomstboeren (Dutch for Future Farmers), which is an organisation that enables many new entrants into farming to meet and it is a member of Via Campesina.

The desire to live close to nature implies that a new entrant into farming moves from the city to a more remote area, which is however not very remote from a European



perspective. These areas are not in the immediate surroundings of the big cities in the West of the Netherlands (like Amsterdam or Rotterdam) but have still easy access to clients in other medium-sized cities (like Nijmegen or Deventer) that are still big enough to support a farm.

An issue is that many traditional farm supporting agencies are very much oriented towards 'industrial' farming, the large scale development that is not being followed by most of the respondents (and certainly not the new entrants into farming), which has impact on the support system and the need to find ways of support through parallel trajectories. There are links between these two worlds but bridging them is less easy than to stay within the own context.

Although many people support environmental friendly practices, choices made in the food store are often different. In fact, most consumers buy low-priced food and usually do not pay a little extra for environmental friendly produced products. This makes that it is needed to develop a market for alternative practices. It is not sufficient to produce environmental-friendly food, but potential clients have to be engaged to buy it. In one case, next to the CSA model there is a farm with a web shop allowing ordering every week a package without an obligation. 4000 people are registered, which means 450 orders per week. Managing such a web shop, including filling the boxes, takes a lot of time (about 60 hours per week), which means that personnel is needed.

In another case, the context of a traditional crop (potato, in fact the area is famous for seed potatoes for export) has been used by a woman to organise a cultural festival (potato weeks). She has been inspired by her experience in her own farm and being a female helped her in profiling the festival. The relative remote location of this area makes that the potato can be seen as a unifying symbol in that area and can attract also people who would not get there if it was not to visit the festival. Remoteness is still within the Netherlands's scale, so still quite accessible compared to remote areas in larger countries. Culturally, people in this area (it is 16th century polder that was cultivated by people from Holland) speak their own Dutch dialect which is different from the Frisian language of the surrounding area.

3.3 IDEA AND PREPARATIONS/DECISIONS AND PREPARATORY ACTIVITIES

Many of the respondents had no access to a family farm and had to find land, which is not easy. Although they prefer a long-term rent agreement, they sometimes have gladly settled with a 2-years lease as the maximal achievable outcome, which results in a need to find opportunities for a renewal from the beginning as two years is a too short period to build on. Another respondent reflects on an experience in which it was (in a location close to the city) not successful in finding land.

Finding land close to the largest cities in the Netherlands may be more complex, not only due to the urban pressures but also due to landscape conditions. In fact, there is a lot of peat land in the West, for which the most ecological friendly solution would be to flood it, or to raise the water level to stop peat oxidation, which will have the effect that it will not



provide a solid ground for farming. Or there are large deep polders with huge plot sizes that make it less easy to get access to than in areas that have different landscape features. The drive to live close to nature of these new farmers means also that a location in a less-urbanized rural area is preferred. From an international perspective these areas are usually not remote (they are within 45 minutes distance of a population centre with more than 50,000 inhabitants), but from a Netherlands perspective these are not as close to major cities as other locations are.

One of the new farmers indicate that the location close to a range of mid-sized cities is essential for the farm, just as fertile soil is. Still, this farm works with a subscription, which means that the farm itself organizes the delivery using 2 vans. The client base is stable. Advertisement has been done in the past but is not needed anymore. Part of the work is done by volunteers and trainees. Gender share in the farm is 60% females and 40% male. During winter it is quieter, and planning takes place for next season.

Significantly, some farmers even went on with their ideas even if farm advisors told them that this would not be a good idea as it would not be feasible to do. Very specific in this case was that there was room to take risks. Investments were based on equity (money saved) and not on debt (loans). So you do not need a bank to review your policies and if it fails you lose your savings but have no debt with the bank.

Other farmers had easier access to land through their family farm. These farmers see differences in practices, for instance that less pesticides are used nowadays than in the past. This makes that differences between farming types are smaller. They claim that they have learned to implement biological practices and that the transition is smaller than in the past. Preparing activities are easier to start in a running farm, especially if it is tenured base.

Not much difference between types of area (remote or close to the city, rural villages) has been found.

3.4 CONCRETISATION OF INNOVATIONS

As one of the respondents indicate: *“Our own farm is focused on short supply chains and community involvement. The role of women in this organization is significant but often overlooked.”*

Even alternative farmers consider that being an agricultural entrepreneur is an essential part of being a farmer. It is about making autonomous choices, about producing food people want to buy. This is a real issue. Many people do not spend sufficient money for food, and it is so essential to reach your clients. So, it is about telling the story of agroecologically produced food and making people curious enough to buy it. It may help if true pricing of all products will become the standard but currently you only pay a true price for environmentally friendly products.

Organising care on a farm demands also other qualities and so impact on organizational matters. Some farmers do a range of other matters as well, including teaching yoga classes, hosting cultural activities.



Making a farm profitable has not been the goal of a respondent. The aim is just to make it financially viable. Many of the farms work with volunteers.

A farm in a small village sells products in its farm store. Here location of 15 km to two mid-size cities is of importance to reach more clients than the village can provide. Interestingly enough this store was running well in COVID19 times. The inflation after COVID19 was more difficult to handle.

Cooperation with local farms in the neighbourhood to jointly market regional products has also been a strategy followed by farmers.

Increasing profit was also achieved by constructing a windmill and setting solar panels on the roofs.

Females who have taken over the family farm also indicate that the farm in its original state was not economic viable anymore and that new initiatives were needed. A respondent has not taken the modernist solution to grow bigger but the alternative one to provide more added values by involving new clients and biological farming. This includes a permaculture park in which people can come and follow a 'wild food picking adventure trail'. So, there is a restaurant and recreational facilities next to the farm, which is biological, multifunctional, but which is not anymore geared to mass-production of food. The idea is that the farm grows feed for the animals and that many products are directly eaten by visitors at the farm. Large groups of people can be entertained at the farm. It is also a place where meetings can be held. For this range of activities, it is needed to have personnel, which needs to be managed. The area is located close to cities and is so an area that people can visit easily and personnel can commute by bicycle to the farm.

As relationship with clients is key, more remote locations may have more complexities to overcome these.

3.5 IMPACTS OF INNOVATIONS

One of the issues mentioned by a respondent is that, especially in a field like agriculture, the role of women is crucial yet often unseen. Women work very hard, both inside and outside the house, doing informal work that goes unnoticed. There is a certain solidarity because we are also women. In essence, women are incredibly powerful and equal, and it is important to recognize and allow that.

Many of the respondents strive to make impact by pursuing more agroecological ways of farming and involving communities to support local food production. The outcome of their work is at the same time the impact they strive for. They are part of larger organisations (as Toekomstboeren, CSA networks, etc.) to mutual support the community to achieve this impact. It is however, an impact that is outside the mainstream. So the impact is limited. However, mainstream farming is also changing and it seems that practices that have proven to work in a biological context are taken up by regular farmers as well.



Remarkable from a gender perspective is that in these alternative sectors, the gender balance is more even than in other sectors of farming in the Netherlands. However, it may be better to formulate it differently. The gender balance in the alternative sector is not so remarkable. Just as can be expected females play an important and visible role in farming. Remarkable is that in mainstream farming very traditional role divisions are still visible. It is not just a question of reporting, but it is the women that take on auxiliary jobs to create an extra income and it are the males that stay at the farms.

Most of the impacts are in the intermediate zone between close to the city and remote rural areas. It is an area with a sufficient client base to organise communities around food and it is an area that still have some room to implement this without a direct threat from the urban fabric. A more urban farm has also its impacts, but this is achieved differently by inviting visitors directly to the farm.

4. INNOVATION ECOSYSTEMS

4.1 POLITICAL

In the interviews only the local (municipal and provincial) political context has been addressed. This was mainly done, not because of party political issues, but based on general concerns.

New entrants to farming are not the most economically powerful actors on the market. Political decisions may help to get a good lease. Especially for CSA, politicians may be helpful as these are initiatives that are grounded in the community that they represent. An issue is the tenure security. Political deals can be short term and many farms need a long-term commitment to the land as many developments takes year to mature. The transition period towards biological farming may be longer than the tenure of a lease.

In many practices the respondents succeeded in getting contacts with alderpersons. So, in a way the system helped to get matters on the agenda of local politicians. Based on the interviews we cannot see that there was a difference between the types of area.

4.2 ECONOMIC

There is in the Netherlands an organization that allows to start new locally supported farms called 'Herenboeren', which literally means gentlemen farmers. This title does not refer to the male gender but is used to express the status of the gentry, that is, the class of rich farmers who do not have to do the work themselves but hire people to do the actual farming. In this concept people from a community are the gentry and come together and hire a farmer, who is on their payroll, to farm on a land they own together. Locally there are many communities in progress in starting to establish such a farm. It takes some entrepreneurial skills to actually get hold of a land big enough to roll out the concept of the 'herenboerderij'. Two of the respondents interviewed (together) are in the process of starting such a new farm, which is in need of a lot of organizational skills, such as getting a community together and getting access to land. The organization of Herenboeren sets a framework for what it involves starting such a new farm (compare



Spaans, 2021). Not all of these rules may be adequate to the local context but the fact that these rules exist makes that initiators can focus their efforts on other matters than thinking about the nature of the farm, which helps to make progress. This CSA-model is a growing phenomenon in the area and *Herenboeren* is a brand that helps to motivate politicians to support the establishment of one in their own territory.

Economically many initiatives are an alternative for the retrace towards scale enlargement that traditional farming offers. Many of the farms search this both in diminishing costs (by producing feed themselves, by working with volunteers) as in proceeds (by direct sales to customers, by having a range of other activities, including care, entertainment of people on the farm). So there is a large set of economic means used both to reduce costs and to add value to farm products.

One of the females, organising a cultural event, has made use of LEADER, which was considered to be a complex process. Especially risky was that everything had to be pre-financed with individual savings. Also others mentioned individual savings as economic assets that were of help to start up an initiative.

For females taking over the family farm, the farm has been an essential economic asset to kick-start their activities.

4.3 SOCIAL

One of the females indicate a difference between cattle keeping farms in which females are often active partners and crops producing farms in which females are not active but have a job outside the farm. Some of the respondents are growing crops and are as such an alternative role model. This is being confirmed by one of the respondents as she said that her husband has a crop farm, i.e. it is not her farm. She is a vet and has a different practice. However, this vet also indicates that in dairy farms the male always stay at home and females have other jobs as well. This fits to the statistics (Table1) of farms dominantly managed by males in the Netherlands. These traditional role patterns have been mentioned in many of the interviews. For instance, females buying a tractor without a man being present are considered to be a major deviation from what is normal. Although for every farmer buying a new tractor can be an exciting event, it reveals a lot about social norms that it is considered to be out of the ordinary if females are doing it.

Organising an event with farmers has the constraint that there are less and less farmers. The pool of farmers becomes thin. For such an event a more remote location works as a place to organise the event. It gives it a different atmosphere.

Many of the females are networking with other farmers within a range of organisations.

Networks range from traditional farmers organization (LTO) to alternative organisations (Toekomstboeren). There are also local networks of farms organizing themselves to offer regional products or to host excursions for people wanting to visit agroecological farms. Some of the farmers have been educated at the Warmonderhof and this organization has a network of alumni. Networks are also organized to find interns and to help people making a next step (as intern or temporary worker) in the career towards finding a farm.



Many have also volunteers. Specific networks are connected to local politicians. We have not seen a large impact of the location in these practices. Differences relate more to the kind of farm than to the location.

4.4 TECHNOLOGICAL

A specific part of the technological ecosystem in the Netherlands is that next to regular agricultural education there is an official school (Warmonderhof) that provides education in biodynamic agricultural practices. According to the school itself it is the only by the state recognized vocational school in biodynamic agriculture in Europe, which means that it attracts international students that follow the course in Dutch language. Many of the internationals come from Belgium and Germany. For many new entrants into farming this is the place where they learn farming. One of the respondents has been director of this organization which means that she was a central player in the network of alternative farming practices (both nationally and through its alumni, internationally; in total there about 3000 alumni), and has had an essential role in developing this programme and the school farm further. In the interview, she indicates that about 80% of the students have no farming background. So, these students must learn the basics of farming in the fields themselves. Being director of such a school includes taking responsibility for cooperation and future development of what it means to be a biodynamic farmer, and by informing the larger population about it.

In relation to gender, the Warmonderhof has a 50/50 gender distribution (see also <https://www.mbostart.nl/aeres-mbo-warmonderhof/>). So, there is a large gender gap between traditional farming (Table 1) based on family traditions and the community of new farmers aiming to learn to start with being active in agroecological farming practices. The school has a full-time programme for young students that generally “live, learn and work” at the farm for four years and a part time programme for mid-career switching people.

Some of the other respondents have followed their farm training at Warmonderhof. This shows the importance of this facility to promote alternative farming knowledge and to consider the better gender distribution at this facility, supporting more female farmers.

There are no signs that this school has different impacts per type of rural area. Many of the students have a rather urban background, but that does not involve that they aim for farming in an area close to the city. Becoming a farmer is a lifestyle changing choice that involves a move to a farm, which can be located in a different region.

4.5 ENVIRONMENTAL

In the Netherlands there is a variety of soil conditions and in some cases there are small differences in climate (for example based on distance to the coast) that make that some types of farming are concentrated in certain areas. Het Bildt is for example an excellent location for seed potatoes, which helps to have concentrated production and allows to organising cultural events on this topic. Some of the farmers have also gained rental contracts from landscape organisations to practice nature inclusive farming. Protected



landscapes fit their practices, while for other mainstream farmers protected landscapes might represent an obstacle as it might constrain farming practices.

Soil conditions (peat, sand and clay are main types but more specific types exist as well that support specific types of farming) have impact on what can be cultivated and shape also environmental conditions, the landscape and farming possibilities. In this way, soil conditions form the context for farming. There are also specific prejudices of what type of farming fits to what types of soils and these have been transferred to policies. Currently some types of farming may not fit to current climate conditions of the location but are still pursued. This is both the case of sandy soils that during summer may become too dry and need more water than can be sustainably provided, or dairy farms on peat lands in which there is a battle over water level decision by polder boards, between nature conservationists and farmers. Higher water levels stops oxidation and are better for biodiversity, but do not allow machinery and dairy cows to access the lands.

Many of the respondents are environmentally motivated and are working on more environmentally friendly farming practices. So, this is of importance for them.

There is not much difference relating to whether they farm close to the city, remote areas part of a village.

5. MAINSTREAMING ACTIONS

5.1 SCALING UP

Farming in the Netherlands has traditional allocation of roles. Excellent female role models help to challenge these roles, but based on the interviews it cannot be said that the roles have shifted. It is still an uphill struggle for females to get acknowledged as farmers. An exception is the alternative practice of new farmers in agroecology. In this context being a female seems to be within the normative framework.

Notable innovation, although already for some years, is that the Warmonderhof is a state recognised educational facility teaching biodynamic farming methods, which is an exception to general farm schools. Also an exception is that females have a larger role in farming programmes than in traditional schools, where there is a gender gap based on specific educational programmes.

If these females get more access to land, this may help in increasing the presence of females in farming overall.

5.2 SCALING OUT

Work on the school Warmonderhof has an impact by every new generation of students that flies out and makes steps to put the learning in practice. This is often done by engaging in various internships and seasonal work at different farms. It is also done by engaging in a network of alumni.



Furthermore some respondents are active in farmers' organisations. In this way they are networking and supporting each other. The *Toekomstboeren* organisation unites many new entrants into farming and has a stronger presence of females than the traditional farming organisations, reflecting the male dominance in regular farming.

Many of the female farmers are visible. They have websites, they take interviews for professional or local media. Some of them have a social media presence. This is not only done as part of acknowledging their status as role model but in some cases it also needed to get relationships with clients as direct consumers of farm products.

5.3 SCALING DOWN

As earlier mentioned, the Warmonderhof is a school where new entrants into farming can learn biodynamic farming practices that meet the Demeter label. This is an ongoing infrastructure where, compared to mainstream farming, many females are active. Also in other more alternative farming organisations the female presence is much larger than in traditional farming in which traditional role patterns are still strong. Structurally this openness of the schooling system can be loosely related to the in 1917 introduced constitutional principle of freedom of education. This constitutional principle allowed religious or other worldview organisation to set up schools and let them to be financed and quality-controlled by the state. This resulted in a diversity in schools which also support also different ways of farm education, and a more general openness to non-mainstream education. After all, there are also (or have been) protestant, catholic and public farming schools. A school inspired by biodynamic farming practices is currently more related to differences in farming practices than the more difficult to imagine differences in farming practices between a protestant-educated farmer and a catholic-educated farmer, and there is a clear link with a different worldview.

In this world of alternative farming practices there is more scaling down happening with consultants advising on how alternative farming can happen and of a models and organisation that support community supported agriculture. These organisations also market themselves to attract funding that they can use to support new farmers, for example by leasing land they bought using funding from the general public.

Not in all cases gender is at the forefront of these alternative practices. Gender mainstreaming is in all contexts helpful to make a difference.

5.4 SCALING IN

The general support for new entrants into farming supports also females. LEADER is mentioned but was considered to be not so much user friendly for the specific case of the respondent. There is no specific regulation to support female farmers. In gender equality policies there is much more emphasis on the urban contexts rather than on the rural context.



5.5 SCALING DEEP

Most respondents have shared experiences of not being considered the 'real' farmer as people were looking for a male figure. Having more and more role models of female farmers helps to shift this view. This has happened in many other professions. The farming profession is rather late in this shift and it is still dominated by traditional views on specific gender roles. The work of the females in presenting themselves as independent farmers helps to make a difference. Here it is good that we have also respondents in more traditional farms. In these contexts as well females are presented as being good farmers, working day by day to make their farms a success.

In the current context it seems to be an uphill struggle where time and time again the patriarchal views must be creatively destructed in order for female farmers to be seen as the autonomous decision makers that they are. In some cases the females were able to play with this, suggesting that an alternative gender was needed for alternative ways of working, but this idea of a 'fresh' gender must in due time be replaced by a situation that it is not anymore 'refreshing' that the farmer is female, but that it is business as usual, i.e. just as boring or exciting as a male farmer. The current innovators contribute to this emerging situation by presenting themselves as role models, but this situation of normality has not been reached yet.

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FARMING WOMEN-LED INNOVATIONS IN SLOVENIA

CASE STUDY REPORT

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ACRONYMS & ABBREVIATIONS

| | |
|-------------|--|
| CAP | Common Agricultural Policy |
| UAA | utilised agricultural area |
| SORS | Statistical office of the republic of Slovenia |
| LAG | Local Action Group |



1. THE NATIONAL CONTEXT

The entire Slovenian territory (with the exception of 16 settlements with more than 10,000 inhabitants) is defined as “rural”. At NUTS 3 level, 9 out of 12 regions are defined as predominantly rural, while 3 regions are defined as intermediate regions. A combination of the criteria (population density, population change index, share of agricultural population, settlements with a certain degree of centrality) resulted in three types of settlements: Rural settlements (5,165 or 85.6% of all settlements in Slovenia) had either a population density of less than 100 inhabitants/km² (in 2020) or a population change index (2020/2012) of less than 110, a share of agricultural population in the municipality of more than 10% (2019), Suburbanised settlements (rural settlements close to the city; 816 or 13.5% of all settlements in Slovenia) had either a population density of more than 100 inhabitants/km² (2020), a population change index of more than 110 (2020/2012) or a share of agricultural population below 10% (2019) and Urban settlements (only 55 settlements).

According to the more general typology based on the NUTS 5 level (municipality level – 212 municipalities in Slovenia), there are two types of rural municipalities (together represent 50% of Slovene territory, 24,6% of total population): a) Rural municipalities with a shrinking population (together 82 municipalities): these are mostly border municipalities that are remote from transport and have been facing population decline and stagnation for a long time. This type of municipality is characterised by both the number of municipalities and the largest share of the area (29.2%; population density is 43.9 inhabitants/km²). The population density has decreased due to the decline in the number of inhabitants (by almost 5% in the period 2008–2017; 12.6% of the population of Slovenia) at the expense of negative natural growth and emigration; the ageing index is high. More than a quarter of housing is vacant in these municipalities. B) Rural municipalities with a growing population (61 municipalities): rural municipalities, mostly located in valleys and basins, with good transport links or with a long history of stable population growth. This type makes up the smaller part of the country (19.35%). The number of inhabitants has risen by almost 8% in the last ten years (2008–2017), making up 14% of Slovenia's total population. In this type of municipality, the number of inhabitants is growing the fastest, mainly due to immigration, although this type has a below-average population density (73 inhabitants/km²). The result of positive demographic processes is a significantly below-average ageing index (compared to the Slovenian average). Compared to the national average, there is a lower number of businesses and a higher proportion of agricultural population. The proportion of daily migrants is above average (77%, while the national average is 50%). The registered unemployment rate is the lowest. There are significantly larger families (with four or more children) in the municipalities analysed. It is also interesting to note that in rural municipalities with growing populations over the last 30 years, the phenomenon of the growth of small towns can be observed (settlements with 2,501 inhabitants and more).

Some recent data about agriculture – we have to mention, that from 2023 on in Slovenia the data on the structure of agricultural holdings are monitoring a different population (methodology was changed), incomparable with the past data (before 2020).



The total number of agricultural holdings in 2023 decreased by 7% from 54,599 to 50,531 compared to the year 2020 (previous methodology: the total number of agricultural holdings was 74,646 in 2010 and 68,927 in 2020). According to the new methodology, an average agricultural holding in Slovenia manages 8.8 hectares of UAA (meaning 5.0 hectares of permanent grassland, 3.4 hectares of arable land and 0.5 hectares of permanent crops). Size classes of UAA show that the number of agricultural holdings increased compared to 2020 evidently in the class from 20 hectares and more (namely from 3,815 to 4,294 agricultural holdings or by 13%). In the class below 5 hectares the number of agricultural holdings decreased by 14%, from 27,295 to 23,383. In 2023 total area of UAA was 447,158 hectares, the largest share was permanent grasslands (56% or 250,705 hectares), followed by arable land (38% or 170,495 hectares) and permanent crops (6% or 25,959 hectares) (SORS, 2023). The total UAA increased by more than 2% compared to 2020 on observed agricultural holdings – so we can observe a concentration of agriculture and very fast “erosion” of small farms (some farmers talk about “absorbing” of small farms by larger ones), which were characteristic for Slovenia in the past. For more farming data in Slovenia see also Deliverable 3.2 (2024).

2. THE INNOVATIONS

The selection of innovative practices followed the guidelines and starting points of the project application. However, after conducting interviews and learning more about the innovative practices in Slovenia (not just 20 women surveyed), we found that the scope of innovation for many of the women interviewed could either be expanded or changed. It is evident that the women innovators identified and included in the research are often innovating on multiple dimensions of sustainability. Each of the innovations on the sustainability dimension was, according to the focus of the research, selected in one of the three types of rural areas.

Among the 10 farming innovations, we have therefore included three that we have identified as economic innovators of priority, whose innovativeness extends to completely different areas (microgreening, marketable vegetable growing and tourism products and experiences ...). All three economic innovators are under 40 years of age.

The environmental innovations on the farm are carried out by women who are on average older (all over 40) and their innovation is linked to innovative practices in organic farming. Each of them has developed their own field of activity and is also successful in other areas of sustainability (economic dimension of sustainability).

The Slovenian selection of innovative women in the social dimension of sustainability is the most heterogeneous - we have included one of the most recognised and experienced social innovator in the country, as well as a practice that is just starting out.

The selected cultural innovator in agriculture could at least be credited with the social and environmental sustainability dimension of her practice at the same time. She is still expanding her farm and her field of activity.



The spatial distribution of the selected farming women-led innovations in Slovenia showed that there is a higher concentration in the central and eastern part of the country. The southern and south-eastern part (forested karst region) and north-western part (mountainous Alpine region) of Slovenia are somewhat “neglected” in the selection. Our selection of innovative practices of women in farming is partly attributed to the natural conditions, as the conditions for agricultural production are much more favourable in eastern Slovenia. However, central Slovenia is interesting for innovative practices because of its proximity to the capital and the market.

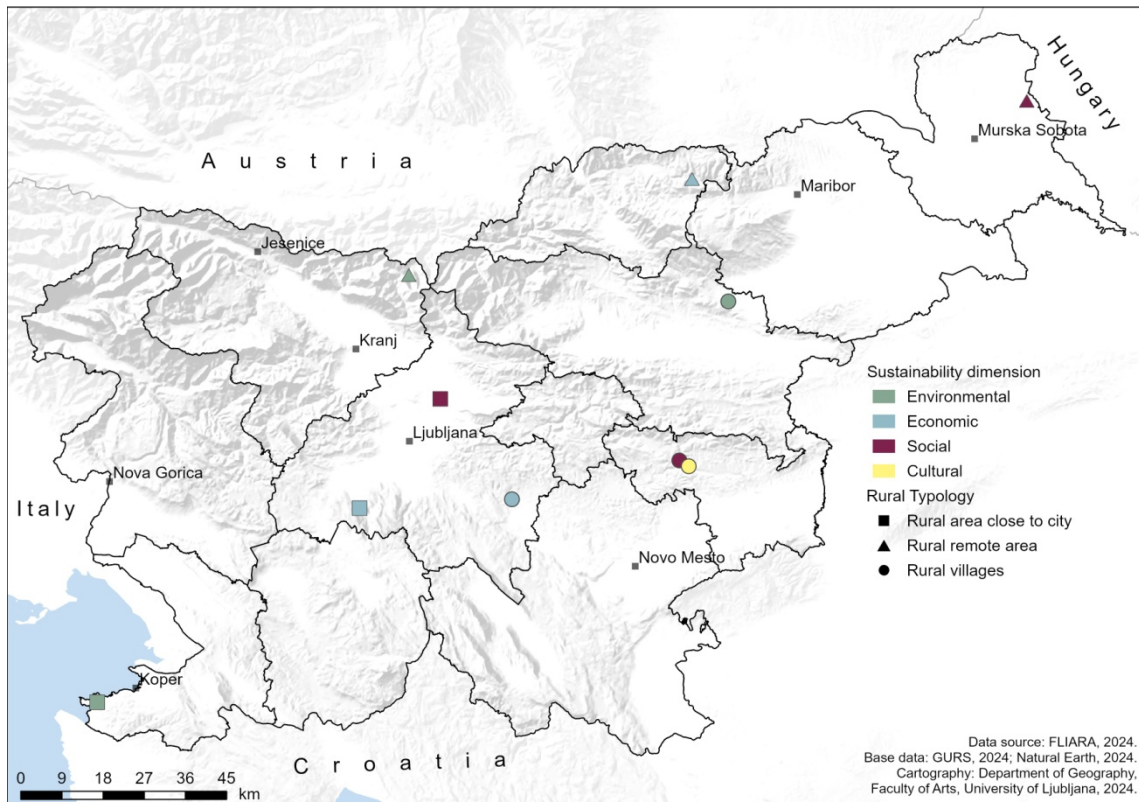


Figure 1 - The spatial distribution of farm innovations analysed in Slovenia by the typology of rural area and sustainability dimensions.

We briefly summarise the characteristics of the women surveyed (see more in Table 1). The age structure of our farm innovative women is favourable (41.4 years) – we noticed a distinctly younger population among farm innovators than among the group of rural innovative practices (47.2 years). Six innovative women are 40 or younger and only one is over 50.

It is also worth noting the educational structure of those involved; with the exception of one, all have completed tertiary education. Compared to the educational structure of Slovenian farm holders, this selection is of course well above average.

Regarding the farm size: the average farm size of our interviewees is significantly larger (13.6ha) than Slovenian average (7ha/8.8ha new data), but this picture is mainly due to the two larger practices involved.



Table 1. The list of farm innovations analysed in Slovenia.

| N. Interview | Age | Educational Level | Dimension of the farm (ha) | Property of the farm rights (own; rented) | Legal form of the farm (family farmer; company) | Year when she started operating in the farm |
|-----------------|-----|-----------------------------|----------------------------|---|--|---|
| SI_F_E_1/Int.1 | 48 | tertiary (higher education) | 50 | own | family farmer | 2010 |
| SI_F_E_2/Int.2 | 44 | tertiary (higher education) | 8 | majority rented, some owned | family farmer | 2012 |
| SI_F_E_3/Int.3 | 45 | tertiary (higher education) | 6,5 | own, some land leased | family farmer | 2010 |
| SI_F_S_3/Int.4 | 40 | tertiary (higher education) | 8 | own | family farmer, private institute with social enterprise status | 2010 |
| SI_F_S_2/Int.5 | 60 | secondary | 8 | own (3 ha) rented (5 ha) | cooperative, social enterprise | 2013 |
| SI_F_S_2/Int.6 | 23 | tertiary | 5 | rented | private institute with employment centre for disabled people status, social farm | 2015 first owner, 2023 she took over |
| SI_F_EC_1/Int.7 | 40 | tertiary | 40 | own | family farmer | 2012 |
| SI_F_EC_2/Int.8 | 38 | tertiary (higher education) | 2 | building rented (260 m ²), fields owned | company | 2014 |
| SI_F_EC_3/Int.9 | 36 | tertiary (higher education) | 7 | own, some fields leased | family farmer | 2014 |
| SI_F_C_3/Int.10 | 40 | tertiary (higher education) | 2 | own | family farmer | 2018 |

3. INNOVATION PATHWAYS

3.1 MOTIVATORS FOR INNOVATION

The women chose to innovate on the farm for different reasons, but common to all the Slovenian women surveyed is a love of farming practices and farm life (*"My husband and I obviously have this love of preserving heritage. We didn't find the farm, it found us"*). The desire for personal development (*"Ever since my mother started biodynamics, I was really drawn to it. So my personal drive was personal development."*), career reorientation (*"I worked in the school system for two years, but it drained me and I didn't want to continue"*; *"I actually joined my mom after I finished my sports career."*), and professionalization of hobbies or family traditions (*"The focus all along was to find employment at home and professionalize this farm that wasn't even geared toward serious work."*; *"My mother farmed it alongside her work, and then we thought about how*



these activities could provide a full-time living on the farm.”) also appeared frequently in our cases (5 out of 10), indicating their importance as a motivator closely linked to opportunity. The women were also motivated by economic stability and personal needs (*“The original reason was how the mother’s farm can sustain itself financially, support the family and enable us to live off it”*), which is one of the most frequently mentioned motivators, usually in combination with some other motivators or aspirations. Economic stability drives women to earn an income on the farm, especially in times of economic crisis (*“We returned to Slovenia during the economic crisis and there weren’t many job opportunities in our profession.”*) and to achieve economic independence from other industries (*“I didn’t want to work in the pharmacy anymore. I wanted to be my own boss, to work for myself, to create something for myself”*).

There is a growing aspiration among our women to improve agricultural practices in all types of rural areas. This includes a drive to improve farming techniques, diversify produce and increase farm profitability. Our women surveyed illustrate the desire to transform traditional or hobby farms into profitable enterprises through innovation, and the desire to improve farming practices and diversify products (e.g. through pickled products) to increase economic sustainability. Another key objective is to improve rural life, which is particularly evident in interviewees in remote rural areas. This involves improving the quality of life in rural areas, particularly by strengthening the economy and community development. Two interviewees, both from remote rural areas, wanted to prove that there are viable opportunities in rural areas, e.g. in agritourism and with additional activities on the farms (*“...to show other women farmers on our farms that success is possible, and in connection with my hobby at the time, which I was passionate about - making herbal syrup - I registered an additional activity on the farm”*). Last but not least, the aim is to address the challenges of sustainability, e.g. through the preservation of the agricultural landscape and farming practices in the peri-urban rural areas where there is strong urbanization pressure, through a holistic farming approach that includes biodynamic practices, and through the desire to create a more inclusive and sustainable community - *“Building an inclusive society - finding work for everyone in the community - this is something that farms have always enabled in our countryside”* was mentioned in an interviewee in a peri-urban rural area and highlighted in one example in a remote rural area: *“The desire to create employment opportunities for people with disabilities”*.

3.2 CONSTRAINS AND FAVOURABLE CONDITIONS

Of the ten female innovators in agriculture, more than half cited finances as a constraint to innovation. Specifically, they most often referred to the lack of financial resources when starting up (*“When you start a business, you do not have fabulous financial resources. We just knew that’s what we wanted. We had enough to start a company, for a limited company you need €7500. We had some money for the renovation, but the renovation was much more expensive back then, at the beginning. When I think back now, I do not really know how and where we got the money...”*), and in some cases also in later stages of innovation development (e.g. for technological modernisation, purchase



of equipment, etc.), as well as the lack of specific open tenders (for certain agricultural activities).

Certain constraints emphasised by a number of interviewees, are specific to agriculture. In particular, access to agricultural land (*"One obstacle could be, for example, the acquisition of agricultural land. In Slovenia this has become quite difficult"*), access to labour (*"Labour is also an obstacle, but not so much that you cannot find it. I think I could still find people, but despite the crisis, I have to turn many people down because I simply cannot pay them."*) and the lack of competitiveness against large farmers who dominate the agricultural sector in certain areas, while there is no room for small farms. The lack of government support for entrepreneurship and the bureaucratic hurdles are also a constraint, as many procedures are complicated and time-consuming (*"We cannot, we must not forget that bureaucracy makes every idea even longer..."*), while newbies also cite the lack of specific agricultural knowledge as a constraint (*"Then certainly lack of knowledge. I am going to say lack of specific knowledge. When I was little, all the families in the village lived from subsistence farming, so my mother had some basic knowledge, especially my mother. But in terms of specific knowledge, we really had to learn a lot, and we are still learning. But that was also an advantage"*) and the lack of networks (*"It's really difficult to penetrate the market and find customers, people who want to come or someone who is willing to work with them"*), which is also related to the lack of visibility of the farm and can lead to limitations related to the lack of trust of the local environment, market and potential customers (*"I was quite young, quite inexperienced. I did not have a market, not even a market for just selling fresh vegetables, not even for pickled vegetables."*).

However, some of the constraints identified were specific to certain local environments or regions - e.g. the remoteness of the area (specific for rural remote areas), which entails long transport distances and high costs, the distance from larger towns, the lack of public transport (*"Here, for example, public transport is the first problem because, for example, workers, visitors have to go by car, there is no connection, there is no bus, I do not know, or even a train or whatever."*). In the traditional tourism regions, the underdevelopment of rural tourism in the region was mentioned (*"When we started working in this direction, we realised that back then, ten years ago, tourism was pretty much limited to the classics - the beach and things like that..."*).

Among the favorable conditions for our women farmers, strong family support is highlighted in six out of ten interviewees, providing not only practical or financial help, but also emotional support, which is crucial for coping with the challenges of farming (*"The family, all family members, have always supported me."*). In five interviewees, access to family-owned land, a farm or other pre-existing infrastructure, whether through inheritance, partnership or purchase, provides a solid starting point for the implementation of our women's innovative practices. Utilizing existing infrastructure facilitates faster adoption of innovative farming practices and reduces initial set-up costs. Some quotes from the interviews explain this: *"It is of course much more difficult to start from scratch. The fact that a certain framework was already in place, that something already existed, and also a certain infrastructure and so on, was much easier"*; *"We took*



over the eco-social farm in August. Although the farm had been closed for a few years in between and some things had to be rebuilt, it was much easier to get started".

Access to financial resources, be it personal savings, government subsidies such as CAP funding or grants, facilitates investment in innovative technologies and practices. This was highlighted in the case of three women surveyed. Recognition of the importance of community and local support and networks, including communities and other farmers, contributes significantly to creating a favorable environment for agricultural innovation in the case of three women innovating.

Other favorable conditions mentioned were knowledge sharing within the family or wider community (*"A big help was that my mother was here and introduced us to the process and the agricultural part, where we might have been missing something"*), the use of existing free technologies (e.g. social media) and the strategic location - proximity to urban centers and the use of cultural heritage and unique geographical features (*"We are also lucky to be in such a favorable location, on the coast, near the salt pans; then it is easier to combine that with tourism."*).

3.3 IDEA AND PREPARATIONS/DECISIONS AND PREPARATORY ACTIVITIES

The preparatory activities of the respondents are very different. While in Slovenia no differences by type of rural areas can be observed, there are differences between those who had the opportunity to inherit a family farm and those who are complete novices in agriculture.

Those who have had the opportunity to inherit a family farm or land undoubtedly cite this as a great advantage and a key factor in starting to innovate (*"It was my wish. Making the farm work for itself, that was my challenge from the first moment I started working here on 1st January 2014"*). Succession meant that their ancestors (parents or grandparents) were also an important source of the information and (farming) knowledge needed to introduce the innovation. Nevertheless, they were very often faced with the challenge of modernising the farm and making it self-sustaining, as their ancestors were not only involved in farming, but farming was usually an additional activity alongside regular employment (*"The trigger was initially purely from this point of view, how can the farm exist in such a way that it is self-sustaining, purely financially and in such a way that it can feed the family so that we can live on it."*). This often meant renovating the buildings, modernising the farm technologically, orienting the farm towards new complementary activities, finding new innovative products, orienting towards certified production (e.g. organic), etc. On the other hand, it was often crucial for newbies to buy or rent land and premises to carry out the activity.

Regardless of how the innovation was launched, raising finance was crucial for all interviewees to get the business off the ground (*"We were part of the Investman ready programme in Vienna (2013) and learned there how to get investment to develop social innovations. Since then we have made all kinds of investments - grants, EU calls, crowdfunding, private investors..."*). For some, funding has been crucial to start-ups, for



others to modernise and renovate the businesses they inherited. For some, financing was secured through various tenders (e.g. for young farmers to finance investments in farms, for young farmers, etc.) (*"I retired from sports, but here in the agricultural sector I fell into the young farmer category... In fact, a neighbour who works in the sector told me that you can apply to be a young entrepreneur."*), for others through bank loans and for others through their own savings.

The acquisition of knowledge and skills for the development of the innovation itself also proved to be an important preparatory measure for the interviewees. Most had participated in specialised workshops and courses, some had acquired knowledge abroad (through numerous visits to good foreign practises), but often the only way to learn was by doing, which meant many successful and many unsuccessful experiments to learn from and build their knowledge on (*"We had to master that, the breeding itself. And how to breed them, because we also had many failures, but you learn from them, you grow"*).

A preparatory activity that was emphasised by the interviewees regardless of the start of their innovation is also networking in the local environment (*"We did a lot of networking, even at the beginning, there was the Mreža za Istrio - the networking of different interest groups in the countryside and so on, and in these different tourism providers and so on. All of that has brought us something, even though I will say later that we are working quite independently now."*). Regardless of how they started, many of the women innovators were met with suspicion, which made connecting with the local community all the more important. In addition, the newbies emphasised the importance of support and acceptance of themselves and their innovation in the local community.

3.4 CONCRETISATION OF INNOVATIONS

One of the most important results observed is the creation of jobs: eight out of ten women report the creation of new employment opportunities. In most cases, the new jobs are created for the innovative women themselves and one other person, often a family member. In a few cases, however, more jobs were created per innovation (up to 12) (*"Nobody could imagine that the family would make a living from this business. That the farm would be self-sustaining. And even less that we would approach farming with so much entrepreneurial spirit."*). The women surveyed not only contribute to local economic growth, but also promote social inclusion by providing opportunities for meaningful employment or socialization, especially for disadvantaged groups such as disabled people and youth (*"... how we have managed to involve different disadvantaged groups, especially youth, and how we have empowered them through such an experience on the farm"*).

In addition, the introduction of new products (e.g. pickled vegetables, herbs, sprouts, new products from olives, aronia, micro vegetables, etc.) and services on the farms (e.g. farm visits, agritourism, camps for volunteers, youth, rehabilitation center for the disabled, etc.) is mentioned as an important outcome highlighting the economic benefits of diversification. This diversification not only improves income streams, but also promotes environmental sustainability by encouraging the cultivation of different crops



and activities on the farm. By integrating primary and complementary activities, farms maximize the use of resources, minimize waste and create value-added products, improving their profitability and resilience.

Environmental stewardship is a key theme in many women interviewees, regardless of the type of rural area, with farms adopting sustainable practices such as permaculture, organic farming and biodiversity conservation. Eight out of ten women surveyed practice organic farming, even if they are not officially certified (five farms are certified organic). Some women go even further by integrating biodynamic and permaculture agriculture (*"We follow the principles and practices of permaculture as well as biodynamics"; "We are almost the only major organic tea producer in Slovenia"*). If they do not practice organic farming, they still mention climate-smart agricultural practices. In four interviewees, the establishment of permaculture learning polygons, herb gardens, demonstration plots or the breeding of native animals not only strengthens ecological resilience, but also provides educational activities on the farm that empower people to adopt environmentally friendly practices (*"The most important outcome is undoubtedly the establishment of a sustainable permaculture polygon ..."*).

Another important outcome is the development of tourism, with farms using their unique offer to attract visitors and create memorable experiences. Tourism development is in most cases closely linked to educational and awareness-raising activities, e.g. through tastings, visits to farms, show gardens, animals or through the revitalization of historic sites such as mills and country houses. These farms not only contribute to cultural preservation, but also boost the local economy through tourism-related spending (*"We have preserved a cultural monument - a house, revitalized the farm as such, which is the basis of our agricultural activity, but certainly also created new employment opportunities"*).

In addition, brand awareness and financial independence are proving to be success factors, with farms building a strong brand identity and achieving financial sustainability (*"I am very proud that the [name] brands are established and recognized are established and recognized brands."*). Through innovative marketing strategies and product development, these farms have gained the trust and loyalty of consumers, enabling them to compete in competitive markets while reducing their dependence on external funding.

3.5 IMPACTS OF INNOVATIONS

Innovations have a wide range of impacts, such as the strength, the actual impact and the area of impact.

The first impact that most interviewees thought of was undoubtedly economic, namely the financial stability of their innovation and the provision of jobs (*"I think the fact that we can do it, that we can make a living from agriculture..."*). Two practises have ensured through their innovation that they have found their way into the wider Slovenian context (i.e. microgreens and pickled products) (*"The most important thing for me is that the farms that grow vegetables have now included microgreens in their offer, which I am very, very happy about. I recently took part in another tender, there are now these"*



tenders for agriculture.”), which ensures diversification and therefore stability for entrepreneurs.

Looking at the overall picture of the selected innovations, the most striking effects are to be found in the environmental dimension of sustainability. Here, almost half of the interviewees emphasised the impact on the preservation and promotion of sustainable (and organic) agriculture as well as education and awareness-raising about the importance of healthy, locally produced food (*“I am also pleased that more and more people are visiting the farm every year and that they learn something and go home with a new perspective on the world and the type of food we eat.”*). It is also important to highlight the impact on the actual preservation of the agricultural sector and farmland, especially in areas under severe pressure from urbanisation (e.g. rural areas close to the city) (*“Also to preserve this landscape so that we work in this landscape to basically protect it.”*) and where the activity is abandoned due to remoteness (e.g. border areas, high mountain regions) (e.g. rural remote areas). Some of the selected examples also make an important contribution to the promotion of the circular economy, which in the Slovenian cases is most often manifested in the renovation of buildings, natural construction and food processing.

The preservation of agriculture is also strongly linked to cultural impacts, such as the preservation of cultural heritage and the restoration of old buildings, which in turn ensures the preservation of the landscape.

In terms of the social dimension of sustainability, innovations most often contribute to the creation of networks in the local environment and thus to the actual development of local communities or specific sectors within these communities (e.g. tourism) (*“Farmers from the Jezersko area take us as an example. What can you actually do with a small farm, because we are the smallest farm in terms of area...”*). At the same time, a significant impact on changing social values and consequently on building a healthy and inclusive society was found, especially in the identified social innovations. These include the empowerment of young people and volunteers (*“If I do three of these trainings a year, that's about 100 people, and if out of 100 people only half, let us say 50, will actually work with young people and therefore work better with them, then that's a big, big impact for sure.”*), care and rehabilitation of vulnerable and disabled people, ensuring gender equality (*“One of the results of the new management or the takeover is that we have a gender balance, i.e. women and men are equal, we have a better ratio between the female and male gender.”*).



4. INNOVATION ECOSYSTEMS

4.1 POLITICAL

The five women surveyed in Slovenia positively evaluate the national CAP policy for young farm successors, which supports entry into agriculture, and some specific investments in farms. However, suggestions for changes in policy and regulations include a call for more flexible measures and financial support tailored to the needs and changes to the farmer's original plan due to weather events, market changes, etc. (*"This policy support system is far too bureaucratic. For example, this financial support for agriculture where you get tangled up in different tenders and then have to report on something for five years or meet a certain condition, which does not allow for flexibility"*). This also includes overcoming barriers to land access and funding for new entrants to agriculture, streamlining bureaucratic procedures to facilitate entrepreneurship and unconventional innovations on farms, e.g. education and rehab/volunteer centre on farms, day care for the elderly on farms, etc. (*"I also threw myself into this part of the Slovenian tenders, but it just did not work, something always went wrong"*). There are concerns about the lack of understanding and support for social innovation and social entrepreneurship in the political agenda, legal framework and existing policies (*"Social entrepreneurship and social innovation are still not properly understood in our society, in our economy and in politics"*).

Bureaucratic hurdles and excessive paperwork related to government regulations, in relation to national farmland leases, reporting on completed on-farm investments when co-funding has been received, and (organic) farming standards were highlighted as obstacles (*"From an agricultural point of view, the legislation seems to me to be quite demanding, with many tasks and regulations to comply with, especially in relation to organic standards, which can be quite challenging."*). The lengthy procedure for leasing agricultural land from the national fund is also particularly emphasized (*"We still have quite a few unresolved land issues regarding leased land, whether it belongs to the public fund, municipalities or others. Since 2016, we have been in the process of clarifying certain issues related to the contract with the Slovenian Agricultural Fund for certain plots of land."*). This bureaucratic complexity can prevent women farmers from accessing resources and fully participating in agricultural activities

Inequalities in support for small farms were also highlighted, with limited access to funding and business development compared to larger farms (*"Small farms do not receive support. We have only received some funding through the municipal tender."*) and the need for a different tax and real estate policy for farms in areas with limited opportunities for agricultural activities, such as mountain farms (*"We are particularly concerned about this real estate policy ... because this tax policy will essentially, with minor differences, put those in the valleys on an equal footing with us, where the economic viability per unit of land is much lower"*).

Collaborative efforts at local level, such as calls for tender by municipalities for small farm investments and discussions within the Local Action Group (LAG) - LEADER/CLLD



measure, can provide opportunities to advocate for more inclusive policies and support mechanisms for (women) farmers. Undoubtedly, support from public bodies such as the Agricultural Extension Service and some others (Institute of Cultural Heritage, Institute of Public Health) have been recognised. This support can provide valuable, and in some cases very specific, guidance and resources to women farmers, helping them to overcome challenges and take advantage of opportunities.

4.2 ECONOMIC

All women received financial incentives, but the sources of funding are very different, and in Slovenia we did not find that the type of rural area affected access to financial incentives.

Of the 10 women innovators, five received incentives from the CAP, but the incentives were different - for young farmers starting up the farm, for investments in agriculture (extra points for young farmers) and for diversification into non-agricultural activities (*"We have applied for European tenders. So far they have processed 9, including the one for young farmers. That's been the case since 2015, so it's basically been a lot of work. In the beginning it was smaller ones, but later we did bigger ones. Big for our farm."*).

One interviewee (specifically woman in the social sustainability dimension) received funding from Erasmus+ and the European Solidarity Corps for volunteering projects for young people (*"When volunteers come to us through European projects, namely the European Youth Projects, the ESC, the European Solidarity Corps, and we have been doing that here for eight years now, they basically live with us for a fortnight to nine months per season..."*).

At national level, the interviewees received very different financial incentives. In principle, these are subject-specific areas that are advertised by the respective ministries and offices. The Ministry of Culture (e.g. preservation of cultural heritage) (*"Yes, we have tried the Ministry of Culture several times, because as a cultural monument we fall under the Ministry of Culture."*), the Slovene Enterprise Fund, the Ministry of Agriculture (e.g. ecological subsidies), the Public Scholarship, Development, Disability and Maintenance Fund of the Republic of Slovenia (employment of people with disabilities) (*"The state generally promotes the employment of people with disabilities very strongly and the employment of vulnerable groups also through subsidies."*). Many have also received incentives from the local level - through municipal tenders (e.g. for small entrepreneurs, preservation of cultural heritage, small investments, work with young people, etc.) (*"The only tender I apply for every year is a municipal one. It's to support small businesses, so we always get some funding from this tender. And I am grateful that the municipality also supports us."*).

Two innovators (both from rural remote areas) are also involved in several CLLD/LEADER projects. Here we can reflect on the importance of CLLD for the preservation and promotion of rural and rural remote areas.



Many of the women interviewed had also received external funding (e.g. private investment, grants, crowdfunding, loans) or relied on their own savings.

4.3 SOCIAL

Social factors play an important role in shaping the motivations and challenges faced by women in agricultural innovation.

While one might have expected traditional gender roles to present hurdles, in some cases this was not the case (*"I believe that women have come to the forefront."*). For example, one participant mentioned that it was quite natural for her to take over the farm from her mother and take the lead because her husband didn't speak Slovenian (*"I perceived it quite organically because my mother ran the farm before and I took it over from her"*). This indicates that cultural norms and gender roles can sometimes favour women's involvement in farming.

The women farmers are engaged in networks at various levels. At the local and regional level, they collaborate with neighbouring farmers, public schools, centres for disabled people, local cooperatives, leaders in areas of interest to them, and are involved in local rural women's associations, etc. (*"We work well together at the local level, as a border village we have good cooperation across the border with the Hungarian self-governing national community... We have the support of the municipality as well as good cooperation with various local schools."*). One woman also highlighted that *"although we have diametrically opposed views on farming practices ... neighbourly support still thrives in rural areas"*.

None of the women reported difficulties in having their role on the farm recognised by employees. In two case studies on remote rural areas, they highlighted strong support from the local community and, conversely, that the farm has a significant impact on the development of agriculture and tourism in the local community (*"We are the leading tourism provider ... We account for over 30% of all overnight stays in the entire municipality, so we also serve as a flagship for the entire region. Farmers also see us as a role model. What you can achieve with a small farm, because we are the smallest farm in terms of area."*).

On a national level, they are part of farmers' associations, organic/biodynamic farmers' associations, etc. (*"I find networks with herbalists, biodynamic farmers or organic farmers important. So these are connections or acquaintances that have come about through different meetings, and they are also completely new acquaintances for me, for example"*). They also participate in national initiatives and campaigns (Innovative Young Farmers, Innovative Women Farmers) led by different national organisations.

In one example of farm innovations, which has a strong social and environmental dimension of sustainability, they are also internationally networked. They are connected through networks such as ECOLISE, the Global Ecovillage Network and the ERASMUS network (*"ECOLISE was a stepping stone for us when I expressed the idea and desire*



to focus the farm more on these volunteer activities... Then I started to expand more to the Balkans, where I have also been active for the last three years.").

4.4 TECHNOLOGICAL

All interviewees emphasised the use of social networks to promote their work and raise awareness of their activities among the general public. The most frequently used tools are the website, Facebook and Instagram.

However, some of the interviewees (four to be precise) have also managed to make significant technological advances in the course of developing their innovation. One of the interviewees has made significant progress in the use of renewable energy on the farm and has upgraded the farm with a woodchip heating system (*"We have a woodchip heating system and produce all our hot water for heating and domestic hot water from wood waste ourselves"*).

The other interviewees have mainly improved their agriculture innovations with various agricultural technologies, e.g. modernisation of greenhouses, computer-controlled greenhouse ventilation, irrigation, automation of food processing, etc.

It is also worth highlighting some of the obstacles mentioned by the interviewees, i.e. the reasons why they were not able to improve their innovation technologically. Two of them referred to the protection regulations (protection of cultural heritage) that prevent the use of solar panels (*"Until recently, we were not allowed to combine solar power plants with cultural monuments. We are cultural monuments, cultural heritage and cultural landscape, i.e. more protected than the Kočevje bears, so we were not allowed to. But now we are already talking..."*), while one emphasised the ownership situation. They do not own the facilities where the innovation is carried out, but rent them. Those involved in organic or biodynamic farming also pointed to a real reluctance to use the technologies (*"And that's why I think you have to be careful with new technologies in relation to food, otherwise it will attract attention. There are 2 extremes..."*), which can be attributed to the philosophy of farming.

4.5 ENVIRONMENTAL

Environmental factors play an important role in determining the type of innovation adopted. For example, practices such as organic farming, permaculture, biodynamic and regenerative agriculture are chosen based on the belief and knowledge of the benefits of sustainable farming practices. Eight out of ten interviewees practice organic farming, even if they are not all officially certified (five farms are certified organic). Some case studies go even further by integrating biodynamic, permaculture and regenerative farming methods (*"We follow the principles and practices of permaculture as well as biodynamics."*). Some farmers choose to be certified in organic farming, while others decide against certification due to the administrative burden or because they do not sell their products commercially (*"We thought about getting certified, but of course there is always some administrative burden involved, so we decided against it, precisely because*



we do not sell products."; *"We use organic seeds and organic soil, but we did not opt for certification."*) This decision reflects a balance between environmental principles and practical considerations.

Many of the innovations aim to counteract environmental degradation and promote ecological considerations. For example, the interviewee in a rural area close to a city mentioned the preservation of agricultural land for farming, the other in a rural village mentioned a holistic approach to farming, natural cycles and the woman in a remote rural area mentioned the preservation of protected species, etc. (*"All these areas are farmed organically, they are not intensively farmed, all these protected plants are preserved, their population is actually increasing, this cuckoo flower, then arnica, centaury, certain wild orchids, all of this are actually thriving here."*).

The decision to adopt sustainable farming methods is often determined by several factors. These can include personal beliefs, health considerations, environmental awareness and a desire to support biodiversity and ecosystem health. For example, some individuals cite the importance of healthy food due to their athletic background or personal health issues, while others emphasize the holistic health and environmental benefits of sustainable agriculture (*"We have always, even before organic certification, essentially farmed organically. We have always strived to follow natural cycles and patterns; nature has all the answers. Later, my husband and I decided to get certified too, so that people could see it on the label. Why did we decide to do this? Because we believe that this is the only way to make food as healthy and natural as possible, both for us who consume it and for the environment"*).

5. MAINSTREAMING ACTIONS

5.1 SCALING UP

In Slovenia, we found no major impact on changes in laws, policies, institutions and norms. In fact, only one innovation had a direct impact on the mainstreaming of a specific production in policies and funding tenders.

Most practises had no impact at all, but four practises had an indirect impact on changes in laws, policies, institutions and norms. Their impact on improving the visibility of women farmers, the recognition and visibility of agricultural practises at national and international level, increasing incentives for vegetable farming, etc. is undoubtedly worth emphasizing (*"I think that we – women - have taken the lead on this issue, and I hope we have inspired others to start."*).

5.2 SCALING OUT

There has been no geographical replication of innovations by our women themselves, but our case studies were often inspiration for others and indirectly influenced spread of good practices (this is reported in all experiences analysed), particularly as:

- 1) replication of some products, e.g. microgreens, herbal syrups, pickled vegetables, etc. (*"Many farms have included microgreens to their offerings."*;



"Many smaller farms have tried preserved vegetables, but few persist."), or services, e.g. farm visits and educational activities on farms as supplementary activities.

2) replication of business models, e.g. focus on herbs, farm visits and tastings on farms as the primary activity on farm, farm tourism, which is usually inspiration for other neighbouring farms, other local actors, but also internationally due to leading role of Slovenia in this field (*"I believe that we, Slovenians are far more advanced in the field of tourist farms. We can offer much more compared to, for example, Austria and they are coming to learn from us..."*), organising volunteering activities on farm (*"I know for two or three cases that have emerged, and now these young people, who were initially volunteers with us, have created similar activities."*), etc.

3) replication of farming practices, e.g. organic and biodynamic approach (*"I think there have been quite a few, particularly in terms of biodynamic farming and herbs, who have become interested and have visited us... and I know that they are now trying to implement some things from our approach themselves. There are quite a few, but I would say, mostly at the gardening level."*).

Women are collaborating with local communities, institutions, and single actors to replicate and adapt their innovations in other rural contexts. They have influenced others through farm visits (peer-to-peer learning), educational workshops they provide (*"My mum and I organise workshops about biodynamic farming. In the beginning, it was mainly hobby gardeners who were interested, but now some larger farms are also entering this education process"*), and participation in projects, e.g. EIP, national projects, international research or applicative projects (*"... in every international project, we gain new mentors and also new 'followers,' which is the most interesting aspect of social innovations, that they spread."*).

5.3 SCALING DOWN

All women have received financial incentives, mainly from the CAP, national or municipal support programmes, some also from the CLLD programme and through external funding (e.g. private investment, grants, crowdfunding, loans).

Those who had taken over a farm as a young farmer (under 40 years old) and received support from the CAP highlighted the Young Farmer Programme, which also includes some training. The same applies to other support programmes within the CAP.

Two of the interviewees are also involved in European Innovation Partnership (EIP) projects, where they also participate in various training courses and workshops.

Most of them have acquired specific agricultural skills (e.g. fruit processing, herbalism, baking, milling, etc.) through additional training and the acquisition of new professional qualifications. Those who have turned to organic farming also emphasised the importance of organic farming training courses organised under the auspices of the



Slovenian Chamber of Agriculture and Forestry. The training courses organised by associations such as the Slovenian Permaculture Association are also important (*"Through the Permaculture Association of Slovenia, where I did the basic courses, I realised that there are a bunch of people in Slovenia, a network of people who have more or less similar ideas, but I think that everything is still very much in the dream stage, or at least it seemed that way at the time, and then there were some of us from that generation when we grounded things, realised them and opened our own premises."*).

In addition to individual training courses, they are also involved in various networks and cooperatives at local (e.g. Mreža za Istro), national and international level (e.g. ECOLISE, Eco Villages Network), which organise numerous training courses and events that enable not only networking, but also the exchange and acquisition of new knowledge.

One interviewee also mentioned the Investment Ready programme in Vienna, where they learned how to get investments for social innovation development, which opened many doors for them to get diversified funding.

5.4 SCALING IN

Six out of ten case studies value the support of Chamber of Agriculture and Forestry with its public farming advisors network at local, regional and national level, especially in helping with providing funding, advice, and knowledge regarding supplementary activities on farms and investments (*"At the beginning, we worked quite a bit with the agricultural advisory service."; One agricultural advisor has been instrumental in helping with supplementary activities on farm; she was exceptional."; For all these calls for agricultural support, they were handled by the agricultural advisory service. I mean, they certainly have the most knowledge about it."*). However, not all women received support from them at the beginning, because there was a lack of understanding or knowledge. When they approached these services, the personnel were unfamiliar with their needs and objectives, focusing instead on traditional agricultural practices. *"We went to agricultural services, economic services, and many other places, knocking on doors. People welcomed us, but they had no idea what we were talking about, what we wanted. They just asked us how many heads of livestock we wanted, and we didn't want to have animals on the farm..."*; *"The agricultural advisory service, I must also say, provides me with more support now than perhaps at the beginning. There is more understanding now. It's evident that they are more open-minded now and are making an effort to support slightly different stories."*

Support and knowledge has been received also from various institutions such as some faculties, agricultural schools (*"I have enrolled in the Biotechnical Centre Naklo for higher education in rural and landscape management and I have also obtained agricultural education."*), international training providers, and individual studying of farming and innovations, etc. *"I'm constantly educating myself, and for that, we receive certain funds, whether these trainings are organized for free or through donations. We also collaborate*



with Chamber of Agriculture and Forestry and we are part of EIP projects. However, I know that we still have many opportunities and work ahead of us."

5.5 SCALING DEEP

The actions of our women have indirectly contributed to changing societal values and behaviors regarding gender equality, particularly in the agricultural sector. They have challenged the dominant view of women's roles in agriculture and have contributed to fundamentally challenging patriarchal norms. This change has occurred at various levels, including local and regional.

One woman acknowledges that she served as a role model for other farming women, increasing the visibility of women in agriculture at the national level. She participated in a competition for young innovative farmers and subsequent victory, as well as her media campaign, empowered other women, resulting in one-third of future nominees being women in the next years (one another interviewee competed in this campaign few years later) and challenging dominant view on agricultural ("*With winning this title, I have contributed to a different understanding of farming.*"). Another interviewee also said that she probably inspired other women in region and contributed that women in agriculture are more visible ("*Few years ago, I was awarded among 5 successful women here in the region. I think women have come to the forefront in this regard, and I also hope that we have inspired others to start.* ").

While some challenges persist, such as being perceived as young and inexperienced rather than female, our women have not specifically mentioned their contribution to gender equality nor they see particular obstacles in being women. However, they acknowledge that they often find it easier to connect with other successful women in business ("*It is certain that women then connect with each other more quickly and easily.*"). To further foster gender equality, continued support for women-led initiatives, empowerment programs, and advocacy for gender equality in agriculture are essential.



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FARMING WOMEN-LED INNOVATIONS IN SPAIN

CASE STUDY REPORT

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1. THE NATIONAL CONTEXT

Spain's agricultural sector is not only a cornerstone of its economy but also a vital part of its cultural heritage. However, the sector faces diverse challenges and opportunities that vary across different rural typologies.

1. Common Challenges Across Rural Typologies

One of the overarching challenges faced by all rural areas in Spain is population decline, especially among younger generations. This trend is driven by factors such as migration to urban areas for better educational and employment prospects. Consequently, rural communities experience a shortage of labour, weakening their social fabric. Moreover, traditional agricultural practices grapple with low profitability due to global market competition and an ageing workforce, compounded by limited access to technology and infrastructure, hindering diversification.

2. Rural Villages: Tradition and Modernization

Rural villages exhibit a strong sense of community and an attachment to traditional farming practices. While they benefit from existing infrastructure and social networks, challenges arise in maintaining small farm viability, accessing capital for modernization, and attracting younger generations to agricultural work. Nonetheless, opportunities like agritourism, e-commerce for local products, and community-supported agriculture (CSA) present pathways for innovation and sustainability.

3. Rural Remote Areas: Navigating Isolation

Characterised by low population density and harsh environments, rural remote areas face challenges of isolation, limited resources, and vulnerability to environmental factors. However, they possess unique landscapes ideal for sustainable tourism and niche agricultural products. Leveraging mobile services, marketing cooperatives, and sustainable practices can unlock their potential for development and resilience.

4. Rural Areas Close to the City: Bridging Urban-Rural Divides

Proximity to cities offers rural areas advantages in accessing resources, technology, and markets. However, they grapple with urban development pressures, rising land prices, and the potential loss of rural identity. Innovations such as urban agriculture, value-added products, and co-working spaces can help these areas adapt and thrive amidst urbanisation.

Spain's agricultural sector presents a complex yet dynamic landscape with both challenges and opportunities. Understanding the nuances of each rural typology is crucial for crafting tailored strategies that promote innovation, sustainability, and inclusivity. Spain can pave the way for a thriving and resilient agricultural sector that contributes to national development and preserves cultural heritage by addressing common challenges like population decline and economic constraints while harnessing the strengths and opportunities unique to each typology.



The interviewing process carried out under WP3 revealed that women innovators in Spanish agriculture encounter a range of complex challenges that intersect with gender dynamics, local contexts, and systemic barriers. One prominent issue is the impact of climate change, as seen in Alcaudete, Jaen, where decreasing precipitation patterns disrupt traditional farming practices and threaten agricultural sustainability. This environmental challenge underscores the need for innovative adaptation strategies and resilient agricultural practices tailored to changing climatic conditions. Furthermore, infrastructure and connectivity issues, such as those faced in Bustaviejo, Madrid, highlight the importance of robust transportation networks and digital connectivity to enhance market access, knowledge dissemination, and business growth opportunities for women in agriculture.

Legal and regulatory barriers also pose significant hurdles for women innovators, as observed in Icod de los Vinos, Canary Islands, where local and European laws create complexities that hinder business expansion and export potential. These challenges reflect broader structural issues within the agricultural sector, where policies and regulations often fail to consider the unique needs and constraints faced by women entrepreneurs. Addressing these legal barriers requires comprehensive policy reforms that promote inclusive economic environments and support mechanisms for women's empowerment and entrepreneurship in agriculture.

Moreover, social acceptance, financial support, and administrative complexities, as evidenced in Chirivel, Almeria, Gipuzkoa, Basque Country, and Sora, Barcelona, underscore the need for holistic approaches to address gender biases, improve access to capital and resources, streamline administrative processes, and foster supportive ecosystems for women-led agricultural ventures. These challenges not only inhibit individual women's entrepreneurial endeavours but also limit the sector's overall innovation potential and sustainable development. Thus, policy interventions, capacity-building initiatives, and community engagement are essential for creating an enabling environment that empowers women innovators and promotes gender equity in Spanish agriculture.

1.2 OVERVIEW OF AGRICULTURAL DATA IN SPAIN (2010-2020)

The agricultural sector in Spain has experienced notable shifts and trends over the past decade, as evidenced by key metrics such as the number of farms, utilised agricultural area (UAA), average farm size, economic size of farms, number of farm managers by age class, and farm labour force.

NUMBER OF FARMS AND UTILISED AGRICULTURAL AREA (UAA)

In 2010, Spain had approximately 989,770 farms covering a UAA of 23,752,610 hectares. By 2020, the number of farms had slightly decreased to 914,871, while the UAA had expanded marginally to 23,913,682 hectares.



AVERAGE SIZE OF FARMS

The average size of farms witnessed a significant increase from 2,226,990 hectares in 2010 to 30,012,082 hectares in 2016. This indicates a trend towards larger-scale farming operations.

AGRICULTURAL HOLDINGS BY ECONOMIC SIZE (STANDARD OUTPUT IN EUROS)

- Farms with a standard output of less than 14,000 Euros constituted a large portion, with 1,376,813,910 in 2010 and a notable decrease to 576,620 in 2020.
- Medium-sized farms with standard output ranging from 15,000 to 249,000 Euros showed varying trends, with a decline in the number of farms but some increase in standard output.
- Larger farms with standard output exceeding 250,000 Euros experienced a decrease in the number of farms but maintained relatively higher standard output levels.

NUMBER OF FARM MANAGERS BY AGE CLASS

Table 1. Number of farm managers by age class (2010-2020)

| | 2010 | | 2020 | |
|-----------------|---------|---------|---------|---------|
| | Female | Total | Female | Total |
| Younger than 44 | 40,140 | 205,240 | 30,730 | 127,280 |
| 44-65 years | 106,140 | 490,220 | 119,250 | 409,700 |
| Older than 65 | 68,100 | 294,350 | 111,590 | 377,900 |
| Total | 214,380 | 989,810 | 261,570 | 914,880 |

In Spain, the total number of farm managers decreased from 989,810 in 2010 to 914,880 in 2020. The age group "Younger than 44" saw a significant decline, from 205,240 managers in 2010 to 127,280 in 2020. Conversely, the number of managers aged "44-65 years" and "Older than 65" both increased, with the former rising from 490,220 to 409,700 and the latter from 294,350 to 377,900. Additionally, the number of female farm managers increased across all age categories, with the most notable rise in the "Older than 65" group, from 68,100 in 2010 to 111,590 in 2020.

FARM LABOUR FORCE (2010-2020)

The total family labour force, which includes sole holders and family members, decreased significantly from 2,019,596 in 2010 to 1,139,394 in 2020. The proportion of females within this group dropped from 37.5% to 30.2%. In contrast, the non-family labour force saw a marked increase, with total numbers rising from 247,260 in 2010 to



554,100 in 2020, and the proportion of females in this group increased from 17% to 19.7%.

Table 2. Farm Labour Force (2010-2020)

| Family labour force (sole holders) in persons | | | | | |
|--|----------|-----------|---------|----------|-----------|
| 2010 | | | 2020 | | |
| Female | Female % | Total | Female | Female % | Total |
| 283,291 | 30,4% | 929,694 | 239,164 | 31% | 771,183 |
| Family labour force (sole holders + family members) in persons | | | | | |
| 2010 | | | 2020 | | |
| Female | Female % | Total | Female | Female % | Total |
| 758,014 | 37,5% | 2,019,596 | 345,052 | 30,2% | 1,139,394 |
| Non-family labour force, in persons | | | | | |
| 2010 | | | 2020 | | |
| Female | Female % | Total | Female | Female % | Total |
| 47,852 | 17% | 247,260 | 109,082 | 19,7% | 554,100 |

2. THE INNOVATIONS

Table 3. Case studies Spain

| N. Interview | Age | Educational Level | Dimension of the farm (ha) | Property rights(own; rented) | Legal form of the farm (family farmer; company) | Year when she started operating in the farm |
|--------------|-----|--|-------------------------------|------------------------------|---|---|
| ES_F_EN_2 | N/A | BA | 44 | owned | Family Farm | 2021 |
| ES_F_EN_3 | N/A | BA | 300 | owned | Partnership | 2021 |
| ES_F_EN_1 | N/A | Master | 5700m2 | owned | Family Farm | 2013 |
| ES_F_EC_7 | N/A | BA | N/A | owned | Self employed /Partnership | 2017 |
| ES_F_S_6 | 54 | cheese master course | 115 | owned | Family Farm | 2013 |
| ES_F_C_10 | 45 | BA | 33m (Boat) | semi-owned | Family | 2003 |
| ES_F_EC_8 | N/A | unfinished BA | owns 25ha, but rents 300 more | owned | Partnership, Self employed | 2022 |
| ES_F_S_4 | N/A | BA | building | owned | Partnership | 2011 |
| ES_F_EC_9 | 29 | Professional training in sales and livestock | N/A | owned | Family Farm | 2015 |
| ES_F_S_5 | 39 | BA | 16 | owned | Partnership | N/A |



3. INNOVATION PATHWAYS

3.1 MOTIVATORS FOR INNOVATION

ASPIRATIONS AND INNOVATIONS

The women interviewed share a common aspiration towards sustainability and innovation in agriculture, often driven by personal motivations. For instance, some have leveraged a background in biology and biodiversity to integrate more sustainable farming practices or have initiated eco-friendly routes such as creating educational eco-trails. Others, driven by their professional skills and personal passions, have ventured into specialty productions like cheese making, influenced by their localities such as the Canary Islands.

MISMATCH BETWEEN VISION AND REALITY

A significant mismatch between their innovative aspirations and the existing agricultural framework is evident. These women often faced systemic barriers such as rigid agricultural policies and limited access to necessary infrastructures like broadband internet, which is not uniformly available outside major urban centers. The challenges of adapting new, sustainable practices within a traditional framework that often lags behind in support and recognition are also highlighted.

INNOVATION ORIGINS AND IMPACT

Many innovations stem from personal ideas and the desire to fulfill a need for sustainability within their communities. For example, some innovations aim to enhance biodiversity, reduce environmental footprints, or improve the socio-economic conditions of rural areas. This connection is not just professional; it's deeply personal, influencing their decision to adopt sustainable farming methods. For example, one woman's dedication to organic farming was sparked by her awareness of climate change's impact on drought conditions, compelling her to seek innovative agricultural techniques that mitigate water stress and improve soil health. These aspirations highlight a common theme: the desire to align farming practices with ecological principles and a sustainable lifestyle. These projects are deeply personal but have the potential to influence broader community practices and attitudes towards sustainable farming.

Despite a reality that does not always accommodate their forward-thinking visions, the women leading these innovations persevere, driven by a deep-seated desire to make a difference in their communities.

3.2 CONSTRAINS AND FAVOURABLE CONDITIONS

The interviews conducted among the innovators selected showed a consistent pattern of personal and contextual constraints, as well as favorable conditions, with effective strategies to overcome the constraints and leverage the favorable conditions.



PERSONAL CONSTRAINTS

Many innovators cited family commitments, including childcare, as significant constraints. Balancing these responsibilities with the demands of running innovative agricultural projects posed a substantial challenge. Access to financial resources was frequently highlighted as a constraint. Traditional funding avenues, such as bank loans, were often inaccessible without male co-signers or were perceived as biased against women-led initiatives. Some women noted a lack of specific agricultural skills, which initially hampered their ability to implement innovative practices effectively.

CONTEXTUAL CONSTRAINTS

Several women pointed out that inadequate internet connectivity in rural areas limited their access to information, digital markets, and modern agri-tech solutions. Facing various constraints, women innovators often find themselves navigating challenges such as limited access to broadband, essential for modern farming operations, or a lack of initial financial resources to kick start their projects. Despite these hurdles, many benefit significantly from favorable conditions like strong family support and robust local networks. For instance, one innovator leveraged her family's existing farm infrastructure to experiment with and eventually scale up her organic farming practices.

On this example note, farming is often a business path that is passed on within the families, therefore access to land was a significant barrier for those innovators not inheriting family farms. Also, navigating the bureaucratic maze associated with agricultural innovations and securing necessary permits and approvals was a common challenge among all the innovators.

STRATEGIES TO OVERCOME CONSTRAINTS

Innovators frequently turned to professional networks and associations for support. Joining groups like Ganaderasen Red provided communal knowledge-sharing platforms and emotional support. Additionally, many pursued training and education in fields relevant to their projects, such as sustainable farming practices or entrepreneurship, to fill skill gaps prior to the start of their business journey. It is important to get creative with regards to availability of funds when the standard process of loans and guarantees cannot be put in place. Some innovators used personal savings, family loans, or community crowdfunding to bypass traditional financing barriers. Others accessed specific agricultural grants or participated in mentorship programs offering financial aid.

PERSONAL FAVORABLE CONDITIONS

Strong support from partners or family members was crucial for many. This support ranged from financial backing to assistance with daily farm operations or childcare. Women who had access to family-owned farms could innovate more readily, using the



existing infrastructure to pilot sustainable practices. As mentioned in the previous paragraph access to land could be difficult for those not inheriting land.

CONTEXTUAL FAVORABLE CONDITIONS

Access to European Union funds, regional subsidies, or specialized grants for rural development helped some innovators to scale their operations. For example, funding from the European Agricultural Fund for Rural Development (EAFRD) was mentioned as instrumental. Also, geographical proximity to agricultural colleges or participation in specialized workshops provided crucial learning opportunities, enhancing their ability to implement and optimize innovative farming techniques. It became clear that strong local ties and community involvement facilitated market access for farm-produced goods, enhancing the sustainability of their business models.

LEVERAGING FAVORABLE CONDITIONS

Innovators who accessed land or infrastructure through family connections often leveraged these assets to experiment with and refine sustainable practices before scaling up. Nevertheless, active participation in local and professional networks helped women gain visibility, credibility, and access to shared resources, which were vital for overcoming personal and contextual challenges. Additionally, local women's networks provide a platform for sharing knowledge and resources, proving crucial for overcoming personal and contextual challenges.

3.3 IDEA AND PREPARATIONS/DECISIONS AND PREPARATORY ACTIVITIES

The analysis of the women innovators' pathways in farming highlights how their professional and life stages, along with the typology of their areas, have significantly influenced their decisions and innovation strategies.

Many women leveraged existing family farms, which provided a crucial infrastructural base. Others had to negotiate land leases or purchase land, often influenced by the availability and regulations specific to their region. Networking emerged as a critical activity, with many joining local, regional, and even national associations. These networks provided support, shared resources, and advocacy platforms.

SKILL DEVELOPMENT

Most of the innovators interviewed undertook significant efforts to develop necessary skills through formal education, such as attending courses on sustainable farming, animal husbandry, or business management. Informal learning via community workshops and agricultural associations also proved vital.

UTILIZATION OF FAMILY RESOURCES



Clearly, those with access to family farms could experiment and implement innovations more readily, using these as pilot sites for sustainable practices. Beyond traditional financial support, family members often contributed with labor and expertise, which was particularly valuable in the cases of women balancing care giving responsibilities with their professional ambitions, in the moment of launching their activities with limited financial assets to employ someone. In another example, one innovator used her initial funding to install energy-efficient technologies on her farm, simultaneously reducing costs and enhancing sustainability.

INFLUENCE OF PROFESSIONAL AND LIFE STAGES

As easily foreseeable, life stage such as being mothers or primary caregivers heavily influenced the decisions taken by the innovators interviewed. The need for work-life balance drove some to adopt technologies like GPS for livestock management, allowing for remote monitoring and thus, being able to implement a more flexible time management method. It was noted that women at earlier stages of their careers often demonstrated a higher propensity for risk-taking and innovation, likely due to fewer familial responsibilities and a longer prospect of return on investment. At the same time, women with previously established careers in other fields brought significant skills and professional networks that could be leveraged for their projects. Transitioning professionals, such as those moving from academia into farming, often had to acquire new sets of skills and establish their credibility within the agricultural community.

RURAL VS. URBAN PROXIMITY

Innovators in regions closer to urban centers often had better access to markets, financial services, and technological infrastructure, aiding in the commercial viability of their projects. Conversely, those in more remote or rural areas faced challenges like limited broadband access, which affected their ability to engage with digital marketplaces or access online resources, things that become more critical as you move away from possibly large markets such as urban centres.

3.4 CONCRETISATION OF INNOVATIONS

The tangible outcomes of these farming innovations are diverse and impactful. New jobs have been created, not just in farming but also in auxiliary services like ecotourism and local food processing. Renewable energy usage, such as the installation of solar panels, marks a significant move towards self-sufficiency and environmental sustainability. For example, one farm's transition to solar energy significantly reduced its operational costs and carbon footprint, showcasing the economic and environmental benefits of such innovations.

ECONOMIC OUTCOMES

Several of the women interviewed have been able to create employment opportunities, not just for themselves but also for other local residents. This of course includes hiring



staff for farm operations, marketing, and administrative roles. Notably, one innovator's cheese production not only sustains her family but also provides jobs for local women who had never formally worked or contributed to social security. Innovations have also led to the development of new agricultural products and services, such as organic cheeses, ecotourism experiences, and educational programs on sustainable farming, leading to niche markets and enhancing farm profitability.

TECHNOLOGICAL OUTCOMES

Most farms have integrated solar panels and small-scale wind turbines to reduce reliance on external power sources and decrease the carbon footprint of their operations. Also, technologies like GPS for livestock management and automated irrigation systems were adopted to improve efficiency and allow for more flexible management of farm resources.

SOCIAL, CULTURAL AND ENVIRONMENTAL OUTCOMES

The innovators often focused on community engagement, offering workshops, farm visits, and participation in local schools to educate the next generation about sustainable farming and environmental conservation. These projects frequently challenge traditional gender roles in rural areas, empowering other women to take on leadership roles in agriculture, often seen as a male-dominated field. The vast majority of them prioritize the conservation of local crop varieties and animal breeds, contributing to agrobiodiversity and ecological resilience. Nevertheless, implementation of practices such as rotational grazing, organic farming, and permaculture not only preserves soil health but also enhances local biodiversity.

Several women have also engaged with local government bodies to influence agricultural policies, advocating for more support and recognition of sustainable practices. By forming or joining networks and cooperatives, these women have strengthened institutional support for rural innovators, sharing knowledge and resources more effectively.

3.5 IMPACTS OF INNOVATIONS

The innovations can be categorized as incremental and sustaining, radical and disruptive based on how they alter existing agricultural practices, community engagement, and environmental management.

INCREMENTAL AND SUSTAINING

Renewable Energy Integration is incremental as it improves energy self-sufficiency and reduces operational costs without drastically altering the farming processes; while those focused on preserving local seed varieties and traditional livestock breeds represent sustaining innovations. These projects enhanced biodiversity without radically changing existing agricultural practices but significantly contributed to ecological sustainability and cultural heritage preservation.



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RADICAL AND DISRUPTIVE

We have some examples of farms near urban centers that have developed eco-tourism and educational activities that radically shift the farm's role in the community from purely agricultural production to an educational and recreational resource. This includes guided tours, workshops on sustainable practices, and school programs, which help to connect with rural lifestyles and understand the importance of sustainable agriculture.

At the same time, the use of GPS and other IoT devices for livestock and crop management in remote rural areas can be considered as disruptive. It allows farmers to monitor and manage their operations remotely, significantly reducing labor needs and improving the efficiency and sustainability of resource use. Nevertheless, in some areas, the establishment of women-led cooperatives that focus on sustainable and fair-trade practices disrupts traditional market dynamics.

The projects led by women at the center of this study, significantly impacted local gender dynamics, empowering women and providing them with leadership opportunities. This had broader societal implications, including changing perceptions about gender roles in rural areas.

4. INNOVATION ECOSYSTEMS

4.1 POLITICAL

GOVERNMENT AND INSTITUTIONAL SUPPORT

Several women accessed specific subsidies and grants that facilitated their projects. Among others, the European Agricultural Fund for Rural Development (EAFRD) funds, which have been pivotal in supporting sustainable agricultural practices and rural development projects and the INJUVE award for entrepreneurship. Local subsidies for renewable energy installations such as solar panels have also been instrumental. Government-sponsored training and mentorship programs helped gaining essential skills in agriculture, business management, and sustainable practices, crucial for success. For example, local and EU policies around agricultural funding have been crucial for several women who accessed grants to support their sustainability projects. However, some found that restrictive regulations around land use and agricultural practices posed significant barriers. Support from local agricultural cooperatives and associations have been significant too. These bodies often provide a platform for networking, resource sharing, and collective bargaining, enhancing the women's ability to navigate market and regulatory challenges.

CHALLENGES FROM POLICIES AND REGULATIONS

Navigating the bureaucratic landscape associated with agricultural innovations and securing necessary permits and approvals was a common challenge among innovators. Complex regulations paired with slow governmental processes slowed down innovation



and delayed project implementation in some cases. Zoning laws and land tenure systems that are not favorable to small, women-led enterprises pose significant barriers to those not inheriting the land from their families. Furthermore, the collective actions of these women, often coordinated through national networks and associations, have fostered a change in how agricultural innovation is approached in policy circles. They advocate for policies that not only support sustainable agriculture but also recognize the role of women as key drivers of innovation and change within the sector. Their involvement has encouraged the inclusion of gender perspectives in agricultural research and development programs, ensuring that new technologies and practices are accessible to and effective for both men and women farmers.

WHAT POLICY CHANGES ARE SUGGESTED?

There's a call for more streamlined regulatory processes to make it easier for newcomers and innovators in agriculture to start and scale their operations. Simplifying the permit and approval processes would help women who often have to face multiple responsibilities. Specific policies aimed at supporting women in agriculture, such as grants, tax incentives, and training programs designed to address the unique challenges they face, were highly recommended. An improved rural infrastructure, including better broadband access, transport links, and local market access, has been highlighted as a significant help for women farmers.

4.2 ECONOMIC

It's clear that financial incentives and access to resources varied significantly among those interviewed, according to their background, initial financial availability, as well as the support they could get outside the traditional system of financial development, such as bank loans. A breakdown of their experiences with financial incentives and other external resources could be summarized in EU and national funds, Banks and family loans and external resources.

EUROPEAN AND NATIONAL FUNDS

- European Agricultural Fund for Rural Development (EAFRD): Several of the women accessed subsidies and grants through this fund, which supports rural development projects aimed at improving agriculture, the environment, and rural life.
- Local Government Grants: Some innovators benefited from local government initiatives that provided financial assistance for renewable energy projects, such as the installation of solar panels.

Access to financial resources varies, with some women securing funding through EU programs like the Next Generation funds, which have increased the visibility of their projects. Others have faced challenges due to stringent eligibility criteria of traditional funding sources.



BANK LOANS AND FAMILY LOANS

Most women used loans from family members to start or expand their projects, bypassing traditional financial institutions that might not favor agricultural innovations, especially those led by women. Access to bank loans was mentioned, but often with difficulties, particularly without a male co-signer, which reflects a significant gender bias in the financial sector. Financial incentives in the form of funding for participation in training and mentorship programs were available through various agricultural associations and cooperatives. These programs were crucial for skill development and network building.

Nevertheless, several innovators reported difficulties in securing traditional bank loans due to stringent requirements or biases against small-scale, women-led agricultural projects. While some accessed EU and local grants, others found the application processes overly complex or the competition too high, limiting their ability to secure these funds.

ACCESS TO EXTERNAL RESOURCES

At least one innovator used crowdfunding to raise initial capital for her project. For example, one initiative successfully raised funds through a community crowdfunding campaign, which helped purchase essential equipment for an organic farm. This method provided a way to overcome the barriers faced in traditional financing channels.

Direct consumer pre-payments have emerged as viable alternatives, helping to finance initial project phases as some farmers developed innovative pre-payment schemes where consumers could pay in advance for products (like seasonal organic boxes), which provided immediate cash flow to support farming operations. In areas with strong local ties, some women leveraged community investments, where local consumers invested in the farms in exchange for a return in the form of products or small financial returns.

In summary, we can observe that non-traditional funding sources like crowd funding, family loans, and consumer pre-payments played significant roles in overcoming these financial barriers, while traditional forms of financing were less common due to accessibility issues.

4.3 SOCIAL

Social factors such as cultural norms, gender roles, community support, and social networks deeply influence the motivations, opportunities, and challenges faced by women in farming innovations. These factors either catalyze or constrain their activities, as illustrated through various examples from the interviews.

Gender roles especially present significant challenges for women in farming. Most women reported that being taken seriously in a male-dominated industry like agriculture was a persistent issue. The assumption that women should adhere to roles traditionally seen as 'feminine' sometimes hindered their acceptance in leadership positions within agricultural settings. In most rural communities, there's a strong cultural norm that views



farming as an inheritance passed down through male family members, which can complicate women's access to land and resources. Despite these cultural norms, several women have successfully taken over family farms and are gradually shifting perceptions by demonstrating competence and innovation.

Many of the women are highly engaged at the community level, often initiating projects that directly involve community members. Several have started educational programs on their farms to teach local children about sustainable agriculture, which also serves to integrate them more fully into the community fabric. Many are members of broader networks like Ganaderasen Red, a national network that supports women in agriculture across Spain.

However, the struggle for recognition on the farm, particularly with employees or traditional community members, was noted. Most women mentioned that their instructions or decisions were sometimes questioned or overlooked by male employees, reflecting ingrained gender biases. These challenges were often met with persistent efforts to demonstrate expertise and leadership. Some women took additional courses in agricultural management and sustainability to enhance their credentials and authority. Others emphasized the importance of building personal relationships with employees to foster a sense of mutual respect and teamwork.

One innovator mentioned initiating a local project that integrates renewable energy solutions on her farm, which has not only increased her standing within the community but also serves as an educational tool to demonstrate sustainable practices to others. Another example involves transforming a family's traditional vineyard into an organic operation, hosting wine-tasting tours that educate visitors about organic farming practices. This venture has helped shift local perceptions about women's roles in agriculture and sustainability.

4.4 TECHNOLOGICAL

The use of technology in farming innovations led by women varies significantly, with some leveraging advanced tools to enhance productivity and sustainability, while others face barriers due to limited access to technology.

TECHNOLOGY USED IN FARMING INNOVATIONS

GPS and IoT Devices

Some women have integrated GPS tracking for livestock management, which allows for more efficient grazing and monitoring without constant physical supervision. This technology is particularly useful in extensive farming systems that are prevalent in rural Spain.

Renewable Energy Technologies

Many farms have installed solar panels to power operations sustainably. This not only reduces operational costs but also aligns with the growing demand for environmentally friendly agricultural practices. In wind-suitable areas, small-scale wind turbines have



been used to supplement energy needs, particularly in remote locations where grid electricity is unreliable.

Digital Marketing

Most women have developed or improved their online presence to reach broader markets. Websites, social media platforms, and e-commerce capabilities allow farms to sell products directly to consumers, bypassing traditional, often male-dominated, distribution channels. A specific example involves a woman who leveraged social media platforms to market organic produce directly to urban consumers, significantly increasing her farm's visibility and sales.

Automated and Smart Farming

Technologies that automate irrigation based on weather conditions and soil moisture levels are used to improve water use efficiency and crop yields.

IMPACT OF TECHNOLOGICAL ADVANCES

Technologies like automated irrigation and GPS livestock tracking significantly enhance operational efficiency, allowing women to manage larger areas or more animals with less labor. Digital marketing tools and e-commerce platforms empower women farmers by opening up new sales channels and enabling direct consumer engagement, which is crucial for niche and specialty products.

However, the high cost of advanced technologies can be prohibitive, especially for small-scale operators or those just starting out. In rural areas, the lack of reliable digital infrastructure, such as broadband internet, limits the potential for digital marketing and e-commerce, crucial tools for modern agricultural businesses.

4.5 ENVIRONMENTAL

The commitment to addressing environmental degradation and incorporating ecological considerations is evident across various innovative approaches adopted.

INFLUENCE OF ENVIRONMENTAL FACTORS

The availability of natural resources like water and fertile soil, along with specific climate conditions, often dictates the type of crops grown or the livestock raised. For instance, in arid regions with limited water resources, some women have adopted drip irrigation systems to maximize water efficiency. This technology ensures that crops receive the right amount of water at the right time, minimizing waste and adapting to the local environmental constraints. Many of the interviewed women have turned to sustainable farming methods such as organic, biodynamic, and agro-ecological practices. These methods not only align with their personal values towards sustainability but also respond to the increasing consumer demand for environmentally friendly products. For example, one farmer chose organic methods to eliminate the use of chemical pesticides and fertilizers, thus preserving local biodiversity and improving soil health. This decision was



partly influenced by the desire to produce healthier food products and by the environmental degradation seen from conventional farming practices in her area.

ADDRESSING ENVIRONMENTAL DEGRADATION

A significant motivation for adopting innovative and sustainable farming techniques is to address and mitigate environmental degradation. Many innovations focus on soil health, water conservation, and reducing carbon footprints. Given the growing challenges of water scarcity, especially in arid regions of Spain, several women have adopted advanced irrigation technologies that significantly reduce water usage. Drip irrigation systems, which deliver water directly to the roots of plants, minimize evaporation and runoff, thereby conserving this precious resource. A farmer in a semi-arid region uses rainwater harvesting systems to adapt to limited water availability, showing innovation driven by specific climate conditions.

Soil degradation poses a major threat to agricultural productivity and ecological balance. In response, many women have implemented practices such as cover cropping and reduced tillage, which help maintain soil structure, enhance organic matter, and prevent erosion. These practices not only improve the fertility of the soil but also enhance its ability to absorb and retain water, thus creating more resilient farming systems.

ECOLOGICAL CONSIDERATION IN PROMOTING INNOVATIONS

Ecological considerations are central to the decision-making process for these women farmers. For instance, integrating biodiversity conservation into agricultural practices, such as maintaining hedgerows and other natural habitats that support wildlife, directly correlates with their commitment to ecological farming. Additionally, some have implemented rotational grazing systems that not only improve pasture health but also enhance soil fertility and structure, thus maintaining the ecological balance within their farming ecosystems.

SPECIFIC FARMING METHODS

Many women opted for organic farming to avoid the harmful impacts of synthetic inputs on the environment and to produce food that is safe and healthy. This choice often originated from personal health concerns and environmental ethics. Others have adopted agroecological practices that emphasize diversity, resilience, and community involvement. These practices include polycultures, integrated pest management, and community-shared agriculture, which strengthen the ecological and social sustainability of farming operations. Another example includes a vineyard that adopted biodynamic practices to enhance both the quality of the soil and the grapes, influenced by the region's unique microclimate and soil characteristics conducive to biodynamic methods.



5. MAINSTREAMING ACTIONS

5.1 SCALING UP

Women's involvement in agriculture has started to reshape how agriculture and sustainability are viewed and managed at local, regional, and sometimes national levels.

Women who have championed organic and sustainable practices have contributed to a growing recognition and support for these methods at various governmental levels. For instance, their success with organic farming has helped to justify and strengthen organic farming policies, leading to more supportive measures, such as subsidies for organic certification or support for transitioning farmers. The visible success and advocacy of women in agriculture have slowly influenced policy discussions around gender in agriculture. This includes considerations for more gender-responsive agricultural policies that recognize and address the specific challenges faced by women in the sector.

These women have been instrumental in forming or transforming cooperatives and associations to better serve the interests of sustainable and women-led farming initiatives. Some women have established or influenced educational programs and initiatives that promote sustainable farming techniques, directly impacting local educational institutions' curricula and focus areas.

SOCIETAL CHANGES

Their leadership in sustainability and innovation is changing community perceptions about the roles women can play in agriculture and rural development. Women-led innovations that focus on sustainability have also fostered greater environmental awareness within their communities. This shift in norms is crucial for broader acceptance and implementation of sustainable practices.

Examples of Impactful Innovations

- Women integrating solar panels and other renewable technologies on their farms have not only reduced their operational costs but also demonstrated the viability of renewable energy in rural settings. This has encouraged local policymakers to consider renewable energy incentives specifically tailored for the agricultural sector.
- Women initiating CSAs have developed a model that strengthens the local food system and enhances food security. This model has gained traction and recognition, influenced local food policies and encouraged institutions to support and promote local food initiatives.

What Would Foster This Impact?

Strengthening networks among women farmers and with allies could amplify their voice in policy discussions, leading to more rapid and significant changes in laws and policies. Providing targeted financial and technical support for women-led innovations in



agriculture could accelerate the adoption and scaling of successful models. Policymakers need to consider gender implications in all agricultural policy-making to ensure that policies are equitable and supportive of women's specific needs and contributions in farming.

5.2 SCALING OUT

There has been evidence of geographical replication and widening of the scope of certain agricultural innovations. These innovators are often not just single actors but collaborate with local communities, institutions, and networks to replicate and adapt their innovations in various rural contexts.

GEOGRAPHICAL REPLICATION AND SCOPE WIDENING

Several women have adopted organic and biodynamic farming methods, which have shown positive environmental and economic outcomes. The success of these practices in one area has led to interest and adoption in other regions, often facilitated by organic farming networks and environmental advocacy groups. The integration of solar panels and small-scale wind turbines on farms has been replicated in other areas as neighboring communities observe the benefits, such as reduced energy costs and increased sustainability.

LOCAL COMMUNITIES AND INSTITUTIONS

Some women have developed educational programs on sustainable agriculture that have been replicated in schools and community centers in other regions. These programs are mostly developed in collaboration with local educational institutions and environmental NGOs to tailor the content to local needs and conditions. The Community-Supported Agriculture (CSA) model, where consumers buy shares of a farm's harvest in advance, has been adopted by various communities as a direct result of its success in initial implementations.

INFLUENCE OF INNOVATION

The visibility of their success—whether through local markets, social media, or community events—helps disseminate these innovative practices. For instance, women who have successfully used technology for precision farming often share their experiences in regional farmer gatherings and online farming forums, encouraging others to adopt similar technologies. One woman's efforts in agroecology and preserving local seed varieties have started to be replicated in nearby villages, with her collaborating with local agricultural extension services to provide training and seeds to other women farmers. This has helped spread the practice beyond her immediate geographical area.



WHAT ACTIONS CAN FOSTER DISSEMINATION?

- **Workshops:** Conducting workshops has been highlighted as a useful way to foster the dissemination of successful farming innovations.
- **Mentorship Programs:** Establishing mentorship programs where experienced women farmers guide newcomers can help transfer knowledge and experiences more effectively.
- **Partnerships with Schools and Research Institutes:** Collaborating with schools and research institutes to include successful case studies in their curriculum would not only validate these innovations but also encourage new generations of farmers to adopt them.

5.3 SCALING DOWN

Many innovators have indeed received technical support, funding, or participated in capacity-building programs. These forms of support have played crucial roles in developing their agricultural projects and enhancing their skills.

As stated already, most women have participated in training programs that focus on organic farming techniques, sustainable agricultural practices, and even business management skills. I.e., one woman attended a series of workshops on organic certification processes and sustainable crop management, which were crucial for her transition to organic farming.

Several innovators have received funding through the abovementioned EU funding schemes. These funds have been used for various purposes, including buying equipment, investing in renewable energy solutions, and implementing water-saving irrigation systems. Local governments have also provided grants or subsidies, especially for initiatives that align with local sustainability goals or rural development plans. For instance, an innovator who set up a small-scale biodynamic vineyard received partial funding from her local municipality to support the initial setup costs, recognizing the project's potential to promote sustainable agricultural practices in the region. Another specific case involved receiving both technical support and funding to install solar panels on a farm. The project was supported by a local environmental initiative that promotes renewable energy in agricultural settings.

Several also reported challenges in accessing these supports, often due to a lack of information or bureaucratic hurdles that make it difficult to qualify for funding or support programs. In some cases, the criteria for funding were not well-suited to small-scale or women-led projects, which could benefit from more tailored support mechanisms. A few women mentioned not being aware of the available support or finding the process to access these supports too complex or time-consuming. In rural areas, especially, the lack of proximity to agencies and institutions that provide these services can be a significant barrier.



5.4 SCALING IN

ORGANIZATIONAL SUPPORT

Women greatly appreciate the support they receive in building their skills and enhancing their knowledge. I.e., one woman participated in a series of workshops organized by a local agricultural college that helped her learn about sustainable soil management and crop rotation techniques. This not only improved her farm's productivity but also aligned her practices with environmental sustainability goals.

INFLUENCE ON PRACTICES AND INSTITUTIONS

The success of women-led farming initiatives has encouraged some organizations and institutions to tailor their programs to better meet the needs of female farmers. This includes offering courses on leadership and business management that are crucial for women who often face barriers to these skills in traditional settings.

Women farmers implementing sustainable and organic practices have influenced the organizations supporting them to prioritize and expand their offerings in these areas. For example, the positive outcomes of organic farming projects have led local agricultural support organizations to increase their focus on sustainable agriculture, offering more programs and funding opportunities dedicated to these practices.

ACTIONS TO FOSTER CHANGE

Many women believe that strengthening networks among female farmers and establishing stronger collaborations with research institutions would greatly enhance support mechanisms. There's a consensus that engaging more actively in policy advocacy is necessary. Women farmers can influence agricultural policies by demonstrating the success of their innovative practices, thereby ensuring that these innovations are supported at higher policy levels.

KNOWLEDGE OF AND INVOLVEMENT WITH AKIS

The awareness of AKIS varies among the women interviewed. Those who are aware of it often utilize its resources to access the latest research, technology, and best practices in agriculture. However, some are not aware of AKIS or how it could benefit their operations.

5.5 SCALING DEEP

The actions of women in farming innovations have indeed contributed to changing societal values and behaviors concerning gender equality, particularly in the agricultural sector. These changes manifest in various ways, from altering local perceptions to influencing broader regional or national discussions about women's roles in agriculture.



CHANGING SOCIETAL VALUES

Women leading successful agricultural enterprises challenge traditional gender roles by simply being visible and effective leaders. Their presence in leadership roles within agriculture, a traditionally male-dominated field, helps shift perceptions about what women can achieve. One woman's leadership in a cooperative traditionally led by men has begun to influence how other members view women's capabilities in managing agricultural enterprises. Her success has led to more women being welcomed into decision-making roles within the cooperative.

Furthermore, most women engage directly with their local communities through educational programs, workshops, and open farm days, which further helps to normalize the idea of women as competent and innovative farmers. For example, one woman who converted her farm to organic practices hosted school visits to educate children about sustainable farming, subtly shifting future generations' perceptions of gender roles and farming.

IMPACT ON VIEWS OF WOMEN IN AGRICULTURE

Women who innovate in farming often become role models for other women in their communities and beyond. Their success stories are shared in local media, at agricultural shows, and through farming networks, providing tangible examples that women can lead in agriculture. Another woman has integrated environmentally sustainable practices with community development projects, which include training and employing local women, thereby enhancing their status within the community and providing a model for economic empowerment. Participating in agricultural policy discussions and serving on boards traditionally dominated by men, these women contribute to changing the narrative at higher levels. Their involvement ensures that gender considerations are included in agricultural policy-making.

CHALLENGING PATRIARCHAL NORMS

Women running profitable farms challenge patriarchal norms by demonstrating economic independence. This independence is crucial for altering traditional power dynamics within households and communities. Women have formed or joined networks focused on supporting female farmers. These networks not only provide support and resources but also build solidarity and collective power that challenge patriarchal structures within the agricultural sector.

FOSTER GENDER EQUALITY

- **Education and Awareness Campaigns:** Women believe that continued education and awareness campaigns are necessary to challenge and change deep-seated gender norms. These campaigns could focus on the success stories of women in agriculture and the benefits of gender equality.



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- Policy Advocacy: There's a need for more targeted advocacy to influence agricultural policies so that they support and promote gender equality. This includes advocating for policies that provide equal access to resources like land, capital, and training for women.



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FARMING WOMEN-LED INNOVATIONS IN SWEDEN

CASE STUDY REPORT

Authors: Annie Roos, Helene Ahl, Viktorija Kalonaityte,
Mathias Karlsson, and Malin Tillmar



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1. THE NATIONAL CONTEXT

Sweden is 528 447 km², and it has 10.4 million inhabitants, who live in 290 municipalities. The country is highly urbanised, with only 20% of the population living in rural municipalities. The Swedish authorities define the municipalities geographically as follows.

1. **26 Metropolitan municipalities** .Municipalities with less than 20 per cent of the population in rural areas and a population of at least 500 000 inhabitants when combined with their neighbouring municipalities.
2. **87 Dense mixed municipalities**. Other municipalities with less than 50 per cent of the population in rural areas and at least 50 per cent of the population live closer than 45 minutes of travel to a major city.
3. **29 Sparsely populated mixed municipalities**. Other municipalities with less than 50 per cent of the population in rural areas and less than 50 per cent of the population live closer than 45 minutes of travel to major cities.
4. **80 Rural municipalities close to urban areas**. Municipalities with at least 50 per cent of the population in rural areas and at least 50 per cent of the population live closer than 45 minutes of travel to a major city.
5. **53 Sparsely populated rural municipalities**. Municipalities with at least 50 per cent of the population in rural areas and less than 50 per cent of the population live closer than 45 minutes of travel to a major city.
6. **15 Very sparsely populated rural municipalities**. Municipalities where the entire population lives in rural areas and with an average distance of at least 90 minutes to an agglomeration (a small town) of at least 50 000 inhabitants.

The three rural categories (Category 4, 5, and 6 above) are marked in blue on the map on the next page (the lighter the blue, the more rural the municipality is). The colour red is used to indicate the metropolitan municipalities. Category 3 is marked in yellow and Category 2 in orange.

For the purpose of this study, we selected respondents from the southern half of Sweden and from rural municipalities in Category 4 and Category 5. (Category 6 is primarily found in the mountain range in northern Sweden and represents only 1% of the Swedish population).

Below, in Table 1, we lay out the most recent statistics about farms in Sweden.

Table 1. Farm statistics in Sweden

| | 2020 |
|------------------------------------|----------------|
| Number of farms | 58 790 |
| Utilised agricultural area | 3 005 810 (ha) |
| Average size of a farm | 44,06 (ha) |
| Number of female farm managers | 9 724 |
| Percentage of female farm managers | 16,5 % |

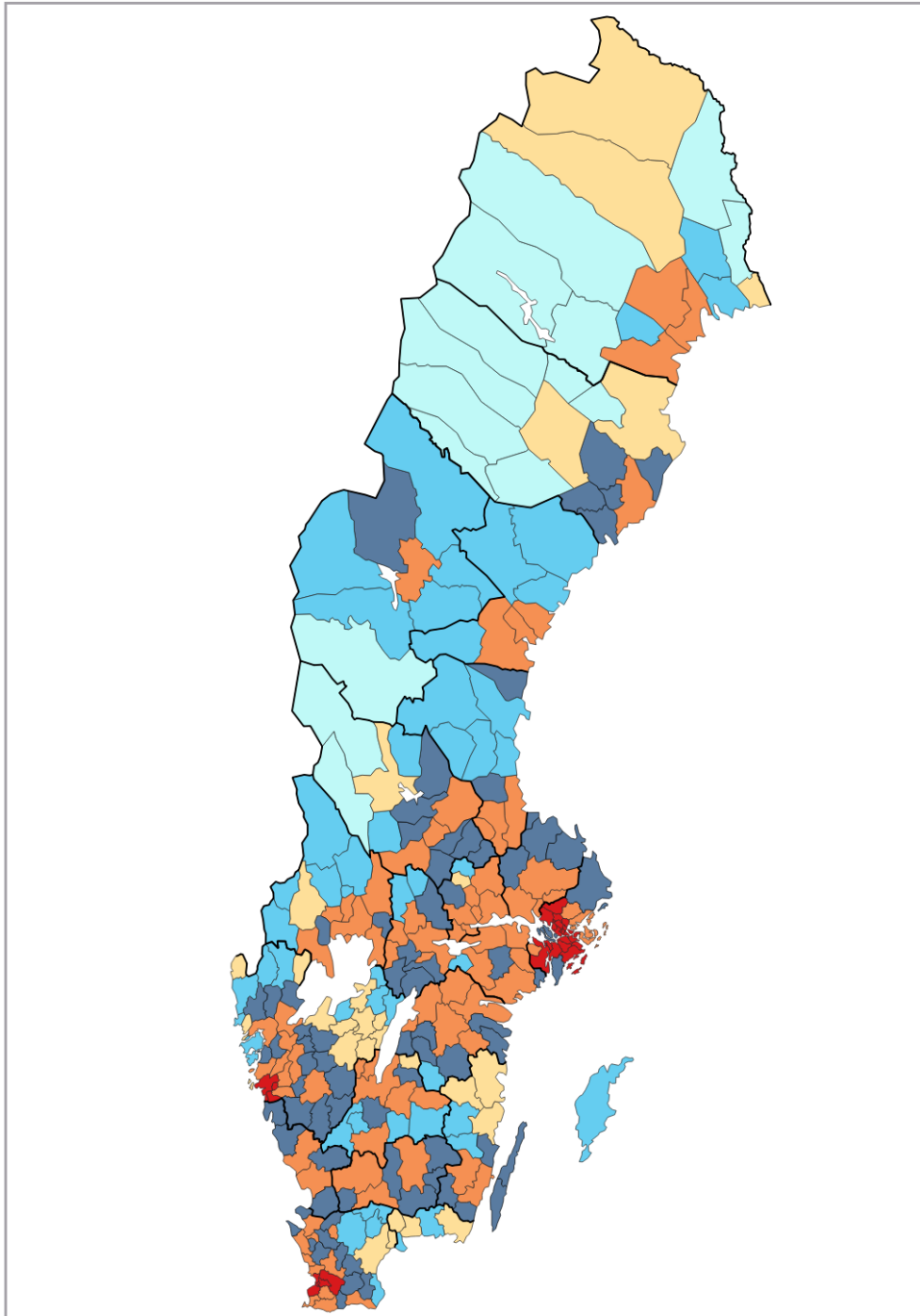


Figure 1. A map of the 290 municipalities in Sweden.



2. THE INNOVATIONS

Table 2. Overview of the innovations analysed

| N. Interview* | Age | Educational Level | Size of farm (ha) | Property rights | Legal form of the farm | Year when she started operating the farm |
|------------------------------------|-----|-----------------------------------|-------------------|------------------------------------|------------------------|--|
| SE_F_EN_1/1 EcoMoo Farm | 40 | Secondary /vocational | 460 | Owned | Sole proprietorship | 2014 |
| SE_F_EN_2/2 Verdant Haven Farm | 53 | Secondary /vocational | 15 | Owned | Sole proprietorship | 2000 |
| SE_F_EN_3/3 Nordic Meadow Seeds | 34 | University | 3 | Owned | Limited company | 2015/2023 |
| SE_F_S_1/4 Evergreen | 57 | University/ vocational | 82 | Owned | Sole proprietorship | 1991 |
| SE_F_S_2/5 Green Meadow | 71 | Secondary | 395 | Owned | Sole proprietorship | 1987 |
| SE_F_S_3/6 The Crop Alliance | 44 | University | >1 | Rented | Economic cooperative | 2014 |
| SE_F_EC_1/7 EcoHarvest Academy | 51 | University | 270 | Owned by the county administration | Public business | 2017 |
| SE_F_EC_2/8 BerryBliss Orchards | 33 | University | >1 | Rented from family | Limited company | 2019 |
| SE_F_EC_3/9 Equine Excellence | 24 | Upper sec. | 2 | Parents own the property | Sole proprietorship | 2018 |
| SE_F_C_1/10 HorsePower | 54 | Secondary plus additional courses | 36 | Brothers own the property | Solopreneur | 2010 |

*SE=Sweden, R= Rural innovation, EN=Environmental sustainability, S=Social sustainability, EC=Economic sustainability, C=Cultural sustainability. 1=Remote rural location, 2=Rural location close to city, 3=Rural village. The final number is the interview number. Organisation names are fictional.

2.1 ENVIRONMENTAL INNOVATIONS

1. EcoMoo Farm is a high-tech, environmentally sustainable dairy farm that uses milking robots that the cows visit when they want to, automatic fodder dispensers, and an app for measuring and monitoring the cows' activities and any health issues the cows may have. This farm is eco-certified, and the 180 cows feed from ecological grass grown on the farm's pastures. The farm's biogas facility produces energy and natural fertilisers. The farm employs three people, including the owners. Further expansion of the farm is limited by land availability. The remote village where EcoMoo Farm is located has eighty inhabitants and is located a 50-minute car journey (50 km) from the regional capital. The farm lies at the border of three counties.

2. Verdant Haven Farm has turned a decommissioned state penitentiary into a fishing and activity farm with access to nature and several accommodations of very high quality. The couple bought the farm in 2005 and envisioned enjoying a sustainable lifestyle and



engaging in sustainable tourism. They strive to be 'climate positive' and want to contribute to a stable climate. They have set up several innovative green projects at the farm, including a biochar system, green roofs, and an aquaponics system. Verdant Haven Farm is located 9 km outside a town of 5 000 inhabitants. This town has a railway junction that connects with three regional capitals.

3. Nordic Meadow Seeds produces and sells Swedish meadow seed mixtures and seedlings. The business was started by a couple in 2005. In 2023, the business was taken over by a young woman, who immigrated from France, who was the original owner's former employee. The business has now moved to a newly built production facility that is specially adapted for the seed business. The business has approximately one hundred different species of meadow plants in cultivation, while some seeds are collected from the wild. In addition to its seed farm, Nordic Meadow Seeds does business with approximately ten contract growers in different parts of Sweden. These contract growers grow local different species of meadow flowers. Nordic Meadow Seeds is located in a remote village of 170 inhabitants. It is a 30-minute (34 km) car journey to the closest city.

2.2 SOCIAL INNOVATIONS

4. Evergreen's mission is clear: to address gender disparities and encourage women to embrace active roles as foresters, just as Evergreen's owner did in the past. One of her initiatives involves organising specialised chainsaw training courses exclusively for women. These courses equip women with the necessary skills and knowledge to pass the examination for obtaining a chainsaw license. The owner has offered these courses since 2008. Evergreen is located outside of a village of 245 inhabitants. It is a 30-minute (30 km) car trip from this village to the closest city.

5. Green Meadow rents out part of their farm to the municipality through a so-called 'green care agreement'. Every weekday, a group of people with disabilities visit the farm with their caregivers and care for the animals. The farm includes 365 hectares of land, most of which is forest. One hundred beef cattle and some sheep live on the farm. Green Meadow is run as a family farm where the woman oversees the animals while her husband is employed outside the farm. Their adult sons are now more involved in the business, especially the farm's forestry activities and the technological advancements used on the farm. Green Meadow is a 20-minute (20 km) drive outside the municipal town. The municipal town has 5 000 inhabitants.

6. The Crop Alliance is an organisation that addresses the unsustainable globalisation of food production, which disconnects consumers from producers and places all the risk of food production on farmers. The Crop Alliance prioritises sustainable food production based on relationships as an alternative to this model. The organisation operates as a produce cooperative, uniting farmers who grow crops and vegetables. Units are sold to customers who receive a weekly delivery of fresh produce. Most customers pay in advance before the season begins. In 2015, the cooperative sold twenty units, growing to eighty owners and 160 units in subsequent years. Each unit equals one person's weekly vegetable intake for 20 weeks. The Crop Alliance fosters greater participation



and imparts knowledge about sustainable food production to customers, thereby fostering local community, food security, and sustainability. In summary, The Crop Alliance has merged a rural community and food production to promote social sustainability. The Crop Alliance is located in a village of 70 inhabitants. The village is 30 minutes (27 km) from the regional capital by car.

2.3 ECONOMIC INNOVATIONS

7. EcoHarvest Academy is a public, upper-secondary school run by the Region. The school is a boarding school and focuses on teaching organic agriculture through a working farm of 270 hectares and with dairy cows, sheep, and pig production. EcoHarvest Academy offers programmes and courses in animal care, agriculture, and gardening. At the school innovative farming testbeds for new technologies are used to advance agriculture. The school's testbeds include a biogas plant, a biorefinery plant, a bio coal plant, solar panels installed on a roof and on water, a variety of simulation vehicles, a biogas tractor, and an electric smart grid. The primary aim of the testbeds is to improve how farms are run so that farms can become more sustainable. EcoHarvest Academy is a five-minute car trip outside a town of 4 700 inhabitants. The national railway runs through this town and functions as a central meeting point for people living in the area.

8. BerryBliss Orchards started on a modest scale, with the owner sharing their berry-picking escapades on social media, thereby sparking demand for their produce. At the same time, she refined several chocolate recipes that she had learned in a course. BerryBliss Orchards has expanded its operations into running a berry farm, a farm shop, a chocolate factory, and an ice-cream parlour. By collaborating with local artisans, the farm shop now boasts partnerships with over forty-five producers. Noteworthy accolades, such as winning a silver medal at a national food artisan competition and their commitment to providing employment opportunities for the local village youth, underscore BerryBliss Orchards' success. With a growing tourist following and eight thousand Instagram followers, the venture stands out as a cherished local institution. BerryBliss Orchards is located in a village of 600 inhabitants 28 minutes (27 km) by car from the regional capital.

9. Equine Excellence produces and sells a heat isolator for water buckets that are used for horses. The innovative product came to life when the innovator got tired of carrying water all over her farm during winter. The heat isolator prevents the horses' water from freezing during the winter. Several solutions to this problem on the market require electrical power. However, installing cables or buying expensive battery-powered tubs is not always feasible. Equine Excellence offers a simple solution to this problem in the form of insulation for the water bucket that keeps the water ice-free for longer. This solution saves the horse's owner time and allows the horse to access water longer during the winter. Equine Excellence started as a Young Enterprise Business (UF), a high school course offered to students in Sweden. Equine Excellence is located a ten-minute car ride (5 km) outside of a town of 1700 inhabitants.



2.4 CULTURAL INNOVATION

10. HorsePower uses horses to transport timber and firewood from the forest and to perform various types of carriage work. Examples of such work include transporting tree branches, manure, and fence materials. The horses are also used for ploughing, covering potatoes in the field, sowing grain, mowing hay, and harvesting. HorsePower is located a 20-minute car journey (17 km) outside a town of eight thousand inhabitants. To reach the nearest city takes 1,5 hours (100 km).

3. INNOVATION PATHWAYS

3.1 MOTIVATORS FOR INNOVATION

The reasons that motivate women to initiate innovation in farming are numerous and varied. However, we note that economic motivation did not appear in our research material. One might say that the owner of BerryBliss Orchards' initial motivation was not economic, but after two years of running the business, the owner deliberately chose to continue with the business instead of returning to a paid job. This female entrepreneur was motivated by a desire to see if she could make something of her business, to make it viable. The owner of the Green Meadow stated that she knew from the beginning that a business like hers would not be economically viable. Instead, she is focused on improving rural lives, claiming that "We provide other values. And why shouldn't we if we can?"

We note that the rural typology in which the farm business is situated reveals variance with regard to one issue. Those entrepreneurs who were motivated to respond to emerging crises are located in rural villages. The Crop Alliance and Nordic Meadow Seeds were motivated to respond to emerging crises. In the case of Nordic Meadow Seeds, the crisis that they are concerned with is that in a hundred years, 99 percent of all Swedish meadows will have disappeared, thus radically affecting plant pollination, insect life, and biodiversity. For The Crop Alliance, the crisis that they are responding to is the unsustainable globalisation of food production, which isolates the consumer from food producers and burdens farmers with all the risks associated with food production.

Besides this variation in the farms' rural typology, no other variation was observed.

The most common motivation behind the farms included in this report was their owners' desire to improve rural lives or farming practices. In the farms located in remote rural areas, this motivation was mentioned in every case. Concerning EcoHarvest Academy, improving farming practices is most apparent since the school's testbeds are specifically designed to improve how farms are run. All the other farmers are motivated to improve rural life, including their own, probably because their relationship with rural living is most evident. For Evergreen, the owner asks herself: "How can we create jobs out here?" However, when her own business is not economically viable, how can she provide jobs for others? However, this female entrepreneur still sees a need in her female clients for her courses. The need she fulfils is structural in the sense that women want to meet other female forest owners in different contexts. The female entrepreneur at HorsePower also



highlighted the idea that she wants to improve the lives of people in the cities, i.e., improving the lives of people who are not immediately connected to nature.

For those farms located in rural villages, the owner of Equine Excellence engaged to solving an issue at her farm. While The Crop Alliance introduced a very local innovation. The female farmer speaks a great deal about her desire for local activities to be more sustainable and socially cohesive. Furthermore, she wanted to produce food locally.

This focus on maintaining a rural livelihood was not observed in all of the farms included in this report. In some cases, the female entrepreneur's activities initially satisfied a personal need by focusing on a personal interest, as demonstrated in the case of Nordic Meadow Seeds, EcoMoo Farm, and HorsePower. Concerning Verdant Haven Farm, the owner's motivation was strictly personal. She wanted to move to the countryside. To make the farm viable, she started a tourist business. In this sense, the innovation itself satisfied a personal need for some of these female entrepreneurs.

However, the owner of The Crop Alliance was also motivated to change her life situation and build on her interests. Notwithstanding this, we cannot claim that this was a need she fulfilled. She had previously done some small-scale cultivating and wanted to see whether she could do it on a larger scale.

No satisfaction of a personal need can be identified at EcoHarvest Academy. At EcoHarvest Academy, we observe a range of professional motives and note that the innovation fulfils a specific administrative goal (the provision of education) and a social need for the implementation of environmentally friendly farming practices. This difference between EcoHarvest Academy and the businesses included in this report can be attributed to the fact that the woman employed by The EcoHarvest Academy does not own the business herself. In contrast, all the other cases we report on here are owned by a female entrepreneur/farmer. For the other women included in this report, we could not identify a specific catalyst that triggered their motivation, but, instead, their motivation can be characterised as something they had felt for a significant amount of time. For Nordic Meadow Seeds, the owner's motivation emerged during her school years, when she could focus and deepen her interest in nature and biology. The owner of Equine Excellence enrolled in a business course at school. She continued her journey towards establishing a business because: "This is supposed to be my way of learning how to run a business." This female entrepreneur saw a personal advantage in running a business and wanted to improve her life situation.

An additional motivating factor we identified in our interviews with regard to the farming innovations the female entrepreneurs produced includes a desire to address challenges to sustainability. The challenges to sustainability that they want to address are either social or environmental challenges. In their mission statement, EcoHarvest Academy aims to improve every dimension of regional sustainable development. Evergreen aims to challenge gender issues because the female owner wants women to dare to be foresters, just as she is a forester. However, at EcoMoo Farm, there is a clearly articulated motivation for the farm to become more environmentally sustainable by using



fewer pesticides and artificial fertilisers. Both the ladybugs and the two lakes close to the farm are mentioned as being affected by the previous unsustainable running of the farm.

We do not see a pattern revealing a mismatch between these female entrepreneurs' reality and their vision of a desirable future.

3.2 CONSTRAINTS AND FAVOURABLE CONDITIONS

The most prominent favourable condition for the continued success of these female-led businesses is that the women had found a motivation they could hold on to: a motivation usually based on an external factor in the rural environment or an issue related to sustainability. In this context, we observe that family support is essential, especially support from the spouse. Their support is essential financially to the household and with regard to taking care of the children. The spouse also acted as a sounding board for the female entrepreneurs' business development. Other favourable conditions include a local network in the rural area and broadband internet.

Personal financial resources were a constraint for many of our cases when they started their business. This constraint has been alleviated by external support or by expanding the business slowly. Economic constraints remain the most significant for those women who want to expand their business or, in some cases, merely keep the business afloat. The Crop Alliance claims that if the cooperative enjoyed financial viability and less risk, this would facilitate the female owner to start running the association again, despite her personal decision to take a step back from the association. Also related to the financial constraints is the fact that these women's businesses are not always eligible for funding. Other constraints their businesses are limited by are related to the transport of people and goods.

The following sections present the constraints and favourable conditions in more detail.

3.3 IDEAS AND PREPARATIONS/DECISIONS AND PREPARATORY ACTIVITIES

The women included in our sample took a large number of steps in pursuit of establishing a business, not just a single step. While many of the women took deliberate steps rather quickly towards making their idea a reality, Equine Excellence proved to be the exception. This female entrepreneur had a prototype product she used for a whole year before she realised she could do something more with the innovation.

We observe a difference with regard to networking depending on the typology where the business is situated. In remote rural contexts, the women all engaged in networking. In the rural villages, only some of the women engaged in networking. However, in rural areas that are close to cities, none of the female entrepreneurs engaged in networking as a first step in setting up their businesses. In remote rural contexts, the women networked to find customers and establish a name for themselves, as in the case of Evergreen and HorsePower, for example. Over the past two years at EcoHarvest Academy, a change has taken place regarding who presents new ideas. Previously, the



school reached out to other people to increase the size of its network. However, now outsiders come to them with ideas and ask for partnerships in their testbed facilities.

Regarding the rural villages, Nordic Meadow Seeds and The Crop Alliance used a very local network, i.e., their neighbours, to establish their business. For Equine Excellence, on the other hand, no networking took place because the owner felt that her existing network was too small to promote her product or sell her product to. She had some friends who tried her product, but this market proved to be too small. Instead, one of her customers took the initial step to promote her business. Without Equine Excellence knowing about it, a popular blogger bought the product and promoted it on her blog. This endorsement sparked sales and encouraged the business owner to enter into further product development.

Returning to the remote rural context, we note that EcoMoo Farm used networking to find other farmers who had done similar projects to the ones that EcoMoo Farm wanted to do. As such, we note that this is an example of networking to find resources, a move that Evergreen and HorsePower also made. In this way, the businesses found collaborators through networking. Most of the cases included in this report also sought out associations they could learn more from, either through attending seminars, courses, or consultancy services. The content of these skill-building activities was linked to business-related activities such as bookkeeping and marketing, but they were also related to their businesses' specific innovations, for example, permaculture. Three cases stand out in this regard. First, Nordic Meadow Seeds hired someone to help with the business take-over. This move provided a sense of security for the new owner since she felt that the transfer of the ownership of the business took place 'according to the rules'. Second, the owner of Equine Excellence started her business as a UF-business (a 'young enterprise course') in high school. This taught her how to run a business in a controlled environment. These two cases are related to business issues. Third, concerning the specifics of the innovation, BerryBliss Orchards stands out by doing everything through trial and error but informed by previous knowledge.

EcoHarvest Academy and EcoMoo Farm tried to build an innovative eco-system as the first step in establishing their respective businesses. At the school, this took place with the staff and managers, who have always been very motivated to try new things. At the farm, the owner aimed to set up a 'farm council' with financial advisors who can help with planning. For Green Meadow, the innovative eco-system they had previously built led them to their innovation once one of their tenants gave them the idea of doing something in the domain of 'green care'. BerryBliss Orchards can use their innovative eco-system in their everyday practices. To secure funding for their farm shop from LEADER, the owner of the business needed to cooperate with others, and thus, she asked local producers to sell their products in her farm shop. Seven producers responded positively, and now, four years later, several other producers have requested to be part of her farm shop. The farm shop at BerryBliss Orchards now sells products from forty-five producers and enjoys a very close business collaboration with each of them.



None of the women in the remote rural areas sought financial resources as a first step in establishing their businesses. The remote rural context thus stands out from the other two typologies where most of the female entrepreneurs sought financial resources; in fact, four out of six entrepreneurs did this. Three businesses received funding from LEADER (The Crop Alliance, BerryBliss Orchards, and Verdant Haven Farm), and the fourth business (Nordic Meadow Seeds) received funds from the Swedish Agricultural Agency and other state-owned initiatives.

Regarding the female entrepreneurs' life stage, we note that the owner of Equine Excellence, our youngest female entrepreneur, feels that she needs to develop her business skills further. At present, she does not have a network extensive enough to make a viable business. However, concerning the other female entrepreneurs, the other businesswomen did not express this need since they are older or possess more business experience.

Access to land is essential for many of the women's innovations. In the businesses included in this report, we observe a mix of land leases from neighbours or family and outright land ownership. The owner of Equine Excellence uses her parents' farm since: "I don't have any costs whatsoever for storage or, yes, electric heating and such." This arrangement enables her to run her business. A similar arrangement can be seen in the case of BerryBliss Orchards. The owner of this business asked her father whether she could use some of his land to plant berry plants for her children. This was the initial stage of her innovation. Later, she asked her parents if she could use their garage as a farm shop. The owner of EcoMoo Farm is the only person who stated that she needs to lease more land. The other female entrepreneurs reported that they are happy with their current situation.

3.4 CONCRETISATION OF INNOVATIONS

Figure 2 below, lay out the tangible outcomes related to the innovations in our study. Cultural and institutional changes were not identified in the material.

| | |
|---------------|--|
| Economic | New product New service New jobs |
| Technological | New product |
| Social | New jobs for young people and for individuals currently not taking part in the labour market |
| Environmental | Animal welfare Reduction in the use of fossil fuels Biodiversity |

Figure 2. Tangible outcomes on a farm level for the cases included in this report.

With regard to the typology in which the business is located, we observe that the further the business is from a city, the business's tangible economic outcomes diminish. In contrast, the positive environmental impact of the business becomes more pronounced the further the business is from a city. We also observe that businesses closer to the city



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produce more economic outcomes in the form of services and jobs than businesses in remote areas.



3.5 THE IMPACTS OF INNOVATIONS

We do not see any patterns when it comes to typology.

We note that sustaining the local community significantly impacts the outcomes for the businesses included in this report. Sustaining the local community can be achieved through for example (i) economic incentives, such as providing local inhabitants jobs and enabling people to sell their products, for example in a farm shop, as with BerryBliss Orchards; (ii) developing local cohesion and food security, as with The Crop Alliance; (iii) providing values that transcend economic values by giving back to the local community, as with Green Meadow; or (iv) taking care of the local environment, as with Verdant Haven Farm, for example.

The work done at Verdant Haven Farm, EcoHarvest Academy, and EcoMoo Farm transcends local borders by showing themselves across the country as good examples that educate others on how to make more sustainable decisions. We see this type of impact in terms of 'incremental innovations' since they can lead to large-scale changes if environmental solutions are implemented nationwide, for example.

Regarding HorsePower, Equine Excellence, and Evergreen, we note that they affect individuals rather than systems, and thus constitute a source of disruptive change. Whether it is a product that simplifies life (Equine Excellence), people who become healthier (HorsePower), or women taking ownership of the forest (Evergreen), we view the work these businesses perform as comprising a series of small disruptive actions that are aimed at moving us towards a more sustainable society.

Nordic Meadow Seeds stands out among the cases we examined since it allows for radical change. Both its products (the seed mixes and plants the company sells) and the services it provides (horticultural guidance) are used to improve biodiversity.

4. INNOVATION ECOSYSTEMS

4.1 POLITICAL

All the cases included in this report except one have been in contact with business support systems. The exception is EcoHarvest Academy since this school is part of a support system.

We do not see any pattern regarding political factors rural area typology.

Not many of the women entrepreneurs used support systems that are specifically targeted at women entrepreneurs. However, three business owners did so. Verdant Haven Farm and HorsePower were part of business networks targeting women (now closed), and the owner of BerryBliss Orchards acknowledges that the local daycare centre and school were essential to her ability to care for her children and run her business. The owner of Green Meadow even remarked that she thought about applying for women-specific funding, but she did not apply since she needed help with



administration and not the technological aspect of her business (in this case, building houses).

Support systems that the women used to obtain funding included, for example, the Swedish Agricultural Agency, LEADER, and the Common Agriculture Policy system. However, two women in our sample explicitly reported that their farms and businesses were too small for them to be eligible to apply for funds from the national support systems. This proved to be an obstacle for these female entrepreneurs. We also note that Green Meadow wanted to engage in small-scale environmental initiatives, but the company found it challenging to receive funding for such initiatives. Furthermore, the company realised that an application for funding involved a great deal of bureaucracy. Problems with an onerous bureaucratic system were identified as an obstacle for companies that submitted applications to the Common Agriculture Policy application each year. There have been discussions about simplifying the application process for farms for quite some time, but nothing has happened in this area, according to the owner of Green Meadow.

Concerns with specific regulations or government policies that the female entrepreneurs raised were individual complaints, and no pattern regarding whether these regulations hindered or assisted the women's businesses was identified. None of the women reported that they have a similar relationship or attitude towards the same regulation or policy.

4.2 ECONOMIC

Regarding economic factors, no patterns associated with the businesses' typology were identified.

Those female entrepreneurs who are part of a business network reported that their network membership inspires them and enables cooperation with other businesses. For Evergreen, joining a forestry network was the owner's starting point for her engagement with the courses in chainsaw licenses. The women included in this report also used informal relationships (for example, with their neighbours) for inspiration and cooperation. Some of the women also mentioned external business advisors as essential contributors to their business development.

While not many of the female entrepreneurs use bank loans as a strategy to expand their business, three of them do use bank loans. The new owner of Nordic Meadow Seeds secured a bank loan to take over the business, and Green Meadow's owner was able to receive a bank loan when she and her husband bought the farm. However, she acknowledges that securing a bank loan is more difficult nowadays because farms are much more expensive now. On the other hand, the owner of EcoMoo Farm feels that she has a good contact at the bank that helps them with their investments. The owner of HorsePower reported that she has difficulties securing a bank loan because of the current low profitability of her business.



Instead of bank loans, the other cases included in this report use their business profits (BerryBliss Orchards and Verdant Haven Farm, for example) to develop their businesses. Some women have applied for and received business funding through stipends and grants from local funding organisations, the Region, the Swedish Agricultural Agency, and LEADER. However, against this background, the owner of Nordic Meadow Seeds remarked: “I feel a bit done with seeking support.” The owner of EcoHarvest Academy highlighted that collaborations are critical to a successful funding application. The owner of HorsePower, however, lacks the knowledge and time to apply for funds, a circumstance that hinders her business’s development.

The prevailing economic conditions in the area are not something the women reflected upon. Instead, they were concerned with their target consumer base and how this affects their financial opportunities. For example, the owners of BerryBliss Orchards and HorsePower reported that their customers are families that endure financial constraints.

4.3 SOCIAL

We did not identify any pattern between social factors and the typology of the rural area.

Family is essential for almost all the cases included in this report. Three cases did not mention family as a social factor relevant to their business. EcoHarvest Academy stands out from the rest of the cases since the woman we interviewed is employed by the school rather than a business owner. Four female entrepreneurs in this report run their businesses together with their husbands, namely EcoMoo Farm, Verdant Haven Farm, Green Meadow, and Nordic Meadow Seeds. For these businesses, the family unit is deemed essential for creating motivation and tackling challenges. The owner of The Crop Alliance ran her business with her husband before she got divorced. She reported that she feels it is much easier as a mother to run a business like hers as a married woman than as a single woman since she needs financial support and help with family logistics. Even though BerryBliss Orchards is run by a female entrepreneur, her husband is very much involved in the business and takes care of the children, thereby helping her out. She also involves her mother in the business, something which the owner of Equine Excellence also did, especially during the product's development phase. Thus, ‘family’, as a resource and support, goes beyond the presence of a husband. The owner of Green Meadow’s access to a family farm has helped the entrepreneur become sure of her role in the company. She feels confident she can provide something besides financial assistance with her interest in ‘green care’, a value she feels the men in her family do not provide.

Many of the women entrepreneurs receive help from their local community and its institutions. For example, BerryBliss Orchards collaborates with the local school, which brings children to the farm. In addition, the farm collaborates with the county governor. This woman entrepreneur draws on her contacts with the local gymnastics association when it is time for her to recruit new employees. She already knows the people who apply for work for her, which is a positive factor. We note that the owner of The Crop Alliance used the local community to expand her business by collaborating with local businesses. Even though these businesses might be seen as competitors, such



collaboration can be a way to attract new customers to already established institutions. HorsePower draws on the positivity of the village. However, the owner of Equine Excellence experiences the opposite and feels that she has not been supported by her community at school (not the rural community, which does support her efforts). At school, she was told she would not succeed as an entrepreneur. A similar situation prevails at Green Meadow, where the neighbours initially provided a great deal of support and help with the animals. Nowadays, a conflict has led to a strained relationship between the business and Green Meadow's neighbours.

The women entrepreneurs found it difficult to discuss gender roles. During our interviews, they avoided talking about this issue directly. The owner of Equine Excellence is the exception, stating that being a young woman has helped her to secure funding. For the other women, they either did not mention gender or allusions were indirectly made to gender by veiled references to not being good enough at entrepreneurship (for example, by the owner of HorsePower), having the responsibility of the children (BerryBliss Orchards), or sometimes feeling that one is not properly listened to regarding business decisions (Verdant Haven Farm). For The Crop Alliance, the owner explicitly stated that she does not believe being a woman played any role in how her innovation was developed and subsequently received. Instead, the most significant factor behind her success was based on her being known in the village for a long time. Since The Crop Alliance started its operations very locally, being well-known and trusted by the other villagers was a prerequisite. This female entrepreneur views herself as a local celebrity because prior to starting her business, she had written several books and appeared in the newspaper. The fact that she was born in a nearby village also helped her secure the support of the villagers.

4.4 TECHNOLOGICAL

Many of the innovations we report on here use technology. This is especially true for EcoHarvest Academy, Verdant Haven Farm, and EcoMoo Farm. On the other end of the technology spectrum, we find HorsePower, a company that has made efforts to 'de-technify' the forestry industry.

No matter the typology within which the business is located, a common essential requirement for all the businesses is access to broadband internet. Those business owners who enjoyed access to broadband internet several years ago are happy that they could access it so early. Those business owners who received it somewhat later all commented on that, too. All the female entrepreneurs seem to be happy about their broadband access now, which is deemed essential for running their respective businesses.

Besides needing broadband internet, business in villages and closer to a city experience the same issues. These issues are different from those businesses located in remote rural areas.

For the businesses in remote rural areas, being unable to use public transport to and from the farm is an issue that hinders their business development. Many of the business



owners reported that they are disappointed with the government and local authorities for not providing public transport. This lack of public transport affects their customers, their children, and their ability to travel.

We identified two issues for the innovations located in villages and closer to cities. The most prominent issue is that it is a challenge to have small packages delivered. This applies to the delivery of private mail and mail to the business and when the business sends small packages to customers. The owner of Nordic Meadow Seeds explained that this lack of service is because the courier does not pick up small packages since they are so far outside of the city. Of course, this circumstance affects these female entrepreneurs' ability to develop their businesses since they spend an inordinate amount of time acting as their own courier service. Transporting goods to other businesses (i.e., large packages) is not a problem.

The other issue for businesses that are located in villages and closer to a city is their reliance on digital systems, such as booking systems and social media accounts. Some of the business owners expressed concern over how vulnerable they feel since they rely so much on these systems.

4.5 ENVIRONMENTAL

We identified no variation in rural area typology regarding environmental factors.

Environmental factors were identified as a motivator for the innovation (see Section 3.1) and as an outcome of the innovation (see Section 3.5). For example, a lake and an existing farm provided the conditions for the innovation at Verdant Haven Farm. This business depends on the availability of fresh berries, mushrooms, the forest, the lake, and its fish. All of these elements must be preserved for the business's continued success. For many of the businesses, environmental degradation and climate change are factors that they have to deal with on a daily basis. During our interviews, the owners of Green Meadow and EcoMoo Farm spoke about the drought of the past few years and how this has affected how they operate their businesses. These conditions influence their mindset. For Green Meadow, the spruce bark beetle that thrives in the warmer climate is a pressing concern and is challenging to deal with. Regarding natural resources, Green Meadow is currently experiencing an invasion of wild boar that destroys its meadows and fields.

Many of the businesses included in this report claim they take the environment into serious consideration when running their business, especially decisions about reducing waste, their choice of materials, and other business inputs. The owner of EcoMoo Farm remarked on the difficulty in finding protein fodder grown in Sweden as a replacement for soya bean-based fodder, for example.

5. MAINSTREAMING ACTIONS

In Section 3.5, we discussed the impact of the innovations, and in Section 3.3, we discussed the initial steps taken to set up the businesses. In this section, we focus on



what the women entrepreneurs want to do in the future, how they are to achieve their future goals, and how the achievement of their goals might affect society.

Many of the women entrepreneurs whom we interviewed were reluctant to commit to any scaling potential in their business. The owner of Equine Excellence stated that she found it too financially risky to expand her business. The owner of Green Meadow does not want to expand her business because she does not want to work with large food producers. Similarly, the owner of The Crop Alliance feels that if she were to expand her business and acquire more customers, she would lose the closeness with her existing customers and the social sustainability that is the backbone of her innovation.

Regarding mainstreaming actions, we do not see any pattern relating to the rural typology.

5.1 SCALING UP

EcoHarvest Academy has gained legitimacy as a science park and innovation hub within the Region. Previously, science parks were all urban since they are linked to a university or an industry, for example. EcoHarvest Academy hosts the first science park in a rural location.

Evergreen is going to be part of a newly established Rural Council (under the auspices of the municipality). When the person in charge of the Rural Council asked the owner of Evergreen what she could contribute to the Rural Council, the owner of Evergreen stated: “*Reality*, I said, that’s enough. That’s enough. You can’t have people who live in the *city* who are on the Rural Council.” This female entrepreneur hopes to influence the politician’s thinking and to bring rural issues to the forefront of their political agenda.

5.2 SCALING OUT

The changes that female entrepreneurs envision regarding their businesses in five years’ time are almost always related to expanding their businesses at their current locations. These women do not plan to scale out their businesses to other locations, but instead, they plan to continue developing their innovation where they are. For example, the business owners envision the construction of new facilities (for example, Equine Excellence and BerryBliss Orchards) and diversifying their farm activities (Evergreen and Verdant Haven Farm). The owner of BerryBliss Orchards reported: “I am not willing to be anywhere else just to continue running my business. In that case, I can work on something else.” She argues that scaling out her business is not an option for her. The physical place is so closely tied to her innovation that she is not willing to lose that connection. However, physical expansion is necessary for the owner of HorsePower if she is to continue to live on the farm.

The owners of Evergreen and The Crop Alliance both see that their innovations are inspiring other to do similar things. This represents a change they welcome and support. The owners of Verdant Haven Farm and Nordic Meadow Seeds want to see more people use their innovation. Verdant Haven Farm provides information concerning the use of



biochar to people who visit the farm. In the case of Nordic Meadow Seeds, this company has applied for funds (together with the World Wide Fund for Nature (WWF)) to become a catalyst for local meadow flower producers. They argue that spreading their innovation will support environmental sustainability.

EcoHarvest Academy, whose mission statement includes ‘the spreading of knowledge’, reports that it is difficult to measure the success of the changes that their innovations contribute to. People are interested in their testbeds, but it is difficult to know what this interest actually leads to. Should a biogas plant be installed somewhere in the country, one might assume that EcoHarvest Academy had something to do with it. However, one can never be sure whether this was the case or not.

5.3 SCALING DOWN

As stated, many of the women entrepreneurs in this report received funding from different business support systems. BerryBliss Orchards will host a new LEADER pilot study that is focused on business expansion, not business scaling. For Evergreen, the next step for the owner is to create a lasting business that transcends the typical projects that are proposed in funding applications.

5.4 SCALING IN

The owner of Equine Excellence is reluctant to expand her business. The only reason she might engage in expanding her business is for personal development. She wants to learn new skills, for example.

Learning new skills is something that the women entrepreneurs do continuously. However, how much they focus on learning new skills varies. The owner of HorsePower would like to access different organisations to learn more business skills. She is interested in attending training programmes for marketing, establishing special contacts in new networks, and even cooperating with academia in a student exchange programme. The owner of BerryBliss Orchards has just completed a bakery training course at Eldrimner (the National Resource Centre for Artisanal Food). The next time she adds an activity to her business, the owner of BerryBliss Orchards wants to do it correctly by first undergoing training in a particular area and then starting a new activity/product.

The women entrepreneurs generally do not know of AKIS and haven’t used it.

5.5 SCALING DEEP

Many of the women whom we interviewed did not mention that they envision changes in norms in the future. The owner of The Crop Alliance is interested in this issue by building local cohesion and a community that is concerned with securing local food security. The owner of Evergreen reported that in five years, she will probably be a politician since: “I’ve probably pushed the issues [of rural development] so hard”. She would also like to



use her buildings and her capacity to satisfy local needs. To do so, she needs to assess local needs by talking to the local community and securing funding.

The owner of HorsePower would like to see her innovation contribute to a change in norms. She feels that more people would feel better through what she does if her business were more focused and economically viable.

Other than this and what we already have written in section 3.5, we do not see any changes in the dominant view of gender equality based on these women's actions.

6. CONCLUSIONS

Below, we provide a summary of the salient findings in our report:

- Rural typology is not a primary factor that differentiates between the cases presented here. Notwithstanding this, we observe variation across four factors:
 - We observe differences in networking behaviour regarding the rural typology. In remote rural areas, the business owners are all engaged in networking. In rural villages, some business owners engage in networking, but in rural areas that are close to cities, none of the entrepreneurs engaged in networking as a first step in setting up their businesses.
 - None of the women entrepreneurs in the remote rural areas applied for financial resources as a first step. This fact also makes the rural remote areas stand out from the other two typologies, where a majority of the women entrepreneurs deliberately sought out financial resources. In fact, four out of six cases did this.
 - With regard to tangible outcomes, as one venture farther away from the city, the tangible economic outcomes of the women entrepreneurs' businesses diminish while the environmental impacts associated with their businesses become more pronounced. For example, businesses closer to the city produce more economic outcomes in the form of services and jobs than businesses in remote areas.
 - Businesses in remote rural areas are unable to use public transport to and from the farm is an issue that hinders their business development. For innovations located in villages and closer to cities an issue for business development is instead that postal service is not sufficient.
- Motivations differ across the entrepreneurs, but none of the innovators were outspokenly motivated by economic measures.
- The presence of a family support system was important for our entrepreneurs when they started their businesses.
- Many of the women entrepreneurs are reluctant to commit to any scaling potential in their business.
- Broadband is essential to running an entrepreneurial business.



SECTION THREE

NATIONAL CASE STUDY REPORTS ON WOMEN-LED INNOVATIONS IN RURAL AREAS



Funded by
the European Union

RURAL WOMEN-LED INNOVATIONS IN CZECHIA

CASE STUDY REPORT

Authors: Antonín Vaishar and Jacqueline Vacková



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1. THE NATIONAL CONTEXT

27% of the Czech population lives in the countryside (in villages with up to 2,000 inhabitants) and together with small towns (2,000 to 20,000 inhabitants) the countryside constitutes 55% of the majority of the population and this share is slowly but steadily increasing especially at the expense of medium-sized cities (up to 100,000 inhabitants).

The Czech countryside is the most industrialized within the European Union. On the other side, primary industries (agriculture, forestry, fishing) employ only around 5.5% of the economically active population in municipalities with less than 2,000 inhabitants. Commuting to work has been widespread since the middle of the last century, supported by frequent public transport systems compared to other countries. Also significant is the dense network of small towns, in which almost 30% of the population live, so a commuting time of up to 30 minutes is typical for the vast majority of the inhabitants of the Czech countryside. The main problems of the Czech countryside can be characterized as a worse educational structure, which corresponds more to the manufacturing sector and prevents a rapid transition to a service economy and disappearing services due to the increased mobility of the population (who consume services in the cities), with which the social life in the village is also threatened.

The countryside around big cities is under the intense influence of residential and industrial urbanization, which developed around Prague in the 1990s, and around other cities since the beginning of the 21st century. A semi-urbanized space (rural-urban continuum) is emerging here. Economic, social, educational, and demographic characteristics are closer to cities, although a relatively strong element of the original population remains (which sometimes leads to tension between old and new residents). Suburbanized communities are not always just hostels for residents employed in cities, but also have their own industrial and logistic activities. Most large cities are located in fertile areas, so agriculture is also developed in their surroundings.

Rural villages are located in the fertile areas of the Moravian and Bohemian lowlands. These are traditionally rich regions with large villages and developed agriculture that are easily accessible from large cities. However, in the post-industrial period, the tables are turned. Agriculture is no longer a source of wealth, and rich agricultural regions face the need for economic restructuring, similar to industrial regions. But the solution is neither in the development of industry nor in tourism because the intensive agricultural landscape is not very attractive. These regions show higher unemployment (in the fertile South Moravian districts of Hodonín and Znojmo, it is close to 5% during the summer season) as well as depopulation tendencies (although recently, thanks to immigration from the East, the population is rather increasing). Nevertheless, the structure of large villages allows for maintaining rural services and thus keeping the population.

The outlying countryside can be divided into inner and border periphery. These are often mountainous areas with worse conditions for agriculture and are harder to reach from big cities. The system of small and very small settlements does not allow for effective maintenance of the network of services. Transport is also complicated not by the distance, but by the complex conditions of the relief and, in winter, the climate. On the



other hand, these regions have retained a relatively high-quality natural environment and are attractive for various types of tourism and, more recently, for first and second homes. In many very small settlements, we encounter significant migration increases in population. Agriculture has favourable conditions for organic forms and therefore can be significantly subsidized.

The borderland countryside experienced a significant shock as a result of ethnically conditioned population exchange, which the communist regime used to liquidate the middle class. In these territories, the tradition of the relationship with the land was broken. In addition, the 40-year-long iron curtain was manifested. Such processes did not take place in the border area with Slovakia, but a change in the geopolitical position was manifested when this area moved from a position in the centre of the country to a position on the (eastern) border.

Women's rights have had strong support since the establishment of independent Czechoslovakia in 1918. Czechoslovakia was among the first countries where women were not only voters but actively involved in politics and representing political parties. Nonetheless, even though there are no formal barriers for women in terms of career path and their involvement in political life, there are still prevailing gender stereotypes seeing the role of women as household and caretakers and men as the main earners in the family. It may complicate the career development of a woman and above all has a negative influence on her income.

Differences in the remuneration of men and women may lie on the one hand in the inequality of remuneration for the same job positions, on the other hand in the inequality between remuneration in enterprises with a preponderance of male and female workforce. Inequality in remuneration for the same job positions is reduced in state institutions with unambiguously set salary regulations and in large companies with strong unions. Nevertheless, there are differences here too. In the rural environment, however, there are fewer companies with a clear wage policy and strong trade unions. The significantly higher share of manual labour also leads to the fact that the division into enterprises, or the divisions of enterprises with male and female workforce, is more pronounced than in cities.

The differences are by no means educational. In 2021, 53.8% of Czech women and 46.2% of Czech men had at least a high school diploma. Czech women are therefore significantly more educated. In rural areas (municipalities with up to 2,000 inhabitants), the differences are even more striking. In these municipalities, 47.6% of women and 38.0% of men over the age of 15 had at least a high school diploma. It can be hypothesized that the limited possibility of finding a suitable partner may be one of the factors that pushes young women from the countryside to the city, where the marriage market is much wider.

In a more than 20-year-old work, Horská and Spěšná point out the differences in how they spend time between rural and agricultural women. Rural women spend more time than farm women taking care of children, taking care of themselves. In their free time, rural women devote themselves more than farm women to visits of friends, reading, visits to cinemas and theatres, and trips. In contrast, female farmers engage more than other



rural women in housework, relaxing in front of the TV, manual work, and sleep. In terms of income, agricultural women are more likely to be in the average categories, while rural women are also in both extremes (with the highest but also the lowest incomes). The amount of income depends to some extent on whether women work in jobs for which they are qualified or not. So it seems that there are quite significant differences between the two categories of women. Due to the low representation of persons employed in the primary sector in the Czech Republic (which has also significantly decreased since 2000), a rural woman rather than a farmer is typical. Both rural and agricultural women agree that equality of opportunity between women and men in rural areas is not ensured. However, only a small part would like to change this situation. Women seem to be content with having their own earnings, which ensures independence from men and a sense of being valid members of the family and rural society. They prefer that both partners contribute to the family budget according to their means. Female farmers are more inclined to the traditional division of roles, where the man is the economic provider of the family. The position of rural men in general is closer to the traditional stereotype. The preference for a traditional way of life is inversely proportional to the level of education for both men and women.

Women's organizations had originally very important role in supporting education for young girls, the topics covered currently by women's organizations vary from human rights in connection to women's rights, the right to natural birth, equal opportunities, gender issues and many others. Several women's organizations in the Czech Republic are clustered by the Czech Women's Lobby, with probably the most influential organization the Czech Women's Union, which was transformed from the Czechoslovak Women's Union. During the socialist period, it was one of the most numerous organizations on the National Front. After the transformation, its meaning diminished. The union works throughout the territory of the Czech Republic, however, one of its five main focuses concerns rural women. The aim is to increase the role of women at the local/regional level, representation in the management of municipalities, promotion of service availability, transport accessibility, access to employment and involvement in cultural and social life. We did not encounter its activities in the field.

The Agricultural Association of the Czech Republic founded the Club of Agricultural Women Managers. The club is focused on sharing experiences, visiting companies and self-education, greater communication with agricultural schools, representation at Czech and foreign conferences and in the media, as well as cooperation with similar platforms at the European level. It also crystallized topics related to social agriculture. There are also gender issues.

2. THE INNOVATION

Among the innovations led by rural women, public administration activities, educational activities, small businesses in services and craft activities, innovations in environmental associations and also innovations in innovative activities were mapped.



Table 1. The innovations

| No | Age | Educational Level | Legal form of the business/enterprises | Year, when it started | Typology | Sustainability dimension |
|----|-----|-------------------|--|-----------------------|---------------|--------------------------|
| 1 | 61 | M.Sc. | contribution organization | 2022 | Rural village | Economic |
| 2 | 43 | M.Sc. | association | 2022 | Close to city | Social |
| 3 | 49 | M.Sc. | Ltd. | 2005 | Remote rural | Economic |
| 4 | 60 | secondary | association | 2002 | Rural village | Social |
| 5 | 35 | secondary | natural person | 2014 | Close to city | Economic |
| 6 | 50 | secondary | natural person | 1999 | Rural village | Cultural |
| 7 | 51 | M.Sc. | state administration | 2017 | Close to city | Environmental |
| 8 | 48 | M.Sc. | registered association | 2013 | Rural Village | Environmental |
| 9 | 47 | M.Sc. | public administration | 2010 | Remote rural | Social |
| 10 | 46 | M.Sc. | association | 2012 | Remote rural | Environmental |

Rural areas within reach of large cities offer the potential for the development of services uncommon to the original rural population. However, suburban residents are more attached to the city in economic, social, and cultural spheres and participate less in rural life. The position of suburban women aligns more with urban conditions, thereby affecting the native population as well. Activities in these areas focus both on economic pursuits and the provision of environmental services, which are in short supply for urban residents.

Differences can be observed between the stabilized population of traditional rural areas (in our research, rural villages) and the inhabitants of the countryside where the population was ethnically exchanged after World War II (in our research, part of the periphery). Traditional rural areas have long-standing cultural traditions, a stronger relationship of people to the landscape, land, and villages, and higher religiosity. Women's activities often focus on cultural potential and emphasize environmental activities related to soil, landscape, and the hydrological regime.

In contrast, the countryside with an exchanged population lacks these attributes. The status of women in the settled regions initially reflected the level of civilization of the regions from which the new settlers came (Czech and Slovak inland, Volhynia - formerly the USSR, Volhynia - formerly Poland, Ruthenians from Transcarpathian Ukraine, Czechs from Hungary, Romania, Western Europe, Croats from South Moravia, Roma, and later Macedonians from Greece). Only now are the relevant relationships being established with varying degrees of success. Women's activities in these regions are primarily economic. Social activities might be expected due to the considerable number of socially excluded localities, but this was not confirmed by our research.



3. INNOVATION PATHWAYS

3.1 MOTIVATORS FOR INNOVATION

Basically, there are two kinds of motivations. For women from a rural background, it is an effort to stay in the countryside, to contribute in some way to the development of rural life, while securing an economic existence. The second group of motivations is related to life stages. Especially after maternity leave, women find that they need to work at home and organize their work according to the needs of the family, or they want to start over after a divorce. There were practically no ideas about getting rich or building a significant personal career. It was not even about competing with men. Women's motivations are mostly focused qualitatively towards a satisfied life.

3.2 CONSTRAINS AND FAVOURABLE CONDITIONS

The countryside itself is both a barrier and a motivation. In general, the central issue in the period after the birth of children is the combination of work and family obligations with other activities. This is where the help of their partner and also their parents is important. We have come across cases where the partner was very supportive of the woman, but also cases where the marriage broke up. In such a case, finding a new permanent partner is usually a problem.

The problem of remoteness is not significant thanks to functioning public transport and the fact that innovative women usually have a car. The fact that, unlike urban women, it is more difficult for rural women to access information such as training and courses where issues of subsidies, digitization, transfer of practical experience, etc. are explained. Here there is space for the activities of various educational associations. Certain paternalistic biases appear to be more pronounced as village size decreases. Problems with the availability of financial resources were not recorded, probably also because part of the activities rely on public resources. It seems that women - unlike men - do not engage in financially risky activities.

It can be assumed that the conditions for women's innovation may differ not only according to the types of suburbanized - intermediate - peripheral countryside, but also according to other characteristics, for example, ethnographic characteristics, level of religiosity and tradition, and the like. However, the number of cases was not large enough to allow us to generalize. The size of the municipality may show because in the Czech Republic, there are more than 1,500 municipalities with less than 200 inhabitants, which is 25% of all municipalities. It is an extreme on a European scale. Such small villages create a specific environment with a minimum of own services, closer relations between residents, which can even result in clan politics. On the other hand, among the women we spoke with as part of the project were a number of mayors or former mayors. It is in very small municipalities that the proportion of women in these positions is highest.



3.3 IDEA AND PREPARATIONS/DECISIONS AND PREPARATORY ACTIVITIES

Two types of approaches can be distinguished. Businesswomen were looking for a free place in the market where they could use their abilities, skills or ideas and at the same time reduce the level of risk as much as possible. It is interesting that the ideas did not come so much from the qualifications of individual women, but rather from their interests and hobby activities. Financial problems were not mentioned.

For women looking for employment in spheres connected to public funds, whether it is public administration, non-governmental organizations or social services, it was more about applying their qualification or level of education. These were often innovations of already existing activities, where they introduced new approaches and ideas. At the same time, they tried to use modern knowledge and apply their activities to the developing situation. In those cases, it was about women who were generally engaged in more various associations, companies and public administration, and participated in the social and cultural life of the municipalities.

In practically all cases, the prerequisite for success is continuous learning, less often formal, more often based on the exchange of experience or inspiration gained in other regions or even abroad. The beginnings were not easy from this point of view, but today the situation is improving.

3.4 CONCRETISATION OF INNOVATIONS

As a rule, the studied innovations do not represent original discoveries. Rather, it is an idea of how to combine existing activities, expand or enrich the market, adapt general knowledge in specific local conditions.

The most significant and most desired result of innovation activities was the creation or improvement of rural services - either in the sphere of new products or in other spheres. Some job opportunities have also been created, but this is not a priority, as businesswomen rather indicate problems with finding suitable workers. Renewable resources are applied, but they do not seem to be related predominantly to women's innovations.

The results of women's innovations are mainly aimed at improving the quality of life in the countryside, whether through the development of social, cultural and community life in general, improving the environment and the appearance of municipalities, the accessibility of services. It is also important to improve the image of the countryside, which is sometimes considered lagging behind, and to connect activities between the city and the countryside.

3.5 IMPACTS OF INNOVATIONS

The impact of innovation on gender equality is difficult to quantify. On the one hand, innovative rural women are more visible, their role in rural development is unquestionable. On the other hand, it seems that the division of activities between men and women is perhaps deepening. Women are active and have a relatively free field of



activity in social, cultural, educational and environmental activities. There, their contribution is generally recognized and accepted. On the other hand, women have a hard time penetrating into "male" activities, such as machines, energy, transport. There they are met with a certain underestimation and mistrust. However, there are some men who support their female colleagues.

The women in public administration themselves talk about optimal cooperation between men and women, where women come up with ideas and men are able to practically implement these ideas. Women have a greater ability to persuade and are willing to take unpopular measures, because they are not so competitive and do not cling to positions.

4. INNOVATION ECOSYSTEMS

The main economic and social framework is the transformation from the modern to the postmodern era. This is characterized by the movement of labour from manufacturing to non-manufacturing sectors. Society is becoming consumerist. The countryside is changing from a space for (primary) production to a space for consumption (tourism, housing). This process can be accompanied in some cases by depopulation, because the remaining production does not need as many workers, in others by population growth because the productivity of labour in services is lower than in production.

In 2021, 3.2% of the Czech population was employed in primary industries (since 2011, this share has increased slightly, probably due to EU anti-intensification measures). Among men, employment in primary sectors is 4.2%, among women 1.9%. In 2011, the share of residents in municipalities with up to 2,000 inhabitants employed in primary industries was 6.5%. The total share of the population in production activities in these municipalities was 43.9% so 56.1% worked in services (or undifferentiated activities) in the countryside. Changing the leading sector in rural areas from industry to services can improve the status of women, as their role and capabilities in the service industry are unquestionable. On the other hand, this is not a guarantee of equalization of incomes, since manufacturing sectors may continue to be better rewarded.

The second leading trend, influencing family policy and the position of women in society and at the same time indicating ongoing changes, is the second demographic transition. This is caused, among other things, by the growing emancipation of women, and can therefore in principle be understood positively. On the other hand, however, it leads to a reduction in the function of the traditional rural family, which tends to result in a worsening of the position of women, for example in the increasing proportion of single mothers and divorced women.

The most telling indicator is fertility. The total fertility rate in the Czech Republic fell in 2000 to the lowest level ever of 1.14. By 2022, it rose to 1.64, which is, however, still quite far below the level of simple reproduction. In 2021, 48.5% of children were born out of wedlock. Some of these are children in functional relationships, but a significant proportion are children with single mothers. On the other hand, 36.2% of marriages where one of the parents (actually the mother) remains without a partner are divorced. In 2018, 400,000 children lived in single-parent families. In addition, discipline in paying alimony and the state's ability to enforce them is generally low in Czechia. That is why



substitute maintenance was introduced from 2021, when the state pays alimony instead of the obligated parent.

The structure of environmental problems has changed over the past 30 years. Due to the slowdown in industry, especially heavy industry, industrial exhalations decreased. The chemicalization of agriculture also decreased primarily, but it is growing again. Intensive agriculture means the reduction of biodiversity and the risk of erosion. The energy structure, which is based mainly on a mix of fossil fuels (56%), and nuclear sources (36.5%) with a slowly increasing share of renewable sources (7.5%), is not very advantageous. Exhalations and other damages from transport have increased significantly, on the one hand as a result of significantly increased individual car ownership, and on the other hand, as a result of Czechia's location in the centre of Europe, which means a huge the transit of foreign trucks. In the last pre-Covid year of 2019, freight transport transported 619 million tons of cargo, of which 81.5% was on the road. In theory, the countryside should be in a better environmental situation, but this is not always true. For example, local heating (which in cities is already solved mostly centrally with gas) is often based on fossil fuels for price reasons, even though a significant part of the countryside is gasified. Also the biodiversity in rural arable land is lower than in the urban greenery as a rule. It seems that even in this sphere, the traditional division of roles applies, where men try to solve technological problems of the environment (for example, energy), while women focus more on the quality and aesthetics of the landscape.

The energy crisis manifested itself mainly in the rise in energy prices, which are still high also thanks to payments for renewable resources and the need to maintain energy networks. The countryside survived the crisis associated with COVID 19 to some extent better, because the lower population concentration meant less interference with the usual rhythm of life. It can be said that the countryside may even have profited from the whole situation, as rural tourism destinations, for example, suffered far less than urban ones. Migration from Ukraine brought workers (most often women) to the countryside, which helped balance the labour force.

Since the mid-1990s, the number and share of the Czech population in municipalities with less than 2,000 inhabitants has been increasing, as migration flows from cities to the countryside prevail. This applies primarily to the suburbanized countryside, but also to the countryside in general, including a number of peripheral areas and municipalities with less than 200 inhabitants. The reasons are economic and environmental. Young families with children are moving to the countryside, but also seniors who are freeing up city apartments for their successors and moving to the countryside with lower living costs. Petrová-Kafková, Vidovičová and Wija (2018) show the positive influence of young and educated senior women on rural community life.

4.1 POLITICAL

The policy that probably most strongly affects women's engagement is the length of parental leave. Maternity leave lasts 26 weeks in the Czech Republic (37 weeks for multiple births). It is followed by parental leave, which can be taken by the mother or father. Parental leave can last up to 3 years of age of the child. The employer is obliged



to provide parental leave and to hold the employee in a position that corresponds to his job duties. Parental allowance of CZK 300,000 (EUR 12,000, in the case of multiple births EUR 13,000) can be spread over up to four years and since 2024 is CZK 350 000. During parental leave, the parent may work or run a business.

This measure, which is primarily intended to support pro-family policy and birth rate, works as a social benefit, but it represents a barrier to development for educated and progressive women. Although it is now possible for a man to take parental leave as well, and parents can choose the length of leave according to their needs, parental leave is still mainly taken by women. During their leave, they limit or lose professional contacts with people and the development of their professions, which puts them at a disadvantage against men.

Starting in 2023, the Czech government will amend the Labor Code in such a way as to motivate women to return earlier from parental leave and at the same time to amend the rules for drawing parental allowance. The next major amendment to the Labor Code is to be approved in 2024, which is intended to contribute to greater motivation for mothers to return earlier from parental leave by guaranteeing a return to the same job position with the employer for 2 years.

Unfortunately, the newly approved legislation brings a large administrative burden to employers. In 2022, a proposal was approved that provided for so-called shared positions. It means that one job position is performed by more workers, usually 2 for lower hours. This change was again meant to help people, especially mothers returning from parental leave. However, this tool is used very minimally in the Czech Republic, as this rule brought taxes to the parties' employers and social insurance.

In the Czech Republic, the question of introducing quotas in public administration and politics has been raised again. These efforts are rejected by women in the public discussion, because successful women have worked for their success, set up a family environment that is friendly for themselves, and the prevailing opinion is that every woman has the opportunity to be successful. Among successful women, the prevailing opinion is that the introduction of quotas will lead to the degradation of women's achievements.

Within the framework of public policies, it is very important to correctly set up the services provided in the field of child care, namely in the field of pre-school education and basic school education. It is very important here to provide tailor-made services for nurseries, kindergartens and school groups for mothers/fathers. A very good example in this regard are medical facilities or some companies that set up kindergartens and school groups, which are opened according to the services of the workers in the given facility, which is very positively evaluated by parents. Unfortunately, the conditions (services) for working parents have not yet been created in the Czech Republic, where the child would be provided with a quality education and the opening hours of the facilities would correspond to current trends in working hours.

There are almost 6,250 municipalities in the Czech Republic. Of these, 60% of municipalities have up to 500 inhabitants. Female mayors make up 26%, which is an increase from 17% compared to 2017. The work of the mayor in a small municipality is



very demanding; the female mayor has to manage all her roles in life, work and family. She has hardly any auxiliary apparatus that ensures the administrative running of the municipality, the entire subsidy agenda, etc. The mayor must have a very wide range of knowledge, experience and must cover all areas of public policy – healthcare, education, subsidy policy, the art of negotiation etc.

4.2 ECONOMIC

No measures were noted that specifically supported women. Indirectly, however, such measures can be used to support all support aimed at the development of such activities in which (rural) women play a significant role, or a role more significant than men. These are educational, social, cultural and environmental activities. It can be European support within the LEADER program (Community Led Local Development), or national programs in the departments of regional development, education, health, culture, but also some regional programs.

Certain concerns can be observed in terms of such supports. It can be a requirement for sustainability, which can become a barrier when conditions change, a requirement for co-participation, and also an administrative burden. This gave rise to persons and companies specializing in subsidy management or the necessity of employing persons with this specialization in their own companies. Here, too, there is an opportunity for the application of women.

An important characteristic of rural areas is the lower educational structure of the population due to the departure of young and educated people for more prestigious and better-paid jobs. The task for local councils is to improve the quality of life in order to make rural life more attractive, by maintaining the technical infrastructure, especially fast internet at the current level, which would allow modern methods such as working from home and by improving the social infrastructure in the sphere of education, health and social care, which could attract skilled labour.

4.3 SOCIAL

Disappearing social and commercial services are considered to be one of the main problems of rural women, especially mothers with young children and elderly women. Therefore, policies and measures aimed at solving this problem can also be considered activities aimed at supporting women, even if they are defined in general terms. These measures appear in the concept of rural development and other materials. The solution is not simple, because it is a reaction to objectively ongoing processes. The main guarantor is the Ministry of Industry and Trade. One of the measures is, for example, the support of hybrid stores. So far, the ministry has supported a thousand such stores and the free introduction of 40,000 terminals that allow payment by card. The Ministry of Transport strives for barrier-free access in public transport to support mothers and pregnant women.

Association activity is very characteristic of Czech rural areas. Association activities in rural areas operate in the cultural and sports fields, provide a range of leisure activities and bring together a large part of the population of the municipality/municipalities. Among



other things, these associations maintain traditions and take care of passing these traditions on from generation to generation. These associations are mainly managed by women or women have a role in them. Without the influence of women, the associations would not function, the proper running of the association or the care of members in the association would not be taken care of, and the association significantly contributed to the development of the village or, thanks to its activity, develops a larger part of the rural area. Quite often it happens that it is from the members of the management of associations that women remain in the management of local governments. As part of the association's activities, we see a number of successful women who are very skilled and hardworking. Unfortunately, these women do not have the ambition to become more involved in regional development or politics. The activity within the municipality or several municipalities is sufficient for them, because all association activity is a non-profit activity that is carried out in free time.

Associations and their activities significantly influence the development of a village/rural region, because it is these organizations that shape local development "bottom up". Thanks to their activities and their members, problems are generated that must be solved by the local government. On the other hand, it must be said that not all representatives of local governments are in favour of associational activity and it creates artificial barriers for this activity. The association is a form of non-profit organization and, unfortunately, the negative connotation of a non-profit organization (often in the environmental field) still persists in the minds of some representatives.

4.4 TECHNOLOGICAL

There are no known technological measures aimed exclusively or predominantly at women. Women are sometimes the bearers of technological innovations in practice (e.g. precision agriculture, sustainable energy, business incubator). However, technological progress is more the domain of men, and women are in the minority here, and in addition, they initially encounter distrust in their abilities on the part of men. The patriarchal approach seems to be most persistent in the technology sphere.

During the time of parental leave, some women can join in the innovation of the business, and thanks to this, a new product is born, especially in the field of clothing, care, etc. However, these activities are very sporadic.

4.5 ENVIRONMENTAL

In the environmental sphere, there are quite significant differences in male and female approaches. While men are oriented more towards performance, quantity and technical solutions, women prefer quality, aesthetics and landscape maintenance, greenery and other ecological approaches. This corresponds to the conclusions of Petrovič and Maturkanič (2022) that the quality of life in the countryside is rated higher by women than by men. Women are more oriented towards the quality of life of the family and the community. At the local and micro-regional level, environmental issues are often significantly in the hands of women.



5. MAINSTREAMING ACTIONS

5.1 SCALING UP

Changes in laws, policies, institutions or norms as a result of women's innovative actions have not been recorded. This knowledge was also confirmed on the basis of consultations with national and regional officials. If women themselves have comments about laws, policies or institutions, they are not proposals related to the position of women, but rather general proposals. Innovative women see quotas on female representation as counterproductive, as it would diminish the efforts of those who have risen to positions through their own efforts. However, they admit the necessity of at least some representation of women in decision-making bodies, in order for women's problems to be put on the agenda at all, because men often do not perceive or underestimate these problems.

Hendlová (2008) points out, however, that some government measures, although they appear to be budget-neutral, in reality are not. As an example, he gives the state budget, which devotes investment funds to "male" activities (transportation, construction), while savings are sought primarily in the "female" sectors of education, health care, and public administration. The author concludes that the necessity of conducting a gender audit for all draft legislative measures is high. This is apparently still true today, 15 years later. Based on our findings, this audit is most often done formally, if at all.

5.2 SCALING OUT

Some innovative women establish informal women's activities aimed at exchanging experiences eventually they got into the leadership of national or regional associations. During the COVID-19 pandemic, these activities have mostly moved into the digital space. The impact of these activities can be on the one hand in solving specific problems, on the other hand in terms of motivation, when innovative women influence other women as an example that success can be achieved.

5.3 SCALING DOWN

In practically all cases, innovative women work with subsidies of various types and levels. In the case of female entrepreneurs, subsidies were usually at the beginning of their careers (for example, the purchase of the first machines), in the case of the public sector, subsidies are a permanent activity.

5.4 SCALING IN

There do not seem to be any organizations or institutions (other than women's) that focus exclusively on supporting women's innovation. Rural women would benefit from practical advice for the management of a business, municipality, institution, oriented towards women's issues, because access to such forms of training, courses or support is generally lower in the countryside than in the cities.



5.5 SCALING DEEP

The prestige of innovative women in rural life has undoubtedly increased. The question is whether and to what extent this is reflected in the position of rural women in general. It is also a question whether innovative women do not adopt "male" positions to a certain extent - whether some of them simply go over to the male side. Overall, the process of overcoming the traditional patriarchal relationship to women is a long-term issue that depends on the generational shift, education, but also the size of the residence.

According to older research (Tuček, 2004), 62% of young women, 41.5% of young men, 38.5% of senior men and 39% of senior women in the countryside do not agree with the traditional patriarchal view that a man should earn and a woman should take care of the family.

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RURAL WOMEN-LED INNOVATIONS IN FINLAND

CASE STUDY REPORT

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1. THE NATIONAL CONTEXT

Finnish rural areas face challenges, especially those linked to aging and unbalanced demographic developments. Especially young and educated women tend to leave rural communities, which causes demographic imbalance and challenges in the social structure and unsustainable local economies. Women's outmigration is often related to the lack of job opportunities and services, rather than to the rural region itself. Digitalisation has been often studied or planned as potential and applicable tool for meeting the challenges of ageing, outmigration and disbalancing of sparsely populated rural areas. Digitalisation is hoped to help with arranging wellbeing, education, and other services and for creating new business opportunities and models.

Rural area is usually described as a great place to raise a family, the small communities are generally described as having a communal spirit and the closeness to nature is considered to be a source of wellbeing, various activities and creative thinking. Most described having received help and support from their community, though the innovative ideas and practices of the women sometimes faced underestimation or belittling, especially in the beginning (especially regarding herbs, leather belts). When the women operated in closeness to rural centres and bigger cities, or in places with a lively local tourism scene, these were considered as advantages to their own activities. Those operating in eastern Finland more often cited remoteness and long distances as a challenge. Finding employment is a challenge in many places and common is that people have several sources of income. Overall, it was felt that local entrepreneurs were given a lot of support from the municipalities. For those located close to Russian border, the current political situation created feelings of insecurity.

Entrepreneurship is one solution for women living in the rural North to stay and make their living in their home regions, as modern ICT-solutions also diminish the role of the geographical location in business. However, a Nordic study from 2012 found that there is a gender gap in the level of entrepreneurship; women constitute between one-fourth and one-third of entrepreneurs in Nordic countries. Reasons for these gendered variations may be related to personal traits, like women's lack of self-confidence, but also that the gendered labour market and education segregation influences who becomes an entrepreneur. The concept of entrepreneur has also been found to be a male gendered concept, placing women in an inferior position from the outset.

The policy measures in rural areas are often devised in top-down manner, based on a male norm. There is furthermore a need to understand the specific needs of women in rural areas to formulate effective support. Suggestions on a more individual level for supporting women's entrepreneurship are; the need to challenge the unequal childcare burden women face in families in terms of the organisation and conduct of childcare; the construction of programmes to improve self-perceptions of aspiring women entrepreneurs; mentoring by experienced women entrepreneurs; networking; and the introduction of women entrepreneurs as role models.



The rural typology (remote, village, close to city) of the innovation did not seem to be an important factor in creating differences between the different innovations. What mattered more was the type of the innovation. Remote location could involve increasing costs for those who had to drive around to buy materials or to sell and promote their products. However, not all innovations required this. Remote location could mean problems with accessibility for tourism businesses and more challenges to get customers but this was only true for tourism businesses and if a remote location already had a lively tourism scene it negated many of these problems.

2. THE INNOVATION

Table 1. Rural innovations in Finland

| N. Interview | Age | Educational Level | Legal form of the business/enterprises | Year when it started |
|------------------|------|---------------------------|---|----------------------|
| FI_R_EC_1/Int. 1 | 28 | higher education | sole proprietorship | 2019 |
| FI_R_E_3/Int.3 | 44 | higher education | limited company | 2021 |
| FI_R_S_1/Int.4 | 50 | upper secondary education | sole proprietorship | 2016 |
| FI_R_S_3/Int.6 | 58 | higher education | limited company | 2020 |
| FI_R_EC_2/Int. 8 | 60's | upper secondary education | limited company | 2006 |
| FI_R_E_1/Int.7 | 61 | higher education | limited partnership company | 2016 |
| FI_R_E_2/Int.2 | 40 | higher education | limited company | 2017 |
| FI_R_C_1/Int.10 | 63 | higher education | network of volunteers | 2018 |
| FI_R_S_2/Int.5 | 41 | higher education | farm, sole trader and limited liability company | 2006 |
| FI_R_EC_3/Int. 9 | 54 | higher education | cooperative | 1994 |

3. INNOVATION PATHWAYS

3.1 MOTIVATORS FOR INNOVATION

Innovations typically start from the basis of personal needs and interests; many had an interest in being an entrepreneur or to turn a hobby or a passion into a way to make a living. What was already available locally (such as local nature that favoured mushrooms, or locally available surplus vegetables, or noticing a need for sustainable belts) influenced the type of businesses they came up with. The woman who established a



food waste store had family background in entrepreneurship and she developed her business idea based on what could work in her hometown where she wanted to live after her studies.

For many, individual professional and life stage has been a catalyst for their motivations: such as dissatisfaction with previous employment or maternity leave and having children being the catalyst for wanting change. For many, important to live and operate sustainably and be environmentally aware. Many women shared a wish to do something for others; to help people, wanting to be useful or empower women, and share with others the wellbeing brought by nature. Willingness to contribute to vitality of the area by providing services and by making rural opportunities visible for the others. The kindergarten cooperative was set up to safeguard the services and future for their childcare.

The cultural event was inspired by lack of light in the autumn, melancholic feelings and end of the growing season asked for something balancing elements: light, togetherness, joy – there was a lack of this in the area. Sharing primitive connection to land, fire and sky together with other people. Becoming empowered by shared feelings and cooperation. Example from one northern city of a similar event.

3.2 CONSTRAINS AND FAVOURABLE CONDITIONS

FAVOURABLE CONDITIONS

Overall, the women reported receiving help from family, in the form of concrete help (such as helping with renovations, moving products), advice, and providing networks, which was much appreciated. Women also consistently reported receiving help and support from their rural communities. Overall, the ability to form social networks, and existing social networks were considered as helpful. For network building, it helped if in the municipality there already existed active entrepreneurship or there was an active tourism scene. Being close to major cities helped in this regard as well. This did not necessarily depend on whether the women lived closer to cities however, since for example in remote rural areas there are some active tourism hubs. For the cultural event, the success of organizing the event with volunteers needed having a lot of active local 'daredevil' people who are willing to join in the organization of the performance without monetary reward. They also invested their own money to organize the facilities e.g. construct parking areas.

Women reported that they possessed a character and personality traits which helped with being innovative and in entrepreneurship, such as being brave, having constantly new ideas, and being the kind of person who turns ideas into reality. Previous work background and existing skills usually brought something that could be utilized in the new activities, such as knowledge of project funding, on managing financial issues, entrepreneurship, on digital marketing or sales. Being a woman was usually seen as a strength in the kind of activities they did, for example, it helped female customers to relate to them, helped in building female networks, women in general were thought to



have more empathy, and that it is easier for customers to be “softer” and more open around women which was a strength especially in innovations related to nature pedagogy and nature guide wellbeing services.

Rural area and closeness to nature were considered overall as major strengths. For innovations such as the tourism business with wild food dishes, nature pedagogy or nature guide business, access to nature was essential for the innovation.

If there already was an active local tourism scene, this was a strength, for it brought customers and networks with other businesses and entrepreneurs. Also, closeness to bigger rural centers and cities was a strength for those who were making their own products and selling them for it helped them reach customers, ordering materials was cheaper and there were more events nearby where they could go and advertise, such was the case for the sustainable fashion innovation. In few cases, the women already had a farm/or had inherited the family business upon which they could built their own activities and develop them further.

CONSTRAINTS

Location in remote rural areas was both a strength and a constraint. While remoteness and closeness to natural parks was a strength for the mushroom business and the tourism business, they had challenges with accessibility of getting customers, and driving to events and ordering products was more costly. For example, the woman who had a farm escape room, was the most notable tourism entrepreneur in her area, and while she did get plenty of customers due to effective marketing and being located one hour away from a city centre, she still felt her location was not ideal for tourism.

Finding time and skills for effective marketing, especially in social media, was a big challenge for many. Since small business owners do everything by themselves, advertising seemed to be the first thing to suffer from lack of time. This was, however, essential for the success of the business. Many of the women were also uncertain on what would be the most effective marketing strategy.

COVID caused a lot of problems due to restrictions and surviving the pandemic required creative thinking. Covid was a big challenge for those who relied on tourism and customer interaction but financial support from the government helped them to just about get through it. For the nature pedagogy business, it forced a change in intended customer base from foreign students to domestic businesses. Those who sell products through an online store were not affected and the grocery store that reduce food waste did very well due to their lower prices. One entrepreneur managed to organise riding lessons within the restriction parameters.

Most women had faced financial challenges, and the rising costs of gas and electricity affected all. Small businesses face big investments in the beginning and many businesses were at the point that they needed to start to make profits soon, otherwise they needed to shut down. Most innovations provided non-essential services or products and with rising living costs people spend less money on “luxury” products and services



which affects sales. Many of the women who run a small business have to work a day job as well because the money is so unreliable, and while they would want to share the workload, they are unable to hire another employee because it is financially too risky.

The woman running a sustainable fashion business had found it very hard to gain visibility in media or be taken seriously by many male business partners because she makes “only accessories”. The fact that she makes her products entirely in Finland was also not noted by the media. Some women expressed having experienced gender stereotypes. For example, operating heavy machinery and doing physical labour was not expected from them.

Overall, most women reported that their own wellbeing and coping amidst the workload was at times threatened. One had to work almost constantly. One of the older women, one of two sisters running a tourism business, had faced health problems because of this and was now considering retiring from the business. For the tourism businesses the winter season is very busy, which puts a strain on one’s coping with the workload, but summer is very quiet. They are unable to hire people year-round and have to try to come up with additional sources of money for summer.

Bureaucracy was also mentioned as a constraint as it is very demanding and complicated.

3.3 IDEA AND PREPARATIONS/DECISIONS AND PREPARATORY ACTIVITIES

The women have had various paths to concretize their innovation depending on the nature of the innovation. The first idea for business was usually born by chance and related to the woman’s particular life and living circumstances. For example, two sisters who run an innovative tourism business inherited it from their parents. One of the women did unofficial guided tours for her workplace because of her background in hiking, and realized she had a natural talent for it and ended up establishing her own tour guide business.

All of the women had to do some new investments, but the nature of the investment depended a lot on the nature of the innovation. Investments meant for example building more infrastructure, getting new equipment and technology, designing websites or finding an office or store space. All but one woman had applied for at least some financial support.

For those starting a business, the first steps included establishing the company/cooperative, and planning the website/online store and establishing a social media presence. The establishing of a business in Finland was said to be a rather simple process.

All women emphasized the importance of establishing networks with local entrepreneurs, businesses, retailers, or, in the case of tourism businesses, with local tourism association and international travel agencies. Those who operated on their birthplace usually utilized



their existing social networks and some women could utilize the extensive social networks they had developed in their previous profession. While not consciously aiming to doing so, many of the networks consisted mainly of women. Some of the women, such as the nature pedagogy business, are currently looking for new partners for their business to help carry the financial burden and share the workload.

The woman organizing the cultural event started small but soon volunteers wanted to join and there was a network of 80 volunteers. She is the manager and organiser of the network and there is a clear division of labour in the team: who builds the wooden structure, who prepares the graphics for social media, who takes care of the parking arrangements etc. Now the unofficial network is well organised and institutionalised. They decide annually whether to go on or quit, which removes the burden of long-term commitment.

Most women had educated themselves further and took part in various courses and webinars to develop skills related to the particular activities they were engaged in. The courses dependent a lot on the nature of the innovation, such as solution oriented neuropsychiatric training, yoga instructor, environmental education, tourism, administration, entrepreneurship, economics and agriculture and product development, as well as digital marketing courses. Women also emphasized the importance of getting feedback from customers and constantly developing their products and services based on it. One woman has also established “Farm Escape Academy” training for farmers interested in hoisting escape rooms on their farms thus helping other farmers in earning extra income on their farms.

All of the women are very careful about the possibility of expanding their activities. Many do not want to do it, even if it would be possible, because they feel it would endanger their core business values (sustainability, social responsibility) or for example take them further away from customer interaction which they enjoy. Thus, being small is seen as a good and desirable thing. Most of the businesses are still on uncertain grounds and have been struggling economically. After big monetary investments, now is the time for many of them to start making profits if they wish to continue. A big part of this is being able to reach customers and turn interest into sales. People may like sustainable business ideas on social media but this does not necessarily turn into sales.

3.4 CONCRETISATION OF INNOVATIONS

The innovations have created new jobs (seasonal or permanent), internships (also for immigrants), and wage-supported employees, mostly for local people. The women have innovated many new products. One woman established a food store which is contributing to reduction of food waste. Locally the small businesses participate to economic life by collaborating and subcontracting with other local entrepreneurs and businesses.

The innovations have created new wellbeing and tourism services and programs, also used locally, such as nature pedagogy and nature tours that combine nature wellbeing. One woman with nature guide business offers training for tour guides and recovery coaching. One of the innovations is a cultural event which gathers 1,200–1,500 visitors



to a municipality of 1,400 inhabitants. more than 500 cars in the parking area. As there is no money involved in the organization, no new jobs are created but just communality, pleasure and memorable experiences. A horse entrepreneur has around 500 regular riding customers per week, three regular employees the year around, subcontractors (coaches etc.), 15 temporary workers during riding camps and dozens of volunteers.

One of the innovations is a co-operative for five small herb businesses. They have a joint website, products and marketing which helps to lessen the workload.

3.5 IMPACTS OF INNOVATIONS

The innovations, no matter how small, are participating in their own way to boosting local economies. Locals benefit from improved facilities, services, catering, and products offered by the innovations. The innovative women cooperate with other local entrepreneurs, buying and promoting each other's products and services. The women innovators tend to favor local services and products, and many of them have generated new jobs, internships, or seasonal work, often for local people. For example, one woman who runs a mushroom business is operating on very small-scale, but she has educated other local people on mushroom picking and usage of mushrooms. She has a couple of local elderly women picking mushrooms and berries for her, which generates additional income for them and offers meaningful activities.

One of the women played a key role in establishing Suomikki association, a website platform for small Finnish fashion companies that make their products in Finland and support Finnish labour and self-sufficiency. Suomikki.fi provides a joint marketing platform for products made in Finland. Many members in Suomikki happen to be rural women.

The innovators are refreshing and enriching local life in multiple ways, depending on the nature of the innovation. Another woman with a food store shifted local perceptions about the use of "II class" vegetables and products past their "best before" dates, helping to reduce food waste. She employs a couple of people. One woman with nature guide business trains other guides in nature wellbeing, introducing new influences to tourism in her area aimed at fostering sustainability. Two of the women have businesses that include selling wild herbs and mushrooms. They are spreading knowledge of the use of domestic wild food and their use, including mushroom picking, which enhances local life and traditional food culture. One woman who has organized a local cultural event which draws visitors from afar, allowing local artisans to showcase and sell their products. Despite no monetary gain, the event fosters a sense of community, and memorable experiences. This has installed a new positive attitude among the local people, a belief that almost everything is possible. Everything is done by volunteers without involvement of any formal organisation (e.g. association, firm). Another woman is encouraging young people to adopt an active lifestyle through stables, lessons, and camps. She creates new social networks and provides services otherwise unavailable in the region. The cooperative kindergarten empowers parents to make decisions about childcare, recruitment, and additional activities, creating a safe and intimate environment. This has



increased communality also for the summer cottage owners some of which have become recognised as 'villagers'.

In addition, a cooperative kindergarten, enables parents to decide many things concerning the care of their children, including recruitment of employees, additional activities (if there is money) etc. The organisation provides an opportunity to have a small, intimate, and safe place for the children. The kindergarten support children learning in nature and by doing themselves.

4. INNOVATION ECOSYSTEMS

4.1 POLITICAL

Global political situation in terms of the war in Ukraine causes feelings of unsafety near the Russian border and may lessen tourism in the area also in future. In Eastern Finland, Russian tourists were an important customers group who have now vanished.

All of the women have received some form of support or advice from local institutions, such as entrepreneurship support from the municipalities. Most had also received some financial support. Bureaucracy is mentioned many times as a constraint. Especially horse businesses are at a disadvantage as there is a grey area between farms and horse farms.

4.2 ECONOMIC

Most women have received some form of financial support: such as basic start-money that all entrepreneurs get in Finland, EU Agricultural fund, Leader, loan for female entrepreneurs (Finnvera), government support during Covid, Business Finland innovation bill, EU funded rural development projects. Participation in different projects helped in understanding how they work. The only exception was the cultural event that was run entirely on voluntary work.

Generally, it was felt that there are funding opportunities available, the key is to be aware of them and know what is suitable. Depending on the innovation, some had more difficulties in finding financial support. If one is not a full-time entrepreneur or makes their own products there are less options available. It was noted that it would be good to get more support even as a part-time entrepreneur since taking the step to full-time entrepreneurship is a big financial risk.

On the other hand, most funding options are aimed at bigger investments or companies that employ several people, and often require the business to already have a considerable sum of money in advance. These do not favor small businesses which these female innovations are. The sustainable fashion business would have needed financial support for purchasing materials (a big financial risk for her) but she is too small an entrepreneur for the funding available. The tour guide innovation noted that the amount of self-financed share needed in funding is often too big for small companies, as in projects it is often too strictly defined where the money can be used. Smaller, more flexible funding options are needed for small businesses.



One woman hosts a cultural event is fully organised by volunteer workers. No money is exchanged as the event works on the principle of communality.

4.3 SOCIAL

Most women are locally very active, and all had received support and help from local communities. All but one had also received help and support from family members, which was thought to be important. Networking, such as with local (female) entrepreneur associations, local entrepreneurs and businesses, local tourism associations, international travel agencies (for which one could get help from Visit Finland), and national retailers was emphasized as very important by all women. Besides social media, for those that made their own products an important way of marketing was to go to events in person and meet people there and tell them about the products.

While none of the women had specifically wanted to focus on female connections, the women tended to have lots of female collaborators and networks, customers, and for many all or most employees were women. For example, all of the employees of the food waste store had been women. For those who made their own products, most customers were women, and they acknowledged that as they wanted to make products that they themselves would like it probably attracted other women. Many women also felt that when most customers were women, it was a strength that they themselves were a woman, for it was easier for the customers to connect with them. It was thought that probably women are more interested in sustainability and talk about sustainability more openly. For example, a large portion of sustainable clothing brands are run by women. Tourism is also a field where a lot of businesses are run by women.

One of the women belongs to the Swedish-speaking minority in Finland and speaks very little Finnish. This has caused some challenges in promoting the business for example in newspaper articles, and when she has had to ask for help for entrepreneur bureaucracy the people are not always able to communicate with her in Swedish. In Finland everything official is available in Swedish but one might face problems if one has to ask an official for more knowledge since they are not necessarily fluent in Swedish.

For many women social responsibility/sustainability was a key value. However, it required a lot of balancing between wanting to act according to their values (in which sustainability was very important) and being profitable (economic vs social and environmental sustainability). Being socially sustainable often meant earning less profits. The woman running a nature pedagogy business used furniture made in local prison programmes, offered 10% discount for associations of the public good, and wanted to offer permanent (not only seasonal) employment, and put effort in having a good work community. She used to have Green Care label but as people in Finland are not familiar with, it did not bring any additional value, so she does not have it anymore. For the woman organizing a cultural event, offering togetherness, communality and a meaning for their life ('everyone is welcome to join and there is a place and job for everyone') were important values. In the kindergarten, which is a cooperative, parents can decide many things concerning the care of their children, including recruitment of employees, additional activities (if there is money) etc.



Due to gender roles, it is common that woman has the main responsibility of taking care of small children. This means time away from developing the business and balancing between family and work challenging. On the other hand, the women thought that women in general tend to be more caring and have more empathy, which they thought was an advantage and a strength the women utilized in many of the innovations, for example in tour guiding that involved nature wellbeing and in the nature pedagogy.

Some women had experienced that traditional gender roles and stereotypes ask for extra effort to show that 'a woman can'. While most women had received primarily positive encouragement, some had experienced belittling especially in the beginning, and people not taking their business seriously. Some experienced self-doubt and felt that women more often than men tend to undervalue themselves. This was evident also while making the interviews during which many women expressed doubts whether they had done anything innovative or worthy of taking notice. When, for example the innovation included making of products, in many cases female customers could see the value in their products/services but men had a harder time understanding the value in what they do. The woman whose innovation was related to sustainable fashion said that small sustainable fashion brands tend to be run by women, and they are not taken as seriously as bigger companies, usually run by men, who employ more. She felt that small female businesses are not supported by her local entrepreneur association and formed an association for female entrepreneurs. She had an unpleasant experience of wanting to find a business mentor but the options were all men who did not take her seriously or understand her business at all.

4.4 TECHNOLOGICAL

In rural areas in general, digitalization and social media are key to building networks and reaching customers. All of the women utilize social media (Instagram, facebook, twitter) and websites to advertise their activities. Overall, Finnish rural areas tend to have a good internet connection. One woman uses an online booking system for the riding lessons which has now much more functions.

Most of the women take care of advertising themselves and struggle to find enough time for it, also some felt that they lacked skills to know what kind of advertising would be most effective.

4.5 ENVIRONMENTAL

For most women the Finnish nature (rural environment, remote "wilderness", national parks) and its products (herbs, mushroom, reindeer leather) play a significant role in their innovations. Finnish forests are seen and utilized as a source of wellbeing and inspiration in two innovations, one about nature tours and one about nature pedagogy. Nature is also used as an educational environment for the children. Environmental sustainability was one of the core business values for all the women.

The tourism businesses are affected by Finnish climate in the sense that tourism season in northern Finland focuses on winter, and for spring and summer harder to get



customers. Hence, tourism often focuses on the winter season, and it is not year-round and one needs to either make all the profit during very intense winter months or try to have other income sources during summer.

Many had some sustainability labels: Green Key certificate, Sustainable travel Finland label, Glasgow declaration Climate Action in tourism signatory. These labels were thought to be essential in tourism businesses because having these different labels do matter to their customers and travel agencies. When it came to those innovations related to selling Finnish wild food products, organic certificates were not seen to offer any additional value since Finnish wild food is already thought to be sustainable and pure. Getting environmental certificates would require a lot of work that was not seen worth the marginal benefits. A woman who run a tourism business had been involved in developing the wild food brand in Kuusamo since 2015.

Sustainability an important value for all, manifested in various ways depending on the business: some used furniture and materials that were either recycled or made from Finnish wood, made sustainable choices all the way from toilet paper to cleaning products, use of local products, cultivating their own food, aiming at zero waste, reducing food waste. For example, the sustainable fashion innovation uses surplus leather and recycled leather, and the surplus leather from own production is made into jewellery. She uses biodegradable jewellery boxes (also Finnish innovation) and FSC-certified packaging that is 100% recyclable. The woman who runs a nature pedagogy innovation has participated in restoration of a local lake and does foreign species voluntary work. One innovation is on a farm that is subject to environmental regulation due to subsidies. Careful planning is used to take care of the environment (e.g. crop rotation), not all fields are intensively cultivated.

5. MAINSTREAMING ACTIONS

5.1 SCALING UP

Most of the women reported no impact. The food waste store had locally changed attitudes and norms into more positive and accepting towards the use of II class vegetables and past “best before” products. This happened as people were encouraged by the lower prices to try the products and noticed themselves that they are still good to use.

The woman running a sustainable fashion business had noticed that changing attitudes towards the use of for example leather with small “imperfections” is very hard: even if she would explain the ethical and sustainable aspects behind it people still rather buy the product with no flaws.

5.2 SCALING OUT

Some women have noted other businesses copying or imitating their activities, and while it was flattering and many women were happy to see good practices spread, it could sometimes be seen as competition. A woman running a tour guide business offered tour



guide training in nature wellbeing, based on her innovative idea. She noted that for her, similar tour guide businesses could be direct competition but also noted that her business model is hard to replicate because it relies on her personality so much. The woman who had been arranging a village cultural event had seen similar events in other places which have used hers as an example. She feels that women should be encouraged to adopt examples and influences from outside their location e.g. by establishing communities of practice. The woman who runs a food waste store has established in partnership another store nearby and was aware that there is a store with a similar concept elsewhere in Finland.

Some women had had many other entrepreneurs and student internships contact them and wanting to learn what she does, and this was seen as one way to spread good ideas. One woman was observed to be an idol for many local young people and tried to provide positive inputs for them besides inspiration.

The cooperatives interviewed reported that many people had shown interest in their co-operative model and asked questions about it, but so far no one is doing the same. Forming a cooperative requires finding the right partners for it so it is not easy to do. Increasing awareness of this kind of a possibility would be important and maybe in the future there will be more cooperative activities.

None of the women had any big plans of expanding their scope or range. They were happy with the small scale of their activities and chose to stay small even if expanding would have been possible, as it would have been for example for the food waste store. The woman who run a sustainable fashion innovation felt that expanding her production would have meant that she would have to compromise on some of her sustainability values and did not want to do it. For the innovations relying on wild food products, the yearly harvests were so unreliable and getting other people to professionally pick wild food for them in order to expand production was so difficult that expanding would be very difficult.

5.3 SCALING DOWN

Most women have received some sort of funding and educated themselves further with courses offered by Open Universities or Adult Education Centres and gotten support for entrepreneurship. These are discussed elsewhere in the report.

5.4 SCALING IN

Majority of the women are satisfied with the amount of support available locally, though it was pointed out that one needs to be active and seek help for themselves. Support is available as long as one has the time and resources to seek it out. Municipalities have a lot of support available especially for entrepreneurs. All of the women have received some sort of support from organisations/institutions, such as support for starting one's own business, for applying funding and many have educated themselves further through courses organized for example by Open Universities or Adult Education Centres. Local Leader groups were identified by many as a great help for beginner entrepreneurs. Also,



local trade promoters were a good source for help with applying for financial incentives/support.

One woman whose innovation was related to sustainable fashion felt that small, female-led companies – specially fashion-related – do not get wider support or recognition from Finnish media, entrepreneur associations or funders such as Centre for Economic Development, Transport and the Environment. In her experience, small fashion companies are not taken seriously and many support figures, such as mentors, in entrepreneur associations tend to be men who do not understand the value of fashion related things. Recognition and visibility in media would be very important for businesses like hers.

SUPPORT NEEDS: NETWORKS, FINANCIAL HELP AND SUPPORT WITH EVERYDAY COPING

All of the women emphasized the need for peer support and the value of networking. Promotion of networking and benchmarking would be important in promoting female innovation and entrepreneurship: the possibility to meet other innovators, also abroad. A couple of women suggested that a network aimed for female rural entrepreneurs could be useful, and as such does not yet exist. On the other hand, one entrepreneur woman felt that especially networks that include people from different backgrounds would be useful, not necessarily those networks for entrepreneurs where everyone has similar background, and everyone does the same thing. This would foster exchange of ideas with different sorts of people that could give birth to new ideas. One woman who had a background in project work had found that workshops that encourage future thinking and visioning would be fruitful to encourage innovative thinking.

It was felt that establishing a small business is quite an easy and straightforward process in Finland. Support needs were mainly related to running the business successfully afterwards. It was acknowledged that small female-led businesses need support from local towns and municipalities, but the best help is not necessarily financial support. Advice on finances, for finding the right sources of financial support, for starting up and creating networks, as well as advice for planning marketing and social media would be useful. Many women struggled especially with creating effective marketing strategies in social media. It was noted that the ability to outsource marketing and sales would be useful for small enterprises, such as in the form of paying for someone to make a marketing plan for the business for a couple of years. Since a small business entrepreneur does everything by themselves, the one thing they often do not have enough time for is marketing.

The needs regarding financial support dependent on the type of innovation. Those who produced and sold their own products, funded their operations mainly with sales. Some others, for example a woman running a nature guide business, wished for more flexible funding options for small entrepreneurs, where the entrepreneur could have more freedom to choose where the money is used. Also, it was noted that funding was available for large investments, but for small businesses these were often too large and



there was a need for support for smaller investments (such as building a website, planning for social media marketing). A woman whose innovation involved sustainable fashion made in Finland, suggested tax reliefs for example for businesses that make their products domestically. This would encourage making products in Finland and thus the creation of employment in Finland. At the moment, it would make financially more sense to make the products abroad. Some of the older women remembered that there used to be female entrepreneurship loans and loan guarantees available, but not anymore. These could be a good form of financial support directed at women.

Many women pointed out the need for some help with everyday coping and wellbeing, since being a small entrepreneur is so much hard work. Lone female entrepreneurs often forget the importance to take care of one's wellbeing, risking burnout. The workload is increased by the fact that the main responsibility of childcare often belongs to women. Better support for childcare could thus help women develop new innovations at the time in their lives when they have small children, at the moment it might be better to wait until the children are older. Many of the innovators had moved to the rural area from elsewhere and thus lacked family support networks. Especially women who are single-mothers struggle with finding the time for innovation.

A useful form of support would help people with marketing and sales and finances, so that people with great ideas could focus on developing them, instead of using all of their time on the former. A woman with a nature guide business had been thinking about forming a cooperative for wilderness guides and small tourism enterprises. This would help with sharing of workload, bureaucracy and marketing duties, by for example outsourcing marketing to a third party. As a cooperative small business could also market themselves to bigger travel agencies that usually like to work with bigger companies.

Lastly, the women emphasized that to encourage innovative thinking one needed an atmosphere where even small and crazy ideas are not discarded. A woman whose innovation is related to tourism noted that an understanding that not every good innovation leads directly to making money, is needed. An innovative idea for example in tourism business could lead to image building or visibility for example.

The innovations of interviewed women have not fostered a change in the practices/values of these organisations/institutions.

5.5 SCALING DEEP

Overall, Finland is a very equal country for men and women and women have traditionally had a strong role in agriculture in Finland's rural areas. The women did not report any strong needs to try to change societal values or views regarding women, rather, most stressed that gender does not play any role in the region these days: all are equal in all respects. No actions necessary to improve women's equality were identified.

A few of the older women had felt belittled at some point of their innovation journey and that they were not taken seriously. One said that with time the local people have started



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to believe in her and the capacity of women to do all kinds of things. The impact is regional as she is a very visible female entrepreneur in the region.



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RURAL WOMEN-LED INNOVATIONS IN GERMANY

CASE STUDY REPORT

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Münchhausen and Janna-Louisa Pieper



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ACRONYMS & ABBREVIATIONS

| | |
|---------|--|
| ABM | Job creation measure (Arbeitsbeschaffungsmaßnahme) after the reunification, offered in the eastern Federal States |
| BMEL | Federal Ministry of Food and Agriculture (Bundesministerium für Ernährung und Landwirtschaft) |
| BMFSFJ | Federal Ministry for Family Affairs, Senior Citizens, Women and Youth (Bundesministerium für Familie, Senioren, Frauen und Jugend) |
| CAP | Common Agricultural Policy |
| CSA | Community Supported Agriculture |
| DLV | German Rural Women's Association (Deutscher Landfrauen-Verband) |
| DSEE | German Foundation for Commitment and Volunteering (Deutsche Stiftung für Engagement und Ehrenamt) |
| EU | European Union |
| EU-SILC | European Union Statistics on Income and Living Conditions |
| IMF | Innovative Measures for Women in Rural Areas (Innovative Maßnahmen für Frauen im Ländlichen Raum) |
| KDFB | Catholic German Women's Association Berlin (Katholischer Deutscher Frauenbund Berlin) |
| KULAP | Cultural landscape program (Kulturlandschaftsprogramm) |



1. THE NATIONAL CONTEXT

1.1 LIVING IN RURAL AREAS AND RURALITY IN GERMANY

Table 2. Distribution of population in rural and urban areas. Source: Eurostat

| | Rural areas | Towns and suburbs |
|--|-------------|-------------------|
| Distribution of population by degree of urbanisation, dwelling type and income group - EU-SILC survey, Total | 23.0 | 40.4 |
| Unemployment rates by sex, age and degree of urbanisation (%), From 15 to 74 years, Total <i>Percentage</i> | 2.7 | 3.4 |

THE THÜNEN-ATLAS DESCRIBES RURALITY IN GERMANY

Rurality is understood to mean sparse residential development, low settlement density, a high proportion of agricultural and forestry land as well as peripheral locations to large centres and a low number of inhabitants in the surrounding area. The spectrum ranges from very sparsely populated peripheral areas (extremely rural) to high-density metropolitan centres (hardly rural). Rural areas are differentiated from non-rural areas at the level of district regions. To illustrate the diversity within the rural district regions, the map shows the degree of rurality at the municipal level.

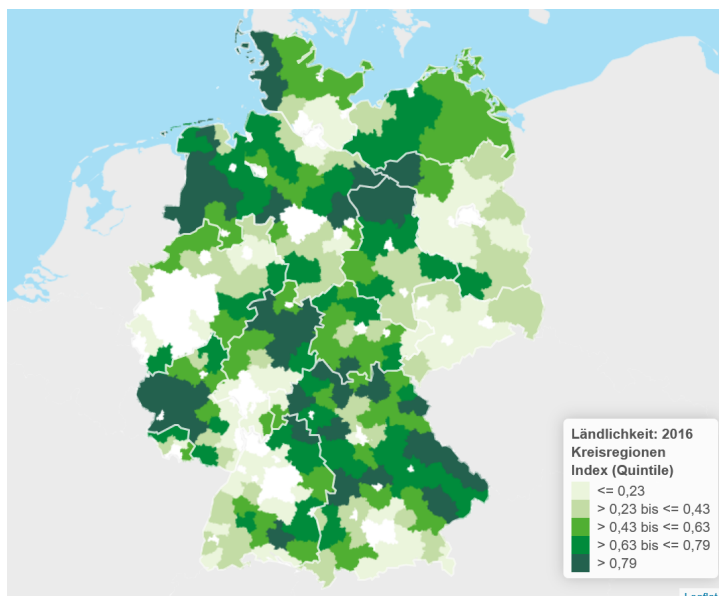


Figure 1. Rurality in Germany (Index per county in 2016). Source: Thünen Institute 2023.

DEFINITION

Five indicators are linked to form an index using a statistical procedure to determine ruralness: - settlement density 2013, - share of agricultural and forestry land in the total



area 2013, - share of detached and semi-detached houses in all residential buildings 2013, - regional population potential 2011 (sum of the population in a 50 km radius projected on the 1 km grid of Eurostat with weighting decreasing proportionally with the airline distance) and - accessibility of large centres (sum of the population of the next five regional centres in Germany or functional urban centres abroad weighted proportionally with the road distance according to the Federal Institute for Research on Building, Urban Affairs and Spatial Development [data as of 2014/2015]). Rurality tends to be more pronounced the lower the settlement density, the higher the proportion of agricultural and forestry land, the higher the proportion of detached and semi-detached houses, the lower the population potential and the poorer the accessibility of large centres.

UNEMPLOYMENT RATE

The unemployment rate is shown here as the proportion of registered unemployed in the total civilian labour force (all civilian employed and unemployed persons added together).

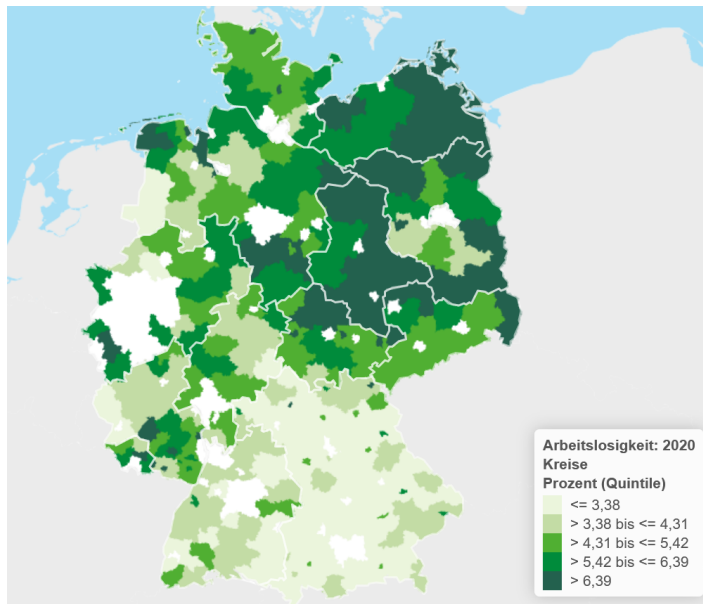


Figure 2. Unemployment rate in percent per county in 2020. Source: Thünen Institut 2023.

DEFINITION

Persons are considered unemployed if they are not employed for 15 hours or more per week are seeking employment subject to compulsory insurance for at least 15 hours per week and have personally registered as unemployed with the employment agency or a job centre. Pupils, students, and participants in active labour market policy measures are not considered unemployed. The civilian labour force includes all dependent civilian employees, the self-employed and contributing family members as well as the registered



unemployed. The non-civilian labour force includes, for example, soldiers. (Calculation: (unemployed / all civilian labour force) x 100).

EMPLOYEES AT THE PLACE OF RESIDENCE WITH AN ACADEMIC DEGREE

Employees at the place of residence with an academic degree are defined here as employees subject to social insurance contributions who have graduated from a university of applied sciences, college or university with an academic degree. The map shows at the district level the proportion of employees subject to social insurance contributions at the place of residence with an academic degree concerning all employees subject to social insurance contributions at the place of residence.

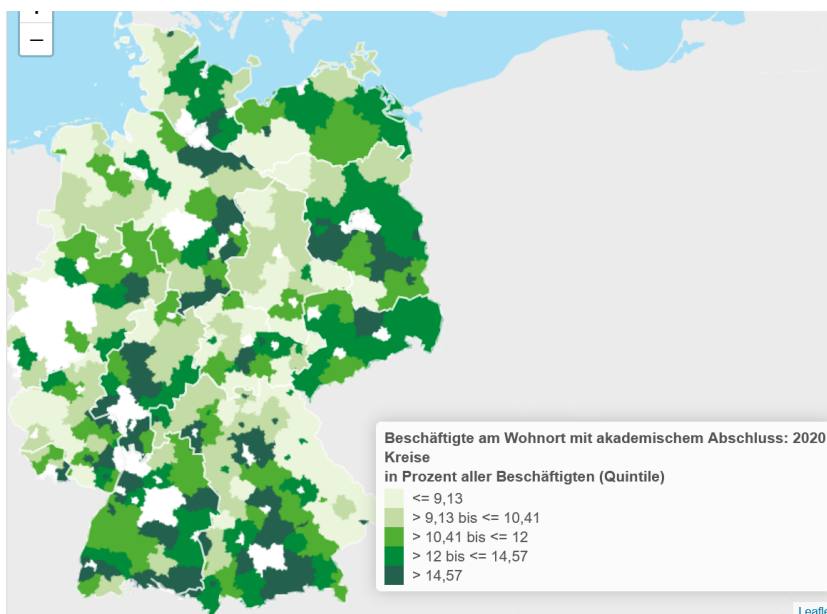


Figure 3. Working population with academic degree per county in per cent of the working population. Source: Thünen Institut 2023.

DEFINITION

The proportion of employees subject to social security contributions at the place of residence with an academic degree (including Bachelor's, Diploma, Magister, Master's, state examination, doctorate) according to the 2010 Classification of Occupations (developed by the German Employment Agency). Employees subject to social security contributions are blue-collar workers, white-collar workers and persons in vocational training who are compulsorily insured under the statutory pension, health and/or unemployment insurance schemes. This does not include civil servants, the self-employed, family workers or marginally employed persons. In total, only around 75% of all employed persons are included. Despite this restriction, employees subject to social insurance contributions are used as a measure of the jobs available on the labour market. (Employment date 30 June 2020; Calculation: employees subject to social



insurance contributions at the place of residence with an academic degree/employees subject to social insurance contributions at the place of residence) x 100).

1.2 MOST IMPORTANT NETWORKS OF RURAL WOMEN IN GERMANY

Deutscher LandFrauenverband (German Rural Women's Association) ~ 450.000 members.

The goal of the German Rural Women's Association (DLV) is more justice and equal opportunities for women who live in rural areas. This includes recognizing and acknowledging the achievements and equal participation of rural women in work and family, in society and politics, in education, business and culture.

Die Landfrauenvereinigung des Katholischen Deutschen Frauenbunds ~ 145.000 members.

We stand up for women! This conviction was and still is the foundation of the KDfB, which was founded by courageous Catholic women in Cologne in 1903. Today, around 145,000 members are active nationwide in 1,500 branch associations and 21 dioceses. They play an active role in shaping politics, society and the church. Our commitment is characterized by lively solidarity and democratic structures. We are a large association with a history that we are proud of.

Unternehmerinnen-Ausschuss Deutscher Bauernverband

The German Farmers Association (Deutscher Bauernverband, DBV) has its specialised unit for female entrepreneurs. This is not an independent organisation but a women-specific branch of the national farmers union.
<https://www.bauernverband.de/themendossiers/unternehmerinnen>

1.3 GERMAN DIVISION, REUNIFICATION AND TRANSITION IN EASTERN AREAS

Social studies covering Germany as a whole and comparing differences between geographical locations such as this FLIARA investigation need to take into account the historical phenomenon of the country's division into Western Germany with its market economy system and the German Democratic Republic (GDR) with its socialist system (1949-1990). The country's post-World War II division in East and West ended with the German reunification in 1991.

The economic and social system remained stable for the population in the western Federal States but changed dramatically with a major transition required for the communities in rural and urban areas in the Eastern part of Germany, covering the Federal States of Mecklenburg-Pomerania, Brandenburg, Saxony-Anhalt, Thuringia, and Saxony. The fast transition of the economic system affected all areas of life. All families, professions and local communities in the eastern areas were – although in very different ways – strongly affected.



Although more than thirty years have passed since the Iron Curtain fell, economic, structural and social differences are still more or less obvious. These differences result from distinct cultural and individual development pathways. If and in how far eastern or western socialisation of individuals drove the emergence and the characteristics of entrepreneurial spirit or the willingness to take responsibility for common interests on the local level has been discussed at many kitchen tables. However, systematic analyses, in particular related to rural innovation processes, are not at hand.

The availability of childcare for youngsters below three years is maybe the only measurable criterion for systematic differences affecting female-led innovation (see Rural WP3 report for Germany). However, robust scientific analysis is missing, which studied other effects such as the impact of the former socialist role model of working mothers and female students in engineering or other technical professions and the emergence of female-led innovation. Moreover, the potential long-term effects of lacking competitiveness-based training, strictly regulated access to universities until the end of the eighties, and the absence of tacit knowledge among daughters from entrepreneurial families were not investigated systematically. Hypotheses related to these aspects are widely spread, but scientific literature is not available apart from impressing individual examples.

2. THE INNOVATIONS

2.1 OVERVIEW OF THE SELECTED CASES

The following section introduces the selected innovations. First, [Table 3](#) provides information on the key characteristics of the innovators and the related businesses. These characteristics include the interviewees' age class and educational level, and it provides the legal form and the year in which the business was established. Moreover, it allows insights into regional aspects, both, where the project is located and where the interviewee has been brought up.

The majority of the businesses are sole proprietorships and there are several registered associations.

Table 2 shows that three out of ten innovations are located in the Eastern part of Germany. Only one person was also socialized and brought up in the Eastern part. The respondents range from 30 to 70 years with a majority of women in the age group 30 - 40 years. Six out of ten respondents have a university degree and three without a degree have done a Meister craftsman training. Eight out of ten of the innovators grew up in a rural context out of which three grew up on a farm.

Two of the interviewed women were interviewed in their role representing a support programme. They are not the innovators of the programme itself, but employed representatives. Therefore, comparability with the other innovators is limited. One of the two is a LEADER initiative offered by the Federal Ministry for Agriculture in the State of Baden-Württemberg. This support measure is part of CAP funding. The other is called



the ‘Municipal Action Programme’, which is funded by the National Ministry for Family, Senior, Women and Youth.

Table 3. Personal and innovation-related characteristics of the interviewees

| Innovation | Interview Code | Age | Educational Level | Legal form of the business/enterprises | Project start | Project location (East-West) | Socialisation of innovator (East-West) |
|---|-------------------|-------|--|--|---------------|------------------------------|--|
| Farm production and direct marketing of self-made products | DE_R_E_1/Int.1 | 50-60 | Vocational Qualification | Sole proprietorship | 2013 | West | West |
| Seed multiplier for the preservation of biodiversity | DE_R_E_2/Int.2 | 60-70 | PhD | Registered association | 1994 | East | West |
| Rooms and vacation apartments on the farm with direct marketing of food from own production | DE_R_E_3/Int.3 | 60-70 | Vocational Qualification & Meister Craftsman | Sole proprietorship | 2003 | West | West |
| Community Supported Agriculture (CSA) | DE_R_S_1/Int.4 | 50-60 | University Degree Confectioner | Registered association | 2014 | East | West |
| Carpenter business combined with political activism for maternal leave support | DE_R_S_2/Int.5 | 30-40 | Vocational Qualification & Meister Carpenter | Registered association | 2022 | West | West |
| Mobile Women Advisory Service for women affected by violence and their children | DE_R_S_3/Int.6 | 30-40 | University Degree Business | Registered association | 2021 | West | West |
| Innovative Funding Instrument | DE_R_E_C_1/Int.7 | 40-50 | Housekeeping and Food Science PhD | Governmental | 2006 | West | West |
| Mobile product finishing for confectionery food items | DE_R_E_C_2/Int.8 | 30-40 | Vocational Qualification & Meister Craftsman | Sole proprietorship | 2021 | West | West |
| Low-stress stockmanship training | DE_R_E_C_3/Int.9 | 30-40 | Agri-food Management Master Degree | Sole proprietorship | 2012 | East | East |
| DLV action alliance “Women in the community” | DE_R_E_C_4/Int.10 | 40-50 | University Degree | Registered association | 2022 | Nationwide | West |

2.2 AREA-SPECIFIC SELECTION

To better understand the context, Table 3 also provides an overview of the locational attributes. It considers the specific historical and social context of location, be it either in the eastern or the western region of Germany. While the classification of areas and innovation types for the 10 interviews was a result of the FLIARA case study selection process (Task 3.1), the distinction between Eastern and Western Germany is crucial as it highlights the influence of differing socialisation and the unique societal and political environments in these two parts of Germany.



This dimension is particularly significant for the eastern regions of Germany. After the fall of the Berlin Wall in 1989 and the reunification of East and West Germany in 1990, the eastern Federal States (Bundesländer) had to face substantial political, economic, and social changes. The transition from a centrally planned economy to a market-oriented economy brought numerous substantial challenges as well as opportunities (e.g. privatisation of state-owned enterprises and the restructuring of the agricultural sector). This transformation period also brought significant demographic and social changes, including unemployment, migration, decreasing population density, and changes in village structures. The eastern regions, therefore, have a unique environment for innovations and business developments.

RELEVANCE OF LOCATION AND REMOTENESS

The remoteness of the location plays a role because marketing and infrastructure play a role. Although foci are on tourism, self-sufficiency for the village on an island is relevant. For some of the interviewees, the quality of life in rural areas was a reason to move or stay in remote areas. The rural location can also be a particular motivation for initiatives that lack the common urban services such as protected spaces for women etc.

However, in locations close to urban areas including most of the villages, there is no correlation between motivation and area and type of innovation.

Infrastructure such as access to schools, doctors, internet etc. plays a role on islands or other very remote areas. However, it does not affect the innovativeness of the interviewees systematically. Moreover, several of the interviewees represent programmes or initiatives that are only locally embedded.

Concerning the sustainability dimension, it is hard to identify patterns here. However, there tend to be effects based on locality. Innovations in remote rural areas face challenges such as lacking transportation and insufficient basic services. Informal social support structures are highly valued.

Innovations located close to the city seem to benefit from proximity to urban centres such as Berlin (DE_R_E_2/Int.2) due to market access and educational opportunities. However, even infrastructure challenges like access to broadband and healthcare are being observed.

In rural villages, Germany maintains in some parts quite basic local amenities and services, but mobility remains still an issue. Interestingly, economic challenges include gentrification and limited business diversity, emphasising the need for innovative community support systems.



3. INNOVATION PATHWAYS

3.1 MOTIVATORS FOR INNOVATION

The following section reflects on personal motivation (and shows that socialisation and family tradition do play a role to some extent. This combines with the necessity to utilise economic opportunities. Social values and idealism also play a significant role, i.e. a motivation for an undertaking that addresses particular problems or obstacles. Some of the innovations aim to improve or contribute to social infrastructure and diversity or to create solutions for environmental problems. We wanted to figure out, what personal motivation led to the innovation and what were the other drivers.

Typical for rural areas is the requirement to be self-organised. Rural socialisation might enhance self-management and stand up for individual needs because the realisation of her ideas in villages fosters the emergence of perseverance for particular needs.

A re-occurring element between the women is a certain degree of idealism. For instance, a sense of community or social issues may foster social idealism or solidarity. At the same time, idealism can fuel passion and a deep feeling of commitment that helps to overcome the inevitable challenges and setbacks associated with founding a business or other undertakings.

For several interviewees, the individual social context played a role in the character of idealism. Family values were important but not specifically linked or emerging from farming traditions. However, coming from a rural area tends to have a different image than coming from an urban area and might also contribute to becoming a driver for innovation (social compensation). Therefore, idealism is an important motivator.

Requesting the underlying causes or special events, such as milestones along the way as motivators have not provoked relevant answers from our respondents. The interviewees have rather mentioned multiple smaller incidences or challenges that made them learn to improve the procedure or forced them to adapt the approach. Also, success or inspiring feedback gave the confidence to continue with the activity.

3.2 CONSTRAINTS AND FAVOURABLE CONDITIONS

This section deals with constraints and favourable conditions, i.e. what facilitated the innovation and what were the obstacles (e.g. lack of money, land or knowledge, family, gender, family resistance etc.)

The horizontal analysis of the interview keywords shows a dominant pattern among the interviewed women. Lack of funds was mentioned to be the most inhibiting factor along with networks being most facilitative.

The term networking includes good connections and relationships with different persons and organisations, social competencies and the capacity to benefit from these relationships. Various sources were named for the area of financing. Public funds (EU co-financing, federal or state funds), for example, play a major role in the financing of



social projects but also inform innovation funding or agricultural funding programmes. Other innovations are based wholly or partly on private funds such as membership fees or income from product sales. Bank loans or private assets were used for investment measures.

Bureaucracy was also mentioned to be an important inhibitor of innovations. Bureaucracy refers to several bureaucratic challenges such as construction, food safety or applications at authorities. Driving innovation forward does not happen out of routine, so many women were confronted with completely new questions regarding rules and regulations. At the same time, consultancy or general advice is often not available, as the questions are mostly too specific or new. Often, challenges of innovation processes cannot be solved through common or well-known solutions or already established processes in administration. Rather it is a new field, and each step needs to be explored and often legal grey zones are covered. High levels of passion and motivation were required to be able to address bureaucratic impediments directly or to develop sufficient personal competencies to overcome those.

One organisation, which deals with the topic of domestic violence, encountered lacking political will to support the women-led rural initiative, which resulted in specific hurdles.

Only one interviewee perceived the encounter with a banking staff to be neglected during a meeting or an application process. The other interviewees have not been triggered by the question of potential systematic discrimination.

In general, we were not able to identify locational or other case-specific patterns.

3.3 IDEA AND PREPARATIONS/DECISIONS AND PREPARATORY ACTIVITIES

In this section, the analysis takes a look at preparatory activities such as the question of how funds were mobilised or how networks or personal competencies were built to succeed in the innovation process.

Building expertise emerges as a general pattern among respondents. Expertise, as delineated above is required to access public funding or develop an understanding of relevant rules and regulations (above referred to as bureaucracy). Also, technical skills and competencies were mentioned to be important. Therefore, building knowledge is of key relevance. As related to an innovation, existing knowledge was often not available.

Two of the interviewees entered their field of innovative interest without any formal training in the area of innovative activity. In these cases, expertise in the professional area was lacking and had to be covered at the same time as the specific innovation-related knowledge. The phenomenon of being a lateral entrant (career transition - entering the field without formal training; see also sub-chapter 5.3) is relevant and closely related to idealism as mentioned above. Some lateral entrants believe in the success, which insiders in the profession might not have dared to start.



3.4 CONCRETISATION OF INNOVATIONS

This section focuses on the effects, which the implementation of the innovation has had such as the creation of new jobs, more animal welfare, etc.

The creation of one or several jobs was mentioned. Moreover, the awareness raising for environmental concerns such as nature conservation and climate change. A few cases aim at changing the social context for women explicitly such as maternity leave (DE_R_S_2/Int.5), protection from violence (DE_R_S_3/Int.6), etc.

Moreover, raising awareness and the enhancement of social interaction and political engagement could be observed. However, there were no patterns concerning locality or the dimensions of sustainability.

3.5 IMPACTS OF INNOVATIONS

Concerning the impacts of innovations on the places where they were introduced (e.g. gender equality or rural development), most of the respondents mentioned that their endeavour was able to foster more social interaction within the community or beyond. Moreover, some of the interviewees stated that their commitment to the community led to higher levels of awareness, in particular about environment and climate change (e.g. DE_R_S_1/Int.4, DE_R_E_3/Int.3, DE_R_EC_3/Int.9, DE_R_E_2/Int.2). Interestingly, this statement was raised independently of the innovations' sustainability dimension.

In another step, the interviewees described the character of their innovation: Gentle adjustment, comprehensive, radical, or disruptive.

Those that aimed at affecting the society and the policy, claimed their innovation as being radical. Others who did not aim for societal change had problems answering the question. The degree of change was not relevant to them and therefore, did not pay much attention to this (DE_R_S_1/Int.4, DE_R_E_2/Int.2, DE_R_EC_2/Int.8, DE_R_EC_3/Int.9, DE_R_E_3/Int.3). From the outside, the effects of these innovations might look differently (more substantial) than perceived by the interviewees. However, this detail had no relevance in the questionnaire.

Changing the attitudes towards women's challenges in society was of particular importance for DE_R_EC_[]/Int.10, DE_R_EC_1/Int.7, DE_R_S_2/Int.5, DE_R_S_3/Int.6.

4. INNOVATION ECOSYSTEMS

4.1 POLITICAL

Concerning motivations, opportunities, and challenges for women entrepreneurs in rural settings, political decisions seem to play a critical role from an outside perspective. But how does it look on the ground, did they receive support through government policies or local institutions?



This sample includes four women entrepreneurs in rural settings (DE_R_E_1/Int.1, DE_R_E_3/Int.3, DE_R_EC_2/Int.8, DE_R_EC_3/Int.9). Two of them depend on tourism and therefore rely on support programmes that strengthen rural tourism and local infrastructure. The political decisions did not affect the innovations of the four women entrepreneurs. They benefited from some funding, but it was not crucial for their decision-making. However, they all mentioned that the policy framework in terms of cost structure (e.g. energy, transportation, motorway toll) affected their activities substantially.

One of the initiatives with social engagement did not receive any support because politicians were not convinced this project was needed (and wanted). The organic (and ancient) seeds association received support from regional programmes, but this funding was not substantial for the initiation and realisation of the project. The two programmes (DE_R_EC_1/Int.7, DE_R_EC_[]/Int.10) fully depend on financial support. They administer funds. Women can register for coaching, training, or mentoring when working on their projects and initiatives.

COVID measures were also based on political decisions. These affected the initiatives of the women.

4.2 ECONOMIC

From an economic perspective, women in our sample show a very diverse picture of funding, financial incentives and by what means they were supported. Access to funds was raised as one of the most striking issues among women in this sample. And, although the financial sources were very diverse from bank loans over family support measures up to public funds, most women were able to build up a viable business.

4.3 SOCIAL

Social factors such as cultural norms, gender roles, community support, and social networks tend to influence motivations and challenges faced by women.

The first category of gender stereotypes was surprisingly less relevant for most women in our rural sample. A majority of the interviewed women did not mention any of such problems. Only one woman had to face explicit discrimination from a bank manager who ignored her role as an innovator in her project. He assumed her husband to be the initiator. Another case of ignorance has been mentioned by the woman who engages against gender-based violence in rural areas. She had to deal with an attitude amongst local and regional decision-makers that gender-based violence does not exist in rural areas and therefore does not need to be addressed. Also, positive responses were observed for instance by the female truck driver, which led to very positive and affirmative reactions.

Most women engaged in local or regional networks and half of the women engaged at the community level. Patterns linked to gender stereotypes, or the lack of recognition were not identified among the interviewed women.



4.4 TECHNOLOGICAL

The use or development of new technologies is often closely related to innovations. In our case study, the results are quite diverse, with only a few women creating innovative hardware (DE_R_EC_2/Int.8, DE_R_S_3/Int.6). In both cases, the innovation solves the problem of distance and logistics, in the first case with a mobile advisory service for women and children affected by violence (DE_R_S_3/Int.6). The counselling mobile is an anonymous VW bus, in some cases disguised as handicraft bus with a mobile office inside. It works with changing license plates and lettering on the vehicle and with this mobile service, on-site low-threshold counselling can be offered for women in rural areas, e.g. in supermarket parking lots.

Another innovative hardware is a mobile product finishing for confectionery food items (DE_R_S_3/Int.6). This innovatively created food truck offers food processing facilities in the smallest of spaces, always where they are needed. Raw materials are processed directly where they are produced, e.g. on an eco-farm. It allows for working as a processor with season and availability in close cooperation with the producers.

Both described innovations involve quite a few well-tuned procedural or management innovations, such as e.g., registering for secret advisory services by using fake accounts or the idea itself, to bring the processing of primary food items to the agricultural producer. Overall, management innovations were quite common among the innovative women (7 out of 10).

Interestingly, none of the ten interviewed innovators has developed any software or digital innovation, only one woman runs a climate-friendly, resource-saving guesthouse with an innovative digital approach displaying QR-codes in the apartments to inform e.g. about cloudy toilet water or shower water consumption.

Overall, the interviewed women show remarkable diversity and creativity in their approaches, particularly about practical and logistical challenges in rural areas.

4.5 ENVIRONMENTAL

Also, environmental factors have influenced the type of innovation such as natural resources, climate conditions and environmental sustainability. For six of the ten innovations, environmental aspects play a bit of a role, while the other four innovations do not relate to environmental sustainability at all. This does not mean, that environmental sustainability was not regarded to be important for the women, but the innovation was not having an objective in this regard. This is relevant for example with the two innovative programmes that support women in rural areas (DE_R_EC_1/Int.7, DE_R_EC_[]/Int.10). The other two innovations that do not address environmental sustainability directly engage with a very specific theme – *first*, the woman that engages as a professional carpenter for maternity leave rights for women, and *second*, the mobile advisory service for women affected by violence, both do not relate to any environmental issue.



5. MAINSTREAMING ACTIONS

5.1 SCALING UP

Women were asked whether laws, policies, institutions, or norms have changed or begun to change because of women's innovative actions. Depending on the overarching objective, the innovations affect the system. In particular, the two policy programmes focus on influencing the policy level as well as the maternity leave initiative (DE_R_S_2/Int.5). However, the policy measure of the Federal State of Baden-Württemberg has not been taken over by any other federal state yet.

Moreover, several interviewees highlighted dissemination effects related to their innovations, i.e. replication of ideas takes place to some extent. Therefore, we can confidently state that quite a few innovations in this study show scaling-up effects.

Likewise, quite most women observed the impact of their enterprises through a changed awareness among those who may have been confronted with their innovative ideas. This is the case with an increased awareness towards the environment and climate protection, but also about gender issues and other social-related concerns.

5.2 SCALING OUT

Concerning a potential scaling out, none of the interviewees mentioned any replication or widening of the innovation. Five of the interviewees would do it again. Three women are aiming to expand.

Some of the interviews focused on innovative approaches that aimed for nationwide coverage from the outset such as DE_R_E_2/Int.2, DE_R_S_2/Int.5, DE_R_EC_[]/Int.10, and DE_R_S_3/Int.6 (including neighbouring states).

5.3 SCALING DOWN

Concerning a scaling down of innovations, the examples are very diverse. Particular technical support or training was not needed. Existing networks played a role but did not appear in the foreground. Formal education or advice did not play a major role. However, all interviewees had to be open to learning and digging deeper into the area of expertise. One interviewee highlighted the need to have training in becoming a political activist.

Three women have a Meister Certificate, which lays the foundation for leading a business as a craftswoman.

5.4. SCALING IN

Overall, there has not been any mention of organisations or institutions providing help in explicitly developing women-led innovations. However, one of the dominant challenges /inhibitors mentioned was bureaucratic hurdles. Innovations usually do not happen out of routine. Usually, sufficient knowledge is available about the application for grants and funds, and how to avoid problems with rules and regulations or to solve certain technical



questions, etc. Therefore, it is quite a common understanding that advisory is highly useful and helps to overcome typical hurdles. However, none of such services were mentioned in the interviews.

5.5 SCALING DEEP

Some of the interviewees have referred to effects on the political level, particularly those, which represented an organisation aiming for policy impact. They confirmed to have impact (otherwise their engagement would have been unsuccessful). Some of the innovators stated that their innovation had a dissemination effect.

However, none of the initiatives confirmed far-reaching effects on society, except for the effects of improved awareness among target groups that were oblivious of the rural challenges. For instance, a CSA (DE_R_S_1/Int.4) aims to involve the village community in sustainable food production and allows people to learn about alternatives to conventional agriculture. The climate-friendly guesthouse (DE_R_E_3/Int.3) raises awareness among holiday guests and impresses with innovative possibilities for water and energy saving.

Only one of the initiatives addresses explicitly negative effects emerging from traditional hierarchies (violence against women.)

6. TO CONCLUDE

6.1 AREA TYPES

The distinction between Remote rural areas and areas close to cities worked well. However, the classification of rural villages did not work so well for the selected cases from Germany. One reason refers to the category itself and its applicability for Germany because rural villages are very heterogeneous depending on the Federal State and the geographical characteristics (mountain, population density, distance to urban area etc.). Another reason emerges from the selection process and the replacement of selected persons during the case study work. For that reason, the results for the interviews within the category 'Rural villages' are not substantially different than from those classified 'Close to cities'. This detail needs to be taken into account in the cross-country analyses.

6.2 GEOGRAPHICAL AREA AND COMPARABILITY

Germany is a large country with 16 Federal States. Three of these are city-states, which can be neglected in rural analyses. Some of these states have more population and land (and number of farms) than numerous EU Member States. The selected interviewees from Germany are examples from 7 Federal States (Berlin, Lower Saxony, Mecklenburg-Pomerania, two in the Federal State of Brandenburg, three in Schleswig-Holstein, Hesse and Baden-Wuerttemberg). Natural conditions, infrastructure, advisory, and administrative structure differ substantially. The political context in the Federal States is very different as well. Even when regional policy programmes partly refer to national legislation or co-funding programmes (Gemeinschaftsaufgabe), the implementation on



the regional level and the rules of the managing, granting, and funding authorities can be fundamentally different. Even the National CAP Strategic Plan does not work as a linking programme because the regions have defined their individual support measures according to their regional policy and traditions. For that reason, the comparison between cases under one national context will not work. Accordingly, the comparison between EU Member States needs to take into consideration that the insights from the German case studies emerge from one national context. The differences between regions might be as substantial as between Bavaria and Flanders or Finland and Hessen. On the other side, a comparison between e.g. advisory systems shows that the structures and funding context of Sweden and Brandenburg have more in common than the States of Brandenburg and the neighbouring Lower-Saxony.

6.3 FEMALE STEREOTYPES

Mentioned in the interviews as still to be effective; while the interviewee, who invented the confectionery truck refers to a very positive experience and recognition based on gender stereotypes (“Woman drives a truck and invests”), there have been other voices such as from DE_R_E_3/Int.3, who runs a climate-friendly guesthouse and who experienced ignorance and discrimination.

6.4 CARE WORK

Care work and especially childcare is an issue among female innovators in Germany. One outstanding example is the self-employed carpenter, who downsizes her business and dismisses the employees due to the challenges involved with childcare and running a business. This is the reason why she started a lobby initiative to improve the situation for self-employed women. This issue is also addressed by the IMV programme as part of the LEADER funding in Baden-Wuerttemberg that aims to facilitate the transition from unpaid care work to salaried employment through the support of women-led innovations.

6.5 SUPPORTING FAMILIES AND/OR PARTNERS

Several of the interviewees highlighted the big role of support from their close family and partners. Without this labour, financial and consultation support, they would have not been able to reach their goals. This is not different to men when they have family, houses etc. and perform in their professional life. One difference might be that men highlight less explicitly the role of their closest family, but this would have needed to be studied with a comparable approach as this analysis to allow for conclusions.

6.6 LEVEL OF EDUCATION AND PROFESSIONAL TRAINING

As in the farming report, interviewees in this study show outstanding capacities, which may be related to the selection process, as we have selected the interviewees based on achievement. The level of professional training is impressive. Six out of ten interviewees have a master's degree from the university or even a PhD. Two of the four other practitioners have a Meister certificate. Several of the interviewees have a Meister certificate.



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RURAL WOMEN-LED INNOVATIONS IN IRELAND

CASE STUDY REPORT

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ACRONYMS & ABBREVIATIONS

| | |
|-------------|--|
| DAFM | Department of Agriculture, Food and the Marine |
| DRCD | Department of Rural and Community Development |
| LEO | Local Enterprise Office |
| CSO | Central Statistics Office |
| EU | European Union |



1. THE NATIONAL CONTEXT

The definition of the rural within an Irish context is often based on population levels put forward by the Central Statistics Office (CSO). These include, defining a rural area as any settlement with a population of less than 1,500 persons (CSO, 2019). In addition, the CSO address differences within the rural context by categorising rural areas as either Rural Areas with High Urban Influence, Rural Areas with Moderate Urban Influence or Highly Rural/Remote Areas. According to the CSO, just below 30% of Ireland's population, or roughly 1.5 million people, live in rural areas. An in-depth analysis by O'Driscoll et al. (2022) of population change in rural areas from 2016-2022 illustrates that rural areas, particularly remote and peripheral areas in the midlands and west of Ireland, have been experiencing consistent population loss. This analysis reflects that urban areas have also experienced population loss, demonstrating that the loss of population is not confined to rural areas. However, Irish rural areas surround cities are gaining population.

Rural Ireland has a greater male to female ratio, while the most isolated rural areas have a greater male to female ratio, according to a study on age and gender demographics in rural areas (CSO, 2019). The CSO's most recent age and gender statistics divided by urban and rural areas (2019) showed that the average age was 41.2 years in rural areas, especially remote rural areas. The average age increased in both urban and rural areas; however, the average increase in remote rural areas was more than in any other location, by 1.6 years. Furthermore, the 2019 CSO study found that there was an unequal distribution of genders in rural areas. A high male to female ratio was seen in all types of rural areas; however, the most remote and extremely rural areas had the greatest male to female ratio, with a sex ratio of 98.5, among the 25–44 age group.

In terms of employment, rural areas have lower participation rates, ranging from 54.9% to 64%, with remote rural areas having the lowest percentage. This is according to the most recent rural breakdown of the CSL Labour Force Survey (CSO, 2019). Despite lower participation rates, a sizable portion of the population are self-employed in rural areas, there are 170,300 self-employed workers, compared to 153,400 in urban areas. This shows that even if participation rates in rural areas may be lower overall, self-employment is important for maintaining livelihoods and stimulating the local economy in these locations.

1.1 TYPOLOGY CONTEXT

The FLIARA Project uses three different typologies of rural areas, namely remote rural areas, rural village, and rural areas close to a city. This typology is relevant within an Irish context and highlights the diversity that exists in rural Ireland.

Remote rural areas in Ireland are often defined by their distance from an urban centre and in turn characterised by their low population densities. Remote regions are typically situated in remote, hard to reach countryside, or along the Irish coastline. Infrastructure is often limited, including services such as healthcare, education, and employment opportunities. Rural villages are considered smaller community areas in close proximity.



Although services and facilities can be in decline, rural villages would still consist of retail services, social services, and enhanced supportive neighbourhoods. Rural areas closer to a city in Ireland tend to be within commuting distance of major cities and frequently enjoy additional services and facilities available within a nearby city. As a result, transport, community dynamics, services and facilities tend to be of a higher standard, while populations still enjoy a rural location.

1.2 RURAL TYPOLOGY ISSUES

Ireland does not have a formal definition of what rural is, although as outlined in 1.1 above, the CSO provide a statistical explanation. As with any numerical classification, however, it fails to explain or catalogue the essence of the place or the people. This perception becomes relevant when examining rural Ireland, highlighting an enhanced recognition of the diversity of the rural landscape and the people, even though the country has a relatively compact land area. The FLIARA project used a rural typology based on 1) a rural area close to a large town or city, 2) a rural village and 3) a remote rural area. Within an Irish context these typologies often yield distinct scenarios. In particular, the economic viability and population density of a region can change dramatically in relation to its proximity to an urban centre. Cattaneo et al. (2022) suggest that the economic and social development of a country or region can often depend on its population's proximity to services and employment opportunities. In considering the above, half of the women interviewed for this case study were situated in a rural region close to a large town or city, while four women were in a rural village and only one woman considered herself to be in a remote rural location. In general terms, most if not all women had issues relating to the rural typology, ranging from broadband issues to transport. Most of the women situated nearer to the larger town or city, had relatively good broadband or felt it had improved in recent years, especially since the Irish Governments, Rural Broadband Scheme, however, some women were still having issues, which do impact their business. Phone service was also an issue for some women, with poor coverage impacting their business. One interviewee living in a rural village stated, *"The network availability for phone coverage for phone calls is terrible. So right now, I can't get any phone calls right here at the moment which is a disaster for business if someone is calling. The only way they can call me now when I'm in the building here is by WhatsApp if I'm connected to WIFI. So that's the biggest thing the infrastructure, phone calls, broadband services"* (Interviewee 7). Public transport was an issue for about a third of the women, impacting on tourism potential and staffing levels. These issues were more prominent in the remote rural area or within the rural village, where the issue of the 'first and the last mile' impacts rural people. One woman situated in a rural village location identified a higher level of issues around services and facilities, especially public transport. She stated that, *"We have no bus connection, so we have no public transport in our village, another bone of contention that we're fighting for the whole time. Our next village is about six miles away so the bus to get into any sort of city we'd have to travel six miles to get the nearest bus – so we've no public transport"* (Interviewee, 4). In general terms, although it was evident that services and facilities were comparably limited compared to what could be found in larger Irish towns or cities, these issues did



not prevent the women interviewed from either establishing their businesses or initiating their innovation. All felt that such issues were surmountable.

2. THE INNOVATION

The innovations represented in this study embody the work of ten rural women. These ranged from social enterprises, craft businesses, food production, training and education and tourism initiatives. The variety reflects the results of previous research which suggests that rural women engage in a variety of enterprises within and beyond the farmyard' (Ní Fhlatharta and Farrell, 2017:17). In relation to rural typology, five women were situated in a rural setting close to a city, four in a rural village and one woman in a remote rural location. The women's ages ranged from mid-thirties to one woman in her early seventies, but most women are in their early to mid-forties. One business was established in 1999, one in 2005, but all the other eight business were set up within the last ten years. There was an even spread in relation to the sustainable dimensions of all innovations, with three enterprises identifying as economic, two as environmental, four as social and one as cultural. Delving deeper into the issue of sustainable dimensions however, most if not all women felt that their business or enterprise had several dimensions with many suggesting they had an economic as well as a social or environmental dimension, while some women also felt they represented cultural aspects of rural society. For example, one woman, concentrating on the craft industry, utilising willow trees, felt her innovation has a strong environmental and cultural element, yet, she also feels she is in business for financial gain, *"I suppose in terms of my business, it's probably perceived to be a cultural success, but you know, I'm bringing hundreds of people like from an economic perspective into the country every year"* (Interviewee 9). This pattern of women connecting to a variety of sustainable dimensions was repeated on several occasions throughout the interview process. The difference was evident however, when interviewing women leading a social enterprise, with all women adamant their innovation revolved very much around a social dimension. One social entrepreneur suggested, *"It was going to be me coming up with products, so I could sell it into homes to get the message into homes and into classrooms. But as the innovation began to develop the idea changed and became very much a social Enterprise. You know I was all about the impact over the income"* (Interviewee, 10).

Seven of the ten Irish women interviewed had third level qualifications with six of these seven reaching a master's level qualification, while three women had second level education. All women however had engaged in additional short courses, training, and education to either enhance their knowledge around their particular business/enterprise or just to advance their own education. In relation to the legal form of the business or enterprise the women were leading, six of the women stated they had a company established around their business or enterprise, two were social enterprises and one identified as a sole trader, while one woman failed to identify the legal form of her enterprise.

The following table represents the ten women interviewed in Ireland regarding their rural businesses or enterprises.



Table 1. Rural Women-Led Innovations

| N. Interview | Age | Educationa l Level | Legal form of the business/enterprises | Year when it started | Typology | Sustainable Dimension |
|-----------------|-----|-----------------------|---|----------------------------|--------------------------------------|--------------------------|
| IE_R_EC_2/int.1 | 40s | 3 rd Level | Company | 2018 | Rural area Close to a City | Economic |
| IE_R_E_3/int.2 | 60s | 2 nd Level | Sole Trader | 2005 | Rural Village | Environment |
| IE_R_E_2/int.3 | 40s | 3 rd Level | N/A | 2018 | Rural Area Close to a City | Environment |
| IE_R_S_3/int.4 | 40s | 2 nd Level | Social Enterprise | 2019 | Rural Village | Social |
| IE_R_S_3/int.5 | 40 | 3 rd Level | Company | 2020 | Rural Village | Social |
| IE_R_S_2/int.6 | 70s | 2 nd Level | Social Enterprise | 1999 | Rural Area Close to a City | Social |
| IE_R_E_2/int.7 | 40s | 3 rd Level | Company | 2013 | Rural Areas Close to a City | Economic |
| IE_R_EC_2/int.8 | 40s | 3 rd Level | Company | 2020 | Rural Area Close to a City | Economic |
| IE_U_E_1/int.9 | 50s | 3 rd Level | Company | 2020 | Remote Rural Area | Cultural |
| IE_R_S_3/int.10 | 30s | 3 rd Level | Company | 2015 | Rural Village | Social |

IE = Ireland; R = Rural Innovation; EN – Environmental Sustainability; S =Social Sustainability; EC = Economic Sustainability; C=Cultural Sustainability. 1 = Remote Rural Area; 2 = Rural Location Close to a City; 3 = Rural Village. Number = Interviewee Number.

3. INNOVATION PATHWAYS

3.1 MOTIVATORS FOR INNOVATION

LIFE STAGE AND PASSION

Most of the women interviewed were in their forties, with three over fifty and one in her mid-thirties. Previous research has shown that rural women undertake or lead innovative



rural practices for a variety of reasons, ranging from financial stability to a quality-of-life issue. The women engaged in this case study also had an array of motives for starting either an enterprise or innovation, however, a common thread amongst most, if not all women was their passion for the specific field they pursued. All women interviewed, even those women engaged in social enterprises for example felt a strong need to tackle a key social issue in their community, from a widespread concern for older community care to issues of farm safety. One woman engaged in establishing a network for women in agriculture stated, *“There are certain characteristics of females in a traditional male world, and I just wanted to move beyond those kind of ways of engaging and stereotypes and bring confidence to women”* (Interviewee 3). Another woman who established a social enterprise around farm safety stated, *“It was the death of two young children that came in on a news alert and I went oh my God and I said, we need to take farm safety far more seriously”*(Interviewee, 10). Another woman was motivated by her passion to assist and help careers needed to seek employment, *“We would be considered what we call a social enterprise because it’s solving a social problem – it’s not just about employment, it’s about the mental health of family carers as well”* (Interviewee 4). Some women also suggested that they were at a stage in their lives when they felt they had a level of maturity, which was needed for starting a business, with one woman, stating, *“I think it’s just kind of having that level of maturity to kind of chance it as well you know”* (Interviewee 4).

Other women who established a business or enterprise were more committed to environmental issues, driven by a passion for climate action and environmental protection. As a result, they established an enterprise or business that reflected these concerns, aligning their innovative ideas with their values. Some on the other hand, while needing employment, also shouldered the responsibilities of being the primary caregiver in the family. For them, finding employment within the rural context was essential and allowed them to navigate family matters while pursuing their passion in a balanced manner. In some cases, the motivating factors were employment and establishing a business around this, but again, the type of innovation was never ‘arbitrary’ but always motivated by a passion or interest in a particular area of interest or expertise. Additionally, the rural context was important to some who felt that Covid had thought them to ‘slow’ the pace of their lives and enjoy what rural and remote working could offer. One innovative woman stated, *“Maybe I can work from home now, maybe I don’t have to go back and that’s exactly what happened”* (Interviewee 7).

ASPIRATIONS AND FILLING A NEED

All women spoke of their aspirations around their innovation, some with the hope that they would make money, but only enough to maintain their business and lifestyle, but others, again especially those engaged in social enterprises, were adamant that their aspirations were never around making money. One woman stated, *“No, it was never ever destined to make money. It was always the idea that enough money would be made to pay the bills and keep the company afloat”* (Interviewee 1). Another woman has a similar idea about financial aspirations, saying, *“It wasn’t financial because I had no idea*



where it was going to go. I suppose it was just kind of you know really enjoying it and just maybe at a stable enough stage in our family life that I could chance it for a year or two” (Interviewee, 4). Most women expressed a desire to contribute to their local communities, to improve it in some way, both sustainably and environmentally, while also aiming to create employment. Consequently, their aspirations were deeply personal, often driven by their passion and innovative ideas. At the same time, most women also hold broader aspirations, aspiring for recognition and success.

When asked if their innovations fulfilled a specific need within their rural community, every single interviewee was adamant that their business, enterprise, or innovation satisfied a variety of needs within their community and beyond. This included education, particularly the pressing need for cyber safety education, support for family caregivers, the revival of traditional skills, community engagement and social connections and gender equality and visibility for women in agriculture. These innovations represent a broad spectrum of community needs within a rural context, and how these women address these gaps. Their actions in turn underscore a deep understanding of the dynamics within their community and their commitment to providing impactful solutions. One women entrepreneur was adamant her craft business, not only fulfilled a financial need for her family personally, but it also filled a social and cultural need around craft revival, particularly amongst young children and teenagers, she stated, *“I do think it fulfills a need in that there’s a huge sense of realization that no more than primary school kids that we’ve become very far removed from using our hands and kind of that connection with how things were done. And there’s a massive interest in people wanting to just kind of get back to basics a little bit. There’s that kind of sense of you know heritage and ancestry and people just want to indulge in that”* (Interviewee, 9).

3.2 CONSTRAINS AND FAVOURABLE CONDITIONS

PERSONAL CONSTRAINS

Rural face additional challenges to the female counterparts in urban areas because of a greater lack of services, facilities, and a limited access to markets. These constraints are well documents in academic material and increasingly in public policy. Within the context of this Irish case study, from a personal perspective, the women interviewed did face challenges and constrains, which included access to finance, time management and work-life balance, self-confidence, and perception issues. Access to finance was a key issue identified by all but two of the interviewees. This finding is similar to previous research in this area, which found that most women had considerable difficulty in accessing finance, often encountering reluctance from banks and other financial institutions to either start or expand their business (Fletscher and Kenny, 2014; Ní Fhlatharta and Farrell, 2017). What was slightly different in this research is that most women interviewed did not even approach the bank as they felt they would not get a positive response, *“No, I was just reluctant to even approach them, never mind make an application”* (Interviewee 10). Two women who had a long-term association with the bank, dealing for previous businesses, however had no issues accessing finance, *“No there was no issues at all. I’ve always found the banks very receptive to a woman. Not*



a problem at all” (Interviewee 3). Another woman had a positive attitude towards banks due to a *“long association, a profitable business and security”* (Interviewee7). Both women did however seem to be the exception rather than the norm, with most women finding it difficult to secure funds to start or expand their business.

Time-management and work-life balance was another constrain that most women faced while starting or advancing their innovations. Balancing family duties was a common struggle amongst many women innovators, with one woman pointing out that women still have the responsibilities of looking after the children and the home, although most women agreed that men nowadays help a lot more than in their parents’ time. One woman interviewed stated, *“You see women we have too much going on. Like I have a child, I have my husband. So, with all the will in the world we still have our homes to mind. I’ve the washing on. I need to put it out on the line when I get home. What are we having for dinner. My child needs to be collected at this time. And the men don’t have that. I’m not saying it’s a bad thing. I love my role, but we’re stretched you know”* (Interviewee, 1). Most women also struggled with balancing business commitments with material responsibilities and having to choose between family and professional ambitions. One woman felt that you can limit yourself in your business due to family commitments, but most women who raised this issue were happy to put family first and then consider the progression of the business.

Self-Confidence and perception issues also featured regularly within the interviews with many women suffering from huge self-doubt. Interviewees spoke about ‘Imposter Syndrome’, which prevented them from believing not only in their position as an entrepreneur or businesswomen, but also in their ability to advance the business. This issue was reiterated by one woman, who spoke of a need to encourage confidence and solidarity amongst women and provide opportunities for women to advocate for each other and support each other in their own successes. She also suggested that overcoming imposter syndrome required specific skills, suggesting these include goal setting, networking, and seeking support from family, friends, and mentors. This support from family was reiterated regularly by most if not all women. Several women also spoke about perceptions regarding women in rural business and it was normal to see men engaged in business or rural innovations, but not women. One woman stated, *“Even the belief that I’m talking about that a business model that can be applied across countries - I was thinking God if I was to go for a bank loan for this what if it doesn’t work out and all these what ifs. Even sometimes it’s like well what if it does work and I’m not able to be the leader”* (Interviewee 4). Several of the interviewees also suggested they suffered from imposter syndrome as they were establishing their business, but some also felt that over time, they became stronger and were more able to deal with difficult situations as their confidence grew. On woman stated, *“I suppose I have become much stronger. I have become more resilient, less tolerant, and that is basically because I’ve actually had to. I’ve had to kind of change and tweak my own personality quite a bit. And again, it comes down to that whole self-valuation thing you know. It really has”* (Interviewee, 10).



CONTEXT CONSTRAINTS

Similar to personal constraints, the interviewees also spoke of context constraints, which included broadband issues, transport issues, skills and knowledge gaps and government support and policy. Broadband was previously discussed in 3.1.1, but just to reiterate most if not all women have broadband issues and although they have improved, they still cause issues around the advancement of business. Although the Irish rural broadband scheme has improved the broadband services, some women still spoke about issues around broadband services only coming to the 'head of their road' rather than directly to their house. All suggested that since the Covid pandemic, there are greater opportunities to sell their produce and advertise their businesses online, so having good broadband is essential. Those who had improved broadband services in recent years were very quick to highlight the difference it has made to their business. For example, one woman stated, *"I finally got broadband about almost two years ago and the difference it has made has been phenomenal"* (Interviewee, 2).

Issues around rural transport was also identified by some women, who felt it wasn't a personal issue for them, but it was if they depended on tourists or customers, who required public transport.

Skills and knowledge gaps were alluded to by several women, who cited a lack of technological proficiency or understanding in areas like finance, technology, and marketing as significant obstacles. One woman alluded to difficulties associated with gaining proficiency for website development and app management, when it came to promoting their business or innovation. Many women were confident in their area of business but found considerable difficulties in surmounting the paperwork or promotion side of business.

Others also spoke of the challenges in understanding taxation and navigating government bureaucracy for business support. Another woman identified transport as an issue for her, in relation to her family and children in particular. She explained her public transport issues, *"There's been many times when I need to get my children from A to B, but I need to do something for my business and I can't be in two places at once. Whereas if my children had a bus to be able to get from A to B to C, I'd let them off on the bus to get to it rather than having to drive them. There's not even a taxi driver in our village. So public transport, that I'd be able to be in one place, rather than trying to move meetings around"* (Interviewee, 4).

Government support and policy was also alluded to by some women as a challenge. Many felt there was a lack of direct support for women in business, especially in rural areas and for small business in general. The absence of targeted assistance was alluded to by some women and although many felt that there were 'soft skills' provided, such as training and skills development, many needed direct financial assistance as start-ups or VAT considerations. One woman suggested, *"It was a steppingstone for them into a government department rather than promoting the industry. They don't and they're not willing to listen, you know they're not willing to learn"* (Interviewee, 2).



FACING CONSTRAINS

Several interviewees acknowledge that women possess an abundance of soft skills, such as communication and conflict resolution, in dealing with challenges both at home and in their professional environment, which assist them in times of negotiations and building their business.

A small number of the women also showed an abundance of assertiveness and resilience in the face of gender-based challenges. One woman discussed the hurdles she faces as a woman in a male-dominated industry, including being passed over for opportunities and facing obstacles in lobbying efforts. However, she remains determined to assert her expertise and make her voice heard. She stated, *“The organization is primarily a male industry - I don’t know why, but I think they were just used to having the playing field to themselves. I can be argumentative. I’ll stick my heels in the ground and if I think something is wrong, I will say so, and that didn’t go down well. I didn’t kind of go with the flow when they wanted me to go with the flow”* (Interviewee, 2). A subset of the women expressed confidence in their abilities and passion for the work they are doing, which often gave them the confidence to challenge some instances of discrimination, highlighting their strength, however there were also women who openly faced discrimination.

A selection of the interviewees also spoke of their community engagement and leadership ability, which allowed them spearheading initiatives and take on leadership roles, a skill which also assisted them as they undertook their own personal businesses and innovations. Within these roles, women also spoke of their organisational skills and willingness to take on paperwork to drive change and secure funding for local projects. One woman spoke of her ability to teach and empower others, particularly in traditionally male-dominated fields like basket weaving. She focuses on guiding others through processes rather than doing the work for them, empowering individuals to learn and take ownership of their craft. Two other women showcased their assertiveness and resilience in the face of gender-based challenges. One woman alluded to the hurdles she faces as a woman in a male-dominated industry, including being passed over for opportunities and facing obstacles in lobbying efforts. However, she remains determined to assert her expertise and make her voice heard. Similarly, another woman in social enterprise expressed confidence in her abilities and a willingness to challenge any instances of discrimination, highlighting her strength as an individual. A third interviewee acknowledges the gender dynamics at play within her work environment, particularly in male-dominated environments like boardrooms and agricultural settings. She discussed the need for inclusion of women in decision-making roles and recognises the challenges women may face in pursuing opportunities or driving change.

Overall, the women interviewed exhibit resilience, leadership, and a willingness to challenge traditional gender roles and barriers in their respective fields and communities. They utilise their skills, knowledge, and assertiveness to overcome challenges and make meaningful contributions in their businesses and in their communities.



PERSONAL FAVOURABLE CONDITIONS

When the rural women were interviewed for this study, one thing that was of considerable interest was how open and willing they were to provide information regarding their advantageous circumstances as well as their difficulties. Broadly speaking, most if not all women were quick to acknowledge the support they received from family and friends. One woman stated, *“Like my husband is great. I’ve no idea what I’m going to be talking about, but you know, like that’s my dream in my head, and he’s like go for it, do it, why wouldn’t you. So, you need somebody who is going to support you”* (Interviewee, 1). While another woman suggested that, *“There are other people in the same position as me where they were with a husband or a partner and maybe they were doing the business side of it and there was someone else doing the other side. So that was really invaluable”* (Interviewee 8). In general, rural women appear very open to help and assistance from family, but most also felt they did not want to put any unfair pressure or expense on the family in starting up a business or following an innovative idea. One woman spoke of her husband’s support and encouragement, which allowed her navigate challenges more effectively.

Most if not all women spoke of the importance of networks and mentors and how they play an imperative role in overcoming any challenges they may face. One woman spoke of having the right ‘mindset coach or mentor’ which provided her with reassurance and guidance while also motivating her to continue her innovation path. Networking opportunities, such as attending meetings or events were also seen as essential to gain an insight into how other people experience business, but these events also play a part in energizing the women and further supporting their entrepreneurial endeavors.

Mentors and networking play crucial roles in overcoming challenges. Having the right mindset, coach or mentor provides reassurance, guidance, and motivation, especially during difficult times. Networking opportunities, such as attending meetings or events, help in energizing and gaining insights from others' experiences. One woman suggested that networking was, *“Absolutely massive, if you get out to your network you can get problems solved you know”* (Interviewee, 1). Another spoke of the importance of networking within a rural setting where it becomes more difficult to meet likeminded woman in business, she stated, *“Its vital, and I can’t emphasize it enough. Unfortunately, within a rural setting there’s this kind of idea that you have to do it on your own. You don’t. You absolutely don’t. Reach out and find people whether it’s your local chamber of commerce, whether it’s the local men’s shed, whether it’s your local network Ireland, whether it’s the local library, go out and find people. I can never underplay the power of networking. People think networking is all about pressing the flesh and putting a business plan in place, but It’s absolutely not, it’s about opening out and finding the answers”* (Interviewee, 10). Most women were of the opinion that networking with ‘like-minded’ people was highly significant, rather than networking within larger business groups, which were not directly related to their business or innovation. Although all women were hugely cognizant of the importance of networking, some also felt it was immensely time consuming, in an already busy schedule, resulting in the positive impacts of networking often being negated by the amount of time and cost it potentially may take.



CONTEXT FAVORABLE CONDITIONS

In the context of finance, most if not all women had difficulties in accessing finance to either start their business or expand their business (See 3.2.1). Nonetheless, many women were also reluctant to borrow too much money in case it exposed their family household to finance difficulties. Income or placed their family into a difficult financial situation. Some women used money they had previously saved, or others felt they didn't need a lot of money to run their business. In all, most women, did not have any favorable experiences with money, as in they failed to receive any funds to start-up or expand their business. Financial issue arises for many women when they wish to expand their business and require access to additional finance. One woman stated, "Financially, I didn't have massive start-up costs or anything. You know for a few years I was able to tip away holding down my own job and just testing the business. But then it just came to a point where I had gone as far as I could go and if the business was to grow, I had to give it 100%" (Interviewee, 9). This woman went on to discuss her issues around accessing finance and the negative rather than positive issues which transpired.

In relation to built resources, several women were utilising what they had within the confines of their own home, land or environment. They were happy to use buildings or their own home to establish their business. Others, including one social enterprise worked via a company office, once this was established, while another worked from home, within a remote working rural context. Again, finances came into play here, as most women did not have the finances to create a new workspace, rent or build.

The local infrastructure was an issue for some women, but not all. Most alluded to broadband, saying it was not as good as they would want it, but considerably better than a number of years previously. Local bus services were an issue for some women, but again, all alluded to our car culture within rural Ireland, which ensures most have regular transport.

3.3 IDEA AND PREPARATIONS/DECISIONS AND PREPARATORY ACTIVITIES

Each woman had a different journey when transforming their innovation idea into reality. Some women felt, their innovation was something that happened organically rather than something they logically planned, devised and put into action. For some, the business or innovation organically increased alongside hard work and determination. Some women prepared for their business by enhancing their skills and knowledge around their innovation, while some women felt they had an abundance of skills they could utilize to establish their business. One woman suggested, "*It blew my mind and I just said wow hang on a second, can I use my skills in a different way here. Utilise my skills in a different way but be able to do it rurally*" (Interviewee, 5). Most women sought family assistance in the beginning, prior to going outside the home for any assistance including finance. Some women did seek additional skills training from local or national organisations who offered 'start your own business training'. A few of the women interviewed started their business following the completion of the ACORS programme, which is funded by the



Department of Agriculture, Food and Marine and is offered specifically for women starting a business in a rural area. Several women also felt that specific skills around confidence building, and leadership were difficult to access and even more difficult to access for women in business. Another woman suggested financial skills are hugely important and additional training is needed in this area; she stated, *“Financial acumen for example is often an area where women fall down, but how do you put yourself in the way of those opportunities”* (Interviewee, 3).

In addition to the information on networking in section 3.2.4, a number of women networked at a local, regional and national scale, with a small number of women networking internationally. One woman stated, *“I’ve done many interviews over the years, and I spoke in Brussels and different countries all to do with the co-operative side of things - there was great interest in that”* (Interviewee, 6), while another woman state, *“I presented in Brussels in December as an example of best practice. Yet for some strange reason I can’t seem to really get this out there with the channels that are actually out there and available”* (Interviewee, 10). This international networking was hugely advantageous to both women and their organization, allowing them to reach a much bigger audience.

3.4 CONCRETISATION OF INNOVATIONS

The outcomes of each innovation and business were varied, at different scales and levels, however every woman interviewed did feel that her innovation, no matter how small, did have a positive outcome for both her family and community. The scale of job creation was also very varied with women not long in business, still working on their own or with family members, but others who were longer established having a number of employees. About four of the ten women have current employees, while two of the women have a considerable number employed, with one woman running a social enterprise having in excess of three hundred staff. Employing people within a rural context was considerably important to all women, with each woman hoping to take on staff once she expanded or the business grew.

Environmental considerations were hugely important to all the women interviewed. Many made decisions around their business based on environmental and climate change concerns. One woman stated, *“It’s a sustainable product, it’s an ancient product and its good for the environment - so I was like this is a no-brainer”* (Interviewee, 1). All though most women were concerned they weren’t doing enough for the environment, it was still foremost in their considerations when making choices about their direction of their business, product or built environment.

Most if not all women felt their achievements were multi-dimensional, with most feeling their business or innovation had a core dimension, however, they also felt that their impacts were also felt across all dimensions. As such, women who felt their innovation outcomes manifest environmental dimensions, also felt that their impacts could be considered economic, social or/and cultural. When asked what her business achievements were, one interviewee suggested that she felt it was a combination of all



of them, *“I was going to say I think all of those. “There isn’t one”* (Interviewee, 7), while another interviewee stated that, *“They’re probably cultural and economic first and foremost well cultural first of all”* (Interviewee, 5). On the other hand, a couple of women, particularly those in the area of social innovation, were confident their outcomes were largely social, although they would hope they have environmental and indeed economic impacts as well.

3.5 IMPACTS OF INNOVATIONS

Local was hugely important to all the women interviewed. Local and rural were key factors in their decision to initiate a business or innovation in their local rural area. In most if not all cases, the innovations introduced by the women had great effects on the places where they were implemented, particularly in terms of gender equality and rural development. In relation to a contribution to gender equality, the innovations resulted in an increased participation of women in economic activities and decision-making processes within their rural area, thereby narrowing gender gaps in rural areas. In some case the women’s innovations brought a great sense of pride to the community. One woman was delighted with the sense of pride the community felt in her achievement, but also felt she needed to give back to the community as well. She stated, *“Definitely I suppose whenever I won an award or whatever else the local press and local media and local people would absolutely come in and then the local schools in the area would bring me in. I’m actually about to sponsor the local schools GAA club with jerseys for their coming season because I feel grassroot”* (Interviewee, 10).

The innovations started by rural women also have an impact on the development of the rural area. In a number of areas, the innovations played a key role in regenerating a rural economy and enhancing the overall development of rural areas. The women engage in promoting sustainable agriculture practices, value-added processing, and diversified livelihood opportunities, thereby stimulated economic growth and resilience in rural communities. Moreover, initiatives focused on improving access to essential services, infrastructure, and markets contributed to the socio-economic development of rural areas, fostering inclusive and sustainable rural transformation. One woman stated, *“We created this lovely collaboration piece and we’ve done videos together and stuff like that and I love that sense of community in terms of being involved or playing a part in their supply chain”* (Interviewee, 7).

4. INNOVATION ECOSYSTEMS

4.1 POLITICAL

Some women spoke specifically about policies directly related to their innovation, namely, social innovations, social care and education and felt that the broader policy around these innovations needed to improve. One woman was concerned about the broader national policies around the bioeconomy and felt they were less advanced than within other EU countries. Many women also had opinions on rural policy and the need for improved services and facilities in rural areas. The issue of broadband and phone



service was a political issue that women felt had improved but was still needed further political intervention. A small number of women spoke about childcare in rural areas and the difficulty in accessing childcare within a rural setting, but also the cost of childcare often prohibited them from accessing the services. One woman stated, *“Childcare is massive. That is a massive blocker, which feeds into the financial as well because you know you’re paying the amount of a mortgage every month on childcare, so it’s definitely childcare and there are no provisions for female led businesses you know”* (Interviewee, 7).

Most women received some form of support from government or local institutions, coming in the form of skills training, business start-up training and grants. Although direct financial aid was not a common occurrence amongst the women, some did receive grants. One woman stated, *“I was introduced to Bord lascaigh Mhara, who were unbelievable, hands down the best support. They gave me a grant”* (Interviewee, 1). A number of women interviewed had taken part in the Acorns Project (See 3.3), which provided peer-to-peer mentoring. Some women were also engaged in additional mentoring programmes which they found very valuable. One woman stated, *“The local enterprise has been fantastic, and I was part of Acorns. I was cohort 8. And that’s been absolutely fantastic you know. We had our lead mentor and kind of you know it happened a bit over covid time so there wasn’t a huge amount of meetings in-person, but it was all that kind of support from other female led entrepreneurs”* (Interviewee, 7). A number of Irish interviewees also received support from a national body called the Local Enterprise Office (LEO), who assist in the development of local business. One woman suggested, *“I have done courses with Leo; again, they’re small courses about Facebook and things like that, but the LEO were the ones who passed me on to the south Tipperary development company because they feel that they were more of a support to me. I would link in with LEO again the joys of women’s business networks and things like that that would be loved by LEO and to network with other business owners”* (Interviewee, 4).

Although most women did receive some assistance from a variety of groups, they found that seeking out these groups or supports was very time consuming and not very straight forward. Many felt that this information should be much more readily available. Another issue a number of women alluded to revolved around support once you advanced in your business or innovation. Some interviewees felt that there was sufficient support for someone starting a business but very little once you were up and running and needed to advance your innovation. Many women also explored the LEADER programme as a possible avenue for funds but felt that there were considerable time factors around filling in forms and complying with the regulations required. In relation to hindering progress, one woman spoke strongly around the issue of VAT (Value Added Tax) in Ireland and how a lowering of this would enhance business for her personally, but also other retail businesses and sole traders. She stated, *“You know but I do think policies like the VAT have to change”* (Interviewee, 1).

Most women did feel there were improvements in general for women, however, in relation to business start-ups and innovations, very little is still directed completely towards women. Several women alluded to a need for more women to engage in politics



so a definite change can filter down to women on the ground. Some also felt that women need to be invited onto more of the Boards of the larger institutes and organisations so a different voice and perspective can be heard. Two women also spoke about a 'tick box' approach to politics around gender issues which can result in people perceiving a greater female involvement. One of those women stated, *"I mean I think that kind of tick the box approach is out there. All these documents and policies and recommendations that are coming up are just ticking the box. They're not doing anything"* (Interviewee, 10).

Key suggestions for policy change for those interviewed revolved around the availability of finance, including finance for sole traders and small business. Some of the supports available are based on the number of employees and the size of the business and most women felt they did not fit into this category; therefore, they were not able to access certain supports for business start-ups. Additionally, policy recommendations revolved around basic rural services and facilities such as childcare, after school care, training in specific areas, mentoring but also mentoring in areas of leadership skills and confidence building.

4.2 ECONOMIC

Some of this has been alluded to above in previous answers but in general no interviewee engaged in crowd funding, and only a very small number were able to access finance via financial institution. This may have resulted in difficulty in progressing their business or innovation rather than starting it up. Women who felt their business came under the umbrella of sole trader or retail felt little or no financial assistance is available to them, while others did not want to pressurise their family by borrowing money for their business.

Many women deliberately made a decision to keep costs down so they wouldn't run into financial difficulties. One woman stated, *"Financially no because you know my start-up costs were minimal"*.

A couple of women received funds via start-up grants and one woman obtained funds after entering a competition. She stated, *"I successfully pitched for a competitive start-up fund with Enterprise Ireland, and I got €50,000 and from that that kept me going again another little bit"* (interviewee, 10). These funds made a huge difference to the direction of her innovation allowing her to create a business app and upgrade her website.

4.3 SOCIAL

Network was considerably important to all women. Networking allowed all women to access information and opportunities. Two women emphasized the importance of networking for discovering opportunities, whether it's funding, grants, or connecting with professionals in specific fields. One woman, mentions how networking groups and platforms like WhatsApp facilitate the exchange of information and connections, saving time and effort in research. Another reflected on her experience in agriculture-related events but acknowledges the value of branching out to women's networks for mentorship and new opportunities.



Professional growth and adaption were also stressed by a number of women, who stressed the importance of continuous self-reinvention and staying ahead in the competitive landscape. They felt that networking provides avenues for generating new ideas, staying informed about industry trends, and remaining adaptable to evolving circumstances. One woman also felt that networking can provide a stage for advertising one's work, establishing connections with relevant organisations, and expanding outreach efforts. Most if not all women, felt that networking allowed them to build trust amongst their peers and increase their visibility. One woman emphasised the significance of personal connections in business transactions, emphasising the importance of trust and relationship in customer relationships. Attending networking events allows her to introduce herself, her company, and its services, building trust and visibility within her professional community.

The interviews shed light on various social factors influencing their motivations and challenges due to gender. Some of the women highlighted the challenges they face such in male-dominated environments, such as being intimidated in meetings and encountering gender biases. One woman spoke of a colleague who would bring her into a meeting to counteract a notion of bullying, which is a practice which can reflect entrenched gender roles and power dynamics. Some women, however, feel that their position in business, gives them a sense of responsibility to advocate for other women and effect change. Although most interviewees believed that rural women are historically constrained by traditional, and were denied an opportunity to embrace entrepreneurship, they also felt that perspectives are changing and there are increasing opportunities in business and innovation for rural women. This shift in cultural norms and attitudes towards female innovators signifies a broader cultural change in society. Nonetheless, another woman felt that traditional gender roles and bias were still present in many rural communities. She highlights the persistence of traditional gender roles in rural communities, where women may face expectations to fulfil certain roles, such as secretarial duties.

Several women believed that building visibility and recognition around female entrepreneurs and innovators was hugely important. They were of the opinion that strategies for building professional profiles and leveraging media opportunities to promote their businesses was important and could potentially and in the longer term, counteract the traditional gender-based discrimination still present in some rural areas.

4.4 TECHNOLOGICAL

Based on the interviews, it is evident that technology plays a significant role in the development and operation of the innovations led by the rural women. While most women acknowledge the importance of technology, some also felt they initially faced challenges due to her lack of technical expertise. Some women resorted to self-learning through online resources like Google and YouTube to acquire the necessary skills. Additionally, one woman spoke of the fundamental role of mentorship and support networks, particularly among women in business groups, in overcoming technological barriers and fostering collaborative environments. She stated, *"My first issue was skillset.*



I mean I am not a technical person. I didn't know how to build a website so I had to literally go on google and follow YouTube. I didn't know anything about apps. So, trying to find mentors in those areas that could help and guide me and stop me from making a costly mistake was very difficult. I actually joined the local network Ireland women in business group for that reason to find a tribe of people that I could lean on and that proved huge. Women help women" (Interviewee, 10).

Many women highlight the role of technology, particularly broadband and video conferencing tools like Zoom, in expanding the reach of their business. A number of women conduct live classes over Zoom, enabling them to engage with clients globally and even offer pre-recorded online classes. She stated, *"I suppose technology in terms of broadband and I would have started teaching classes over Zoom like live classes over Zoom. You know I would even be doing live classes with people in the States, and you know just in various countries. And I suppose that's what prompted me then to record a series of classes that I have pre-recorded and available online"* (Interviewee, 9).

One woman also emphasized the importance of continuous education and training in staying updated on technological advancements relevant to her business. She mentions attending training sessions in Italy annually to ensure proficiency in utilising technology related to her suppliers.

4.5 ENVIRONMENTAL

In some case, women were influenced by issues of environmental sustainability in the type of innovation they established, however in general, the type of business was largely dictated by the passion the women felt for a particular innovation. Nonetheless, all women were very conscious of climate action, natural resources and environmental sustainability with most attempting to address such issues in their business or innovations. One woman owning a café alongside her innovation, spoke of her efforts to implement sustainable practices. A number of women spoke of their efforts to explore innovative ways to repurpose waste materials, like oyster shells, into products beneficial for the environment, such as calcium supplements for laying hens and oyster candles. These actions demonstrate a proactive approach to addressing environmental concerns and promoting ecological sustainability within their business.

5. MAINSTREAMING ACTIONS

5.1 SCALING UP

Social enterprise has emerged as a major medium for change in Ireland, particularly driven by women's innovative initiatives. In rural areas, social enterprise has flourished, largely boosted by the dynamic commitment of women entrepreneurs. One woman aptly expressed her idea that this area presents an exclusive opportunity for women to leverage their skills and expertise for the betterment of community care. One woman has brought about considerable change in her region, not only to the end users of the care industry but also to those employed within the sector, who enjoy flexible hours and rewarding employment. By leveraging their skills and entrepreneurial spirit, women in



social enterprise are creating sustainable and successful businesses in rural areas. Other impacts have been economic growth and job creation within a rural context. Community empowerment and engagement was also an impact of women's innovations.

What is also important to note is that some of the women were content with the extent or level their business had reached and were not interested in expanding further. This was for family reasons, work-life balance and a life stage, but they also felt that this decision needed to be respected and not considered a failure.

5.2 SCALING OUT

Several women shared stories of individuals, both men and women, who came to them seeking advice and guidance about starting an innovation or business. Reflecting on these encounters, one woman stated, *"I was talking to someone over the weekend, and she's 24 and she was like I just think it's amazing what you've done, and God I wouldn't even know where to start and oh God I'd never have the courage. And I was like hang on a second, let me just make this clear here, if I can do this you can do this"* (Interviewee,5). Some women spoke of their local appeal and normal lifestyle which allowed others to make comparisons and feel they could replicate their innovations.

The interview findings also showed that the rural context was not as significant as previously or prior to improved broadband services. Many women felt that business start-up was increasingly possible in rural settings because of improved broadband services.

5.3 SCALING DOWN

Most if not all women received some form of support or participated in capacity building programmes. Some of these were national organisations, but at a local level. These included, the Acorns Programme, the Local Enterprise Office (LEO), Enterprise Ireland and The LEADER Programme, amongst others. Funding was difficult to access for most women and resulted in some women finding it difficult to expand their business if they wanted to do so.

5.4 SCALING IN

A number of the women were very content with where the point and level their business had reached, many feeling proud of their achievements. However, a number of women also felt that more could be done at the national institutional level to support women in business, particularly rural women, who face additional challenges due to a lack of services and facilities. Most had received supports, but some women also felt that key supports in the area of leadership skills and confidence building were also paramount. Some key actions alluded to that could be useful to foster change were increased representation of women in positions of power in local regions, but also in Boards that influence change. The women also called for tailored support programme, which are developed specifically with rural women in mind, and which consider the additional challenges rural women face.



5.5 SCALING DEEP

The interviews carried out with these ten rural women have shown that these women and many more like them have indeed contributed to changing societal values and behaviours in relation to gender equality, particularly in rural areas. As a result of their actions and achievements, they have challenged gender norms and paved the way for a more inclusive rural society.

Through their leadership and advocacy, rural innovative women play a crucial role in enhancing rural area as well as contributing to gender equality.

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RURAL WOMEN-LED INNOVATIONS IN ITALY

CASE STUDY REPORT

Authors: Silvia Sivini and Irene Leonardelli



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ACRONYMS & ABBREVIATIONS

| | |
|-------------|---------------------------------------|
| CAP | Common Agriculture Policy |
| NRRP | National Recovery and Resilience Plan |
| NSP | (CAP) National Strategic Plan |
| PDO | Protected Designation of Origin |
| SNAI | National Strategy for Inner Areas |



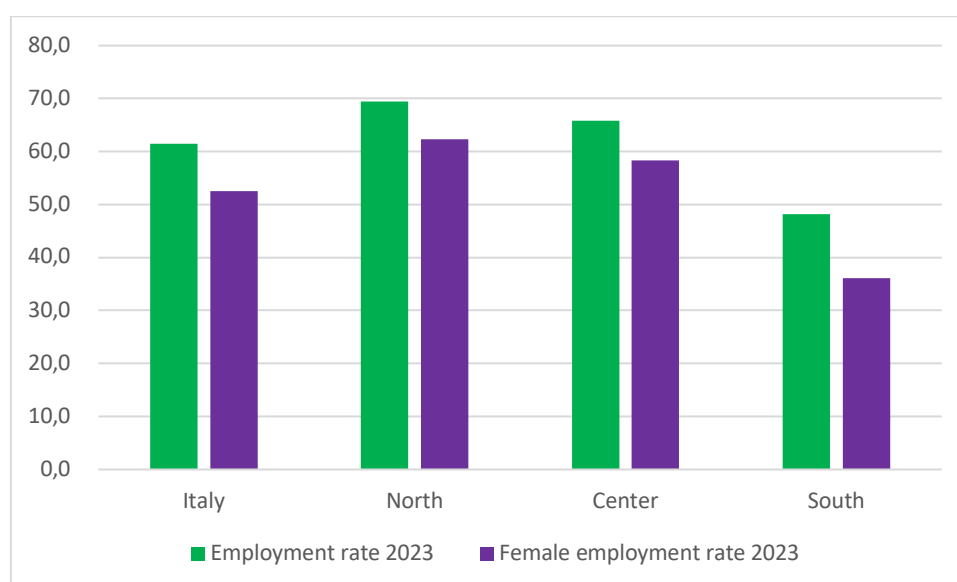
1. THE NATIONAL CONTEXT

In Italy, according to EUROSTAT (2022), 63.8 percent of the municipalities are classified as rural areas, with 17,1 percent of the population residing in these areas.

Italy is characterized by a clear territorial gap between southern and northern regions.

The employment rate clearly shows this territorial divide (Table 1). The employment rate in the north was 61.5 percent in 2023, while in the south it was 48.2 percent. The situation is even worse when looking at the female employment rate, which was 62.3 percent in the north and only 36 percent in the south.

Table 4. Employment rate by macro area and gender- 2023



Source: our elaboration on ISTAT data (2023).

All southern regions are considered less developed regions by the EU cohesion policy, as they have a GDP per inhabitant below 75 percent of the EU average.

In order to distinguish between different types of rural areas, we have looked two different lines of classification of Italian territories established by two different public policies. One is related to the implementation of the Common Agricultural Policy (CAP) and the other to the National Strategy for Inner Areas (SNAI).

Rural areas are classified by the Italian CAP Strategic Plan 2023-2027 as follows:

- “A. Urban and peri-urban areas: : include provincial capitals that are urban in the strict sense and the groups of municipalities with a rural population of less than 15 percent of the total population;
- B. Rural areas of intensive agriculture: include rural municipalities located mainly in the lowlands of the country, where, although in some cases the average



population density is high, the agricultural and forestry always appear to have a significant weight;

- C. Intermediate rural areas: Intermediate rural areas: include hilly and mountainous rural municipalities with a consistent population density and where there is an intermediate development with stable relations with other sectors of the economy;
- D. Rural areas with development problems: include rural municipalities in the southern hills and rural municipalities in the mountains with lower population density in all the regions” (NSP, p. 447).

The SNAI classifies as “Centres” the municipalities offering essential services related to mobility, education, and healthcare. All the other municipalities are classified as follows, depending on the minutes needed to reach the nearest Centre:

- peri-urban areas (less than 20 minutes to reach the Centre)
- intermediate areas between 20 and 40 minutes to reach the Centre)
- peripheral areas (between 40 and 75 minutes to reach the Centre)
- ultra-peripheral areas (more than 75 minutes to reach the Centre)

Considering these classifications and based on the literature analysis, we have considered “remote rural areas” those municipalities classified D by the CAP and the peripheral and ultra-peripheral areas of the SNAI. These are areas with low population density and with limited access to services (education, transportation, healthcare). They are often mountainous areas.

We have considered “rural areas close to the city” those classified as peri-urban areas by the SNAI. These are areas located close to urban centres where access to education, mobility and health services is closely available.

We considered “rural villages” all the remaining municipalities.

These categorization does not aim at homogenizing different rural typologies. Differences may exist among municipalities belonging to the same rural typology.

Despite the importance of women in the rural economy, data about the role of women in rural area and particularly about women entrepreneurs in rural areas and women-led innovation is very scarce.

2. THE INNOVATION

The selection of innovative practices followed the methodological guidelines of the research. Thus, we selected three women innovators for each dimension of sustainability (environmental, economic, social), one for each type of rural area (remote rural areas, rural villages, rural areas close to city). Another woman, located in a rural area close to city, is included in the sample in relation to the cultural sustainability dimension.



The innovations ranged from craft business, food processing, tourism initiatives, no-profit associations offering different services and promoting a variety of activities.

In relation to the dimension of sustainability for which they were selected, the environmental innovations vary from producing upcycling and handmade products which minimize waste and resource depletion to establishing an association with an environmental focus. All the selected women in this category have a university degree and range in age from 35 to 44 years old.

Social innovations include new services for the local community in general, for women in particular, or for people in vulnerable positions such as disabled people or children and young people with chronic diseases who also come from other areas (both urban and rural). These social projects facilitate knowledge exchange and promote social cohesion, helping to build more equitable and just communities. All women innovator in this category have a university degree and their ages range from about 25 to over 50.

Economic innovations refer to new products, which could be food products or handicrafts, and to new services that promote slow and experiential tourism. Two out of three women in this category have a university degree and their ages range from 26 to 43.

The selected cultural innovation is linked to the promotion, especially through videos and podcasts, of small-scale agriculture and sustainable and traditional farming methods and is contributing to create a community identity. The woman promoting this innovation is 29 years old and has a master's degree.

Although women were selected in relation to a prevailing dimension of sustainability, the research results clearly show that their innovations intertwine multiple dimensions of sustainability.

The innovations analysed are implemented in different typologies of rural areas, located in different regions in northern and southern Italy.

In remote rural areas, research findings show that women tend to create/lead innovative projects related to the valorisation of local resources (environment/landscape and cultural heritage). These projects allow them to live in areas often characterized by depopulation and where services are very limited. These projects were started from scratch by the women interviewed and not by inheriting an existing business. However, some used family connections or assets (a space, the family's contacts) or public assets (a space) to develop their businesses. Innovations, in this case, are mostly related to the creation of new products, new services and new ideas that target both local people and tourists.

In rural areas close to city, the innovations can be very diverse, from processing local cultivars, to organize camps for disabled children and vulnerable people or to establish short food supply chains that connect producers (living and working in rural areas) and consumers (mostly living in cities) with a view to promoting solidarity economy actions and projects. In any case, all these innovations provide services and products that



require good infrastructures nearby (shops or markets, roads, facilities): they create interesting urban-rural connections, using the potential of rural areas to sell products/services to people who mostly live in cities. In the case of two experiences, the women inherited the business/the place from their family and decided to expand and/or innovate them, by diversifying or expanding the offer. It is women's management that made it possible to initiate significant transformations in expanding the services offered.

In rural villages, women-led innovation is related to creative and upcycling projects and to the establishment of networks of entrepreneurs that want to join forces and create synergies to 1) overcome the feeling of isolation that rural areas sometimes create and 2) find ways to valorize the local cultural heritage and environment to create a feeling of community as well as to attract tourists. These projects may entail the creation of markets where entrepreneurs can sell their products, online platforms where entrepreneurs can advertise their products/services as well as the organization of events, of both cultural and political relevance. In this regard, such initiatives are very much related to rural development as they incentivize local people to develop their ideas, to expand their businesses also offering jobs and opportunities to other local women and to collaborate with public administrations, also seeking for their support.

Table 2. Interviews overview

| N. Interview | Age | Educational Level | Legal form of the business/enterprises | Year when it started |
|--------------|-----------------------------|-------------------|--|--|
| IT_R_EN_1 | 35 | University | Sole proprietorship | 2015 |
| IT_R_EN_2 | 39 | University | Non-profit association | 2011 |
| IT_R_EN_3 | 44 | University | Sole proprietorship | 2021 |
| IT_R_S_4 | 49 | University | Company | 2019 |
| IT_R_S_5 | 40 | University | Non-profit association | 2016 |
| IT_R_S_6 | Different ages ⁷ | University | Non-profit association | 2024 (before it was an informal network) |
| IT_R_EC_7 | 30 | University | Sole proprietorship | 2020 |
| IT_R_EC_8 | 43 | High school | Company | 2011 |
| IT_R_EC_9 | 26 | University | Non-profit association | 2024 (before it was an informal network) |
| IT_R_C_10 | 29 | University | No legal form/volunteering project | 2020 |

⁷We interviewed 4 women from this association. Their ages ranged from about 25 to more than 50 years.



3. INNOVATION PATHWAYS

3.1 MOTIVATORS FOR INNOVATION

Research findings show that a main motivation to start a project in a rural area, being it close to a city, rural or a remote rural area, is the desire to move to a rural area searching for a new sustainable life. All women we interviewed but one (who inherited a family business), before making such a decision, had spent several years living in a city, often far away from the rural area where they moved, and often abroad. Five women had lived, studied and worked abroad before moving back to rural Italy. Other four had studied and worked in other places, most often in central/north of Italy.

The decision to move to a rural area stemmed from the desire to start a new life, living close to nature, far away from the chaos and stress of the city. In some cases, it is a very disruptive decision. Two women left their job working for important international organizations abroad to move to rural areas and start an enterprise from scratch. In this regard, there is definitely a mismatch between the reality in which these women used to live and their vision of desirable futures. A desirable future is one that is more attentive to one's own mental and physical well-being and to human-nature relations: a more environmentally and socially sustainable future.

Unexpected factors like the COVID19 pandemic also contribute to motivate the women interviewed to start a new life path. For some of them, COVID19 represented a push to start a project they had in mind for a long time. The importance of farming or living close to nature was glaring and as everyday life was disrupted, women had more time to think about how to develop their ideas. One woman explained that she took the decision to leave her job abroad and move to a remote rural area as *"COVID19 pushed her to look for a more creative life, close to nature"* (IT_R_EN_3); another woman that moved to a rural village stated *"... with the change that happened with Covid, not only our desire to be in nature changed but also to have a more natural life as well"* (IT_R_S_6). Moreover, the fear of not knowing what would happen was also a reason to return to Italy and settle in a remote rural area: *"What do we do? How long does this pandemic last? Because we have locked ourselves in. It's been months. What's going on? So we said, no, something is not working here, we have to change direction"* (IT_R_EC_7).

In most cases, women moved back and started their project/innovation in a rural area where they had a special connection, a reason to move specifically there. In some cases, it is the area where they grew up and where part of their family still lives and/or owns a house or a terrain. In other cases, women moved because their partner was from that rural area and had assets there. Only in one case, the woman interviewed moved to a remote rural area where she did not have any specific connection. However, she grew up in a city located in the same region.

Moreover, starting an innovation/project in a specific rural area is also related to the desire of improving the rural life of that specific area, making it a good and interesting place to live. The projects, even if not always consciously, fulfil specific needs of the area where they are implemented.



This is particularly the case for projects with a collective ethos (3 experiences), which are characterized by a clear environmental and social justice emphasis. In one case a woman living in a rural area close to city was driven by the motivation to support small local farmers who produce organic, traditional products prioritizing environmental sustainability, contributing to the well-being of the people inhabiting in that area. Hence, together with some friends, she founded an association to connect these farmers with local consumers.

Another woman, living in a rural village was driven by the idea of creating a community among several local enterprises/association (farms, artisan labs, tourism services, etc.) mainly developed by young people. The aim of her innovation is to valorise the richness and beauty of the local environment and cultural traditions as well as to attract tourists.

Enhancing and empowering women living in the area and their well-being was the main driver of another experience. The promoters of this experience (all women) created a wide network bringing together women (women entrepreneurs and non-entrepreneurs) from different rural villages of the area, with the aim of valorising women work and create synergies among them, as well as to create safe spaces where women can find both emotional and practical supports, by discussing common and personal issues.

In addition, two other women were also motivated by the idea of demonstrating that it is possible to live in rural areas doing something *“that could change the world in a positive way and that can have an impact”* (IT_R_C_10). The innovations started by these women are not developed only for their own interest but revolve around the environmental, cultural, social and economic sustainability of a specific rural area.

The motivation to engage in innovation is also related to desire of valorising specific local products and cultural heritages. As one of our respondent underlines: *“I realized that my region had an incredible history of ... that was being lost. ...and I wanted to try to recover that... this is why I decided to move back”* (IT_R_EN_1).

3.2 CONSTRAINS AND FAVOURABLE CONDITIONS

CONSTRAINS

Being a woman and a woman entrepreneur is in itself experienced as a challenge, as one faces both personal and contextual constraints, having to juggle between domestic work and the development of their business/project. This was emphasized particularly by the five women interviewed who have children, both in the North and in the South (and in all typologies of rural areas). In fact, within their household, it is them who have to perform most of the tasks related to raising children and taking care of the house.

Services (nursery schools, schools, school-buses, facilities for family) are not always available, especially in remote rural areas and in rural villages, hence mothers really find it difficult to manage it all without having their partners and other family member's support.



A woman explains well this feeling: *“entrepreneurship and motherhood ... I feel so much of this fatigue, I feel this breathlessness. ... For men it's not like that. ...A lot of it falls on the shoulders of the woman. And that ... I really feel it as a great source of frustration for me (IT_R_EN_2).*

Furthermore, financial constraints increase as women become pregnant and cannot work as much as they used to. Maternity allowances are limited. One woman explained that she found it very difficult to keep managing her business as she gave birth to her third child. She noticed how her employee, who was pregnant at the same time, enjoyed many more rights than she did - and she found this extremely unfair. In her words: *“I worked until Thursday, I gave birth on Friday and as an entrepreneur, I received a very poor maternity allowance... I felt extremely guilty because I just couldn't afford to stop working. I got those four months of maternity leave and that's it..”(IT_R_S_4).*

Besides, many of the women entrepreneurs we interviewed mentioned how they find it difficult to get credibility and support both from local people and by public officers. Patriarchal social norms are still rampant in all types of rural areas, but perhaps they are felt even stronger in remote rural areas. Mistrust and scepticism by local people is experienced particularly by women who started their enterprise/project from scratch, without inheriting a family business or without being well known in the rural area.

This is even more the case for foreign women - who often feel discriminated against and looked at in a skeptical way. For instance, a woman explained her difficulties in finding valuable collaborations as she started her project in a rural area close to a city where her family owned a property, but she had never lived: *“I was going around to meet other organizations, bringing brochures etc... But there was a lot of distrust... here people immediately think that if you bring brochures, you want something [money]!”(IT_R_S_5).* Another woman who moved to Italy from abroad felt that she started gaining more credibility among the local community only as she started collaborating with a man from the area: *“I just felt I had little credibility, as a woman and as a foreigner” (IT_R_C_10).*

In general. All women mentioned how it takes a lot of time to gain the trust and respect of local people: only when their projects become successful.

Accessing financial programmes was never easy or straightforward: understanding calls for financial support, making sure to have all the requirements, compiling all the necessary information was a major challenge mentioned by the women interviewed.

In a few cases, women gave up applying for grants because the programmes required them to first invest a capital that they could not afford. In other cases, they realized that the programmes were designed in such a way that the allowable expenses would not fit their needs. They thus preferred to proceed one step at a time by leveraging their own resources. As underlined by one respondent: *“You must have the money to ask for money ... but I started from scratch, ... I could go and ask for a credit to the bank only thanks to my father, who was my guarantor. I started with that, but only because I already had the machines, and there was my father, and I owned a place, so I didn't have to pay rent” (IT_R_EN_1).*



Another economic challenge, mentioned by one woman interviewed, concerned how, unlike farms, enterprises focusing on processing specific local crops do not get compensation if crops are damaged by environmental or climate calamities.

FAVORABLE CONDITIONS

Inheriting or having the possibility to use a space owned by the family it was a favorable condition for three women interviewed. They could develop their enterprise and engage in innovation without having to pay rent or maintenance costs, cutting off major expenses to start a business.

In the case of two experiences, it proved useful to use buildings owned by local governments to further develop the projects.

Being part of a network or fostering a network that provides both emotional and practical support has certainly been a favorable condition. Women who are part of these networks meet both to overcome isolation, which is a limitation particularly in remote rural areas, as well as to discuss shared issues, organize common markets and events, and more simply also become friends.

Three women were able to access financial or capacity building programmes to start their activities. Other women had access to some public financial support only after starting their projects, that is to further develop them.

3.3 IDEA AND PREPARATIONS/DECISIONS AND PREPARATORY ACTIVITIES

Transforming an idea into reality, for many women, entailed first of all, finding spaces to develop their projects. Three of them used existing resources available within their families: buildings, rooms, terrains. Others three had to find spaces from scratch, talking with local people or public actors, negotiating contracts and agreements to rent spaces. In any case, many women had to engage in renovation works.

For those whose project did not immediately need a physical space (4 experiences), preparation activities entailed finding people (e.g. other women, farmers, artisans) to develop a network and start organizing collaborative projects. For this, they often worked as volunteers either for local organizations (to get to know the area and gain trust and support) or for other organizations working in a field related to the business-idea (e.g. volunteering for non-profit organizations supporting vulnerable people).

Financial resources were also a central issue to develop some projects. Some of the women interviewed used their own's savings, others applied for different financial programmes or contacted potential donors such as private foundations. This depends on the very personal economic situation of the women we interviewed, which varies greatly.



In the experiences that led to the creation of non-profit associations, women began to develop local networks by working primarily on a voluntary basis without initially seeking financial resources.

With regard to the development of knowledge and skills, many women used those acquired during their university studies to start their own innovative projects. Some of the women studied arts or design and used their creative skills to come up with creative projects as well as to design websites and social media pages to advertise their projects. Others studied social and political sciences, which helped them to gain knowledge about environmental sustainability, food production processes as well as social inequalities at different scales. In all cases, the educational background was most often central to develop a project/business, basing it on specific ethical values and principles.

Two women participated in courses focused on the development of specific skills to start and run a business: one was a course developed within the EWA⁸ (Empowering Women in Agrifood) programme, co-funded by the European Union; another was promoted by a foundation that runs one of the oldest management schools in Italy. Other two women followed courses sponsored by the regional governments to gain specific skills in relation to the business/innovation they wanted to develop.

Searching for good and sustainable material was also a central preparatory activity for three women whose businesses entail the production of creative items.

Moreover, developing good communication strategies is also an important part of their preparatory activities. Women entrepreneurs put a lot of effort in creating pages (on the web and on social media) where they can not only advertise and sell their products, but also narrate their story, thus creating a personal connection with their clients. Women who have promoted projects with a collective ethos have also adopted extensive communication strategies to first develop networks at the local level.

The typology of the area is not a significant variable at this stage of the innovation pathways.

3.4 CONCRETISATION OF INNOVATIONS

The tangible outcomes are diversified but all the women interviewed, even if coming from abroad, are profoundly grounded in the specific territories where they live, and work and their actions is often guided by ethical principles. They want to do something for themselves but also for the people living in a specific rural area, encouraging them to find ways to make a living in that area, often with an intention of helping vulnerable or marginalized groups. Environmental awareness also characterizes all the experiences.

⁸ <https://www.eitfood.eu/projects/ewa-empowering-women-in-agrifood>



Regardless of the type of rural area in which women operate, new services or initiatives (that did not exist before) have been created for local people as well for tourists. For example, three associations, although they have their own specificities, came into being as a result of networking activities promoted by women in areas where cooperation is still a challenge. They organize events and debates, but also other initiatives such as a weekly organic farmers' market; the creation of GAS (Solidarity Purchasing Groups), the creation of tourist packages that appeal to a slow, nature-loving tourist, etc. One of these associations, that was founded on the basis of a women's collective, organizes also public initiatives related to gender-based violence. The creation of a WhatsApp group with more than 100 women participants, furthermore, allows for the sharing of information ranging from job offerings and job search to initiatives organized in the area; from the search for a house to the search for products, professionals (doctors, lawyers, etc.) and other services. These outcomes manifest themselves as a combination of environmental, economic, social, and cultural changes.

An innovative service for children and young adults affected by illness was implemented by another association. By organizing summer camps and outdoor activities to support their well-being and happiness, the promoters of this imitative interweave social and environmental values, while creating collaborations and synergies among different local actors and realities (e.g. farms, mountain guides, sailing instructors, social workers, mountain huts etc.).

Another woman interweaves economic and social outcomes as she manages an alpine refuge that is open all year round, thus guaranteeing a meeting point for the local community; providing a restaurant and a bar, as well as a place where children and adults of all ages can meet, play games, share stories and read books. Such a space did not exist in that remote rural area on the Alps for several years.

Innovative services targeting specifically tourists range from the offer of creative labs to outdoor activities that focus more on getting to know the local environment and territory. Experiences are very much rooted in the local rural context; hence they contribute to make people feel connected to a place, its history and traditions. As mentioned by a woman: *"this activity [the creative lab offered] is very much connected to this place because people come here because the city is suffocating, so they come here to feel something different...we created the creative aperitif. (...) It's a sensory experience rather than a course. It is a sensory experience where all the senses are activated, also because it is done during sunset, with this spectacular view"* (IT_R_EC_7).

In addition, research findings show that, regardless of the type of rural area in which women operate, new products have been created. In fact, three women have started creative businesses that have led them to create respectively ceramic creations (including ceramic and silver jewellery), upcycling products (for example using old nets for harvesting olives or boat sails to make bags) and clothes made with eco-sustainable fabrics that favour local tailoring traditions. Another woman, who inherited the family food processing business, has expanded the range of products by combining traditional recipes and modern tastes, enhancing local products and cultural heritage. Furthermore,



an innovative territorial guidebook was created by one association. As stated in the preface of the book, this is about "people who design a different way of living... the community presented ... wants to reappropriate the territory, proposing different relationships with the land, landscape and food, without compromising with those who exploit the labour of the weakest, with those who speculate for personal profit, accumulating harmfulness in the environment" (Casaluci and Faggiano, 2017, p.5). The short videos created and promoted by another woman, have a similar goal as they aim to advertise and valorize the stories of small agroecological farmers. Attention to environmental issues is an element that strongly characterizes the creation of most of these new products. The typology of rural area in which women operate is not a significant variable.

The creation of new jobs is another relevant outcome of at least 4 of the experience analysed. About 3 experiences analysed have created stable salaried jobs to which seasonal workers are added (in two cases). Another woman employs local women who are in particularly vulnerable situations, teaching them new skills and empowering them in various ways.

3.5 IMPACTS OF INNOVATIONS

The innovations promoted by the women interviewed have had different impacts on the local area in which they were implemented; albeit at different scales, they have helped to promote local sustainable development and to challenge patriarchal norms.

First, through their actions, they have shown that it is also possible for young women to choose to live and work in remote rural areas, setting an example for others as well. In one case this choice has also clearly contributed not only to curbing the ongoing depopulation but also to reversing it, as it inspired other people to start other activities in the area, attracting new inhabitants. By providing a new meeting place for the local community, offering jobs and contributing to the creation of new services (such as a nursery) and the opening of other businesses, it contributed to provide opportunities for local people to stay, new residents to move in and tourists to come and visit the area.

Second, local traditional crops and environmentally sustainable farming techniques have been valorized. The innovative actions put in place have helped to give visibility to sustainable agricultural production and raise awareness also among farmers themselves about their role in sustainable development, even in rural areas close to city. In addition, the innovative actions put in place by the women interviewed contribute also to spotlight the role of woman in farming. In their words: *"We ... give dignity, that is, making small producers perceived as bearers of a value...but also we want them to recognize their own value."*(IT_R_EN_2); *"we communicate small-scale agriculture as a very important and very cool thing...We tell the stories of farmers...as something that has incredible value. This also makes them much prouder of their work. (...) We...always reiterate that the role of women on farms is fundamental, especially in the mountains, because women always bring about change"*(IT_R_C_10).



Third, in three of the experiences analysed, the creation of networks among artisans and local farmers (many of whom are young women) in areas where cooperation is still a challenge, has a positive impact on rural development in the area and contributes gradually and continuously to gender equality. As explained by one of our respondents *"We have in common some visions of the territory which have made us come closer together. The right to health is central: ensuring that clinics remain open and are accessible to everyone, especially to women"* (IT_R_EC_9).

Another experience analysed is clearly contributing to challenge patriarchal stereotypes and norms in a disruptive and sometimes radical way. This is a network of women that provides a space for them to connect, build synergies, discuss issues, and become friends, in a rural area in the South of Italy that is still very much governed by patriarchal social norms. Thanks to this initiative, more than hundred women living in different rural villages meet and provide each other both practical and emotional support. This initiative is disruptive as it counteracts the isolation of women in an area where moving around (with public transport) is very difficult, if not impossible. It also demonstrates the potential of a women's collective, bringing together women who have lived in a particular area all their lives and women who have moved there from other cities or from abroad.

Moreover, some of our interviewees, over time, have assumed roles in local political bodies or in local business organizations and consortia. This has allowed them to play an important role in raising the visibility of women as entrepreneurs - helping to challenge patriarchal social norms.

4. INNOVATION ECOSYSTEMS

4.1 POLITICAL

In general, policy decisions do not seem to have had an impact on the motivations of these women who promote innovation regardless of the type of rural area in which they operate. Only one woman acknowledged that the opportunity to rent a public space was crucial in motivating her to start her activity. In another case, it was recognized that the use of a public space was relevant to develop part of her (already started) project, to minimize expenses, and to help create a local and inclusive community.

Other two women pointed out that one of the reasons that prompted them to transform (informal) networks into non-profit associations was the possibility to access public spaces and to apply for different grants. These women underlined the importance of having a public space to establish a venue for their networks' meetings and for the organization of different public events and activities. As explained by one of the interviewees *"If we have a venue to meet, we could also turn it into a library, a space to chat, a place where do creative things, as well as having volunteers helping other women to prepare a CV, or to develop any other skill: if you need a computer, or you need help with Excel, with Word, or whatever"* (IT_R_S_6).

The main recommendations mentioned by women about changes in local politics and programmes that could support them are the following:



- making sure that local public officers know well what financial support programmes for women entrepreneurs entail, so that they can support them with application processes and in dealing with bureaucratic matters related to opening and running a business;
- offering training and capacity building programmes to women to develop their business plans and business ideas as well as to inform them about financial programmes available (at the regional, national and international levels) and how to apply for fundings;
- making micro credits programmes available to women entrepreneurs upon the presentation of a well-planned business plan and idea, so that also those who do not inherit a business and who do not have a significant financial capital to invest, can develop their innovative ideas and start their businesses;
- improve financial and practical support to women who manage small businesses as freelancers during their maternity leave;
- making public spaces available at favourable conditions for the development of a local enterprise;
- provide venues where women can meet, join forces, organize events and markets;
- organize services around the needs of local people (and particularly women): public transport, nursery schools, elementary schools, women's clinics, meeting points where people can meet and socialize.
- looking at rural areas not only as spaces where to attract tourists but center the local economy and sociality on people who live there all year round.

Furthermore, it was underlined that public and private sector, especially at local level, should work together: *“the public sector has financing opportunities, but projects must be agreed upon, designed with private individuals because if the public creates a space or provides resources without knowing that there is a private individual with the same idea, or vision, it is difficult to make it work...”* (IT_R_S_4).

4.2 ECONOMIC

Most women started their project/business without receiving financial incentives. In some cases, financial incentives were required to further develop and expand the activities they had already started.

Only one woman received an incentive to start their activity. She accessed the national programme “Resto al sud - Remaining in the South”. The programme supports the establishment and development of new entrepreneurial and freelance activities in the South of Italy and is not specifically referred to women.

Other three women preferred to start their new businesses using personal savings or bank loans.

The women who initiated three experiences focused on the creation and promotion of local networks worked on a voluntary basis and were motivated by a desire to bring about change in the local area in which they work, with a focus on the dimensions of



environmental and social justice. However, when projects took on a formal legal dimension (with the establishment of a non-profit association), in at least two cases financial resources were required to implement specific activities/projects.

In the case of three experiences focusing on establishing and promoting local networks, the women, performing their work on a voluntary basis, was motivated by a desire to bring about change in the local area in which they work with a focus on environmental and social justice dimensions. Nevertheless, as the projects have taken on a formal legal dimension (by establishing a non-profit association) they have accessed or plan to access.

At least five experiences, received financial incentives allowing for further expansion and development of already established activities. The financial support was provided either by regional governments, by foundations (e.g. European Cultural Foundation) or by the European Union (e.g. CAP, NRRP, etc.).

Accessing funding was not easy, as mentioned before, especially navigating bureaucracy. In a few cases, women decided not to apply for different financial support programmes because these would require them to already have a significant amount of capital to invest, or because these programmes would cover only expenses related to machinery rather than salaries or raw materials.

Others complained about not having access to proper information and support to apply for financial programmes: even those who hired consultants to write the application complained about unprofessional behaviours and inaccuracy: *"I think I haven't found the right people, because there are certainly calls for tenders sponsored by the European Union, but I haven't found the right person who could help me to apply for these funds!"*(IT_R_EN_1).

A crowdfunding campaign was promoted only by one woman to support the development of her project.

Inheriting a business or using existing family-owned spaces and resources constituted also a significant economic advantage for three women interviewed. They do not have to rent or buy a space and can focus on developing their ideas.

4.3 SOCIAL

Patriarchal social norms importantly shape the social life of women, and more in rural village and remote rural areas, especially in the South.

As mentioned before, it is difficult to be both an entrepreneur and a mother. Support by partners, family members and friends are fundamental to run a business while being pregnant or while having small children. This is also because services (such as nursery schools) are not always available and because for a small business owner it is very expensive to hire someone.



Another issue often mentioned by a few women relates to how, unless a woman inherits a family business, local people tend to look at female entrepreneurs in a sceptical way. Women have somehow to prove themselves and that their ideas are worth it. If they work together with their men, being their partners or not, they notice that people most commonly take men more seriously. They talk to them as if they were the entrepreneur's deserving attention, while women tend to be seen as their helpers or partners.

Women, and particularly those who are also mothers, find it difficult to find the time and energy to be actively involved in local politics or cover important administrative and institutional roles: *"If you are a woman with a full-time job and you have a family, you think twice before deciding to become a mayor or vice-mayor, or whatever. That's a lot of responsibility and time. You must have a partner who supports you. There are also husbands who don't agree because then women don't have time for other [domestic] duties. And it's shocking because administrations would need more women as they have a different approach than men."* (IT_R_S_4). Despite this, at least three women cover significant institutional roles, either in the public administration or as presidents of local associations of entrepreneurs/consortiums. Others (at least two) are involved in activist movements fighting for environmental and social/gender justice, hence they are on the front line, co-organizing and participating in local demonstrations and political events.

All but one of the women interviewed belong to or have fostered networks or associations that help them find connections, gain support, build synergies, exchange knowledge and information. In rural areas, where patriarchal social norms are still widespread, women's collectives seem to be especially important: women can have spaces to meet and discuss their problems, join forces and organize events, contributing to the establishment of gender equality. One woman also reported that the local LAG is an important networking initiative.

4.4 TECHNOLOGICAL

Women-led innovations in all types of rural areas are more focused on valorising local cultural heritage and products, on creating services and networking opportunities for local residents and on creating experiences for tourists, rather than on developing new technologies.

Women use technology already available in their activities/projects. For instance, one of the women invested in a larger and modern laboratory (located in a rural area close to a city) and in large fridge cells, where she can preserve high quality fresh products all year round. She has also developed new techniques to transform local crops into different products, using ancient receipts and family traditions to produce modern products and expand the markets of the family enterprises. Other women use sewing machines rather than pottery lathes or kilns, etc.

What is central in all of the experiences analysed is the use of digital infrastructure and communication tools. All of them have well-designed and regularly updated websites and social media pages. Digital tools are used for expanding networks and for marketing



strategy (allowing also to buy products/services online). As mentioned by one of our interviewees a successful communication strategy is not just about having many followers, but about narrating an attractive, convincing, and coherent story, so that people start thinking that what you offer is “cool” and they buy your products/services.

Selling online is useful to target clients all over Italy and abroad and can be the most important way to market particular products as tailor-made clothes created in a remote rural area in the South of Italy. Using digital platforms and through video calls with her customers, our interviewee teaches customers how to measure sizes and discusses dress designs with them.

Besides, one of the innovations is all about communicating stories (of local farmers) in inspiring and attractive ways: short videos, podcasts and photos are published regularly and spread through local radio programmes and TV channels.

4.5 ENVIRONMENTAL

All female interviewed have ecological considerations in promoting the innovations, regardless the type of area in which they operate.

In particular they are very attentive to using as much as possible locally and ethically produced resources, limiting the production of waste. For example, using only environmentally sustainable textile and making sure that ethical standards are also guaranteed; creating upcycling products using only things that otherwise would have been wasted: olive harvest olive nets and sails, etc.; processing an autochthonous crop that grows in harmony within the local ecosystem.; serving mostly local products that come from organic farms and other small producers.

Environmental and climatic conditions are increasingly risky and unpredictable, and this also influenced one woman's decision to expand her food processing business, initially focused only on a PDO product (whose production has declined in recent years), to also process other regional crops.

Environmental issues are also at the base of many other innovative projects. For example, one initiative is rooted in a local environmental justice movement; another woman makes sure that the members of the local entrepreneurs' network she coordinates, respect the local ecosystem in their work; videos produced by another woman focus exclusively on the stories of small-scale agro-ecological farmers. Finally, also the projects targeting women or children and young adults implement activities in close connection and harmony with the local environment.



5. MAINSTREAMING ACTIONS

5.1 SCALING UP

The impact of women innovative practices can be perhaps noted more on an informal, local level rather than by looking at changes in formal laws, policies, institutions, or norms.

In general, having more women involved in local institutions and administrative bodies would be a very important starting point to listen to women's voices and support their needs. In fact, one of the women interviewed who settled in a remote rural area, starting with the implementation of an innovation (taking over an alpine lodge and ensuring its year-round opening) was later elected mayor of the tiny village. In doing so, she was able to promote various initiatives such as the creation of a nursery that, along with other initiatives put in place, fostered the settlement of other families with children in the small village.

5.2 SCALING OUT

Innovative actions are mostly localized and specific to a context in all rural typologies. The research findings show that women are not aiming to replicate the innovation elsewhere.

Nevertheless, in several cases the women have widened their activities. For example, adding new initiatives to their core business such as opening a tailoring school for local people and for tourists; the organization of workshops and labs with local schools; offering creative experiences to attract more and diverse people. However, their idea is to remain grounded in their specific context and they do not show an interest in replicating the innovation in other contexts.

As explained by one of the women interviewed, especially in the case of experiences promoting social projects, there is value in remaining small, local, and specific: *"we don't actually intend to grow! That is, maybe we will add a project every now and then, but we want to continue working in this house and we cannot accommodate large groups! It's not the number that makes a good project!" (IT_R_S_5).*

Furthermore, innovations that aim at creating and expanding networks (4 experiences) are open to include more actors if these share the same values and ethical principles. In addition, all these networks are, over time, promoting new projects and new activities, also fostering an expansion of product markets, such as by making arrangements to supply the school canteen of a municipality in the area or trying to connect local farmers with restaurants and cooks to make the local gastronomy (in an area close to a city) more sustainable and focused on local products.

As mentioned in previous sections of this report, women do collaborate with local communities and institutions whenever they have a chance to do so, when local administrations welcome their initiatives and are willing to support them. In fact, support



by local municipalities is of great importance and help but it is not always available. Two women obtained the management of a local public space to develop their businesses. Others are still negotiating to obtain a venue to organize events and meeting opportunities.

In addition, it was pointed out that the visibility gained by some of these experiences at the regional and/or the national level- through newspaper articles and TV programmes but also through the web and social media- can inspire other women in other contexts to develop similar projects.

5.3 SCALING DOWN

Most of the women received some kind of funding to further develop their activity/project, only one received a grant to start her activity. The financial support was provided either by regional or national governments (e.g. the national programme Resto al sud - Remaining in the South), by European Union (e.g. CAP; NRRP) or by private foundations.

The educational background was most often central to develop a business/project. Furthermore, two women participated in courses focused on developing specific skills for starting and running a business. The first was promoted under the EWA (Empowering Women in Agrifood) programme, which is co-financed by the European Union; the second was aimed at supporting start-ups developed by young people and was promoted by a foundation that runs one of the oldest management schools in Italy. Since completing their courses, both women have started their own businesses, characterised by a specific focus on the dimension of environmental sustainability. Two other women took regional courses for "Environmental Hiking Guide" and "Experiential Tourism Operator," respectively.

5.4 SCALING IN

Women innovators definitely value the capacity of organisations and institutions to provide support to their businesses and ideas. However, in the Italian context, this support is often limited or inexistent, as mentioned throughout the report.

Support would be particularly important in remote rural areas. This means providing spaces where women can develop their enterprise, sell their products and services, as well as meet to network, exchange ideas and support each other.

Support would also entail having public officers who know well about funding opportunities promoted by international, national, and regional agencies and organizations (such as those provided through the NRRP) and can support women entrepreneurs in their application procedures.

Research findings show that direct engagement of women in relevant roles in public administration or local business associations/consortia can be a way to foster these changes and increase support for women.



5.5 SCALING DEEP

Research findings show that habits, beliefs, and social relations are starting to change thanks to these women's innovative actions, and thanks to their determination in developing different types of businesses/projects.

Women become promoters of social change, demonstrating that it is possible to work on a very local scale but also to reach a wider audience through online communication and marketing strategies. Signs of change are the increasing number of people buying products in short supply chains (farm shops, local markets, etc.); a growing willingness on the part of public administrations to grant public buildings and spaces to develop initiatives and events related to local sustainability and cultural heritage - often promoted by women-led businesses; an increase in networks between local producers, artisans and entrepreneurs in areas of the country where there is no cooperative tradition.

Nevertheless, changing societal values and behaviours in relation to gender equality is a slow process, especially in remote rural areas and in the South of the country where patriarchal social norms are still significantly shaping social relations and roles. However, women interviewed note that, over time, they all gained recognition and respect by local people. Some women are more outspoken than others in terms of wanting to challenge patriarchal norms. Through their activities, they organize specific events (e.g., public debates on gender-based violence or gender inequality) and demonstrations (e.g., for the maintenance of women's counselling centres, of kindergartens that are easily dismantled in rural-and particularly remote-areas). In this way, they actively and directly contribute to changing the social view of women's roles at the local level.

Women who are themselves actively involved in local political bodies or have representative roles in local organizations of entrepreneurs and consortiums play an important role in shaping politics that favour female entrepreneurship, and also in increasing women's visibility as entrepreneurs - contributing to challenge patriarchal social norms at local level.

Services and support programs (such as nursery schools or after-school programmes) need to be improved in all kinds of rural areas, both in the North and in the South, to reconcile women's work life balance. Many women with children, in fact, admit that they would have given up with their activity if they would not have been supported by their partners or family.

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RURAL WOMEN-LED INNOVATIONS IN THE NETHERLAND

CASE STUDY REPORT

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ACRONYMS & ABBREVIATIONS

| | |
|---------------|---|
| CSA | Community-supported agriculture |
| LEADER | Liaison Entre Actions de Développement de l'Economie Rurale (Cooperative Actions for Rural Economic Development) |
| LNV | Ministerie van Landbouw, Natuur en Voedselkwaliteit (Ministry of Agriculture and Food Quality) |



1. THE NATIONAL CONTEXT

The Netherlands is a densely populated country. Rurality in the Netherlands is often based in villages and rural areas close to cities. Only on a few islands, connected by a few ferries a day, can be considered as remote in the sense that they are outside commuting distance of a more urban areas.

Notwithstanding this, there are large cultural differences between urban and rural areas. For example, a bible belt of the Calvinist protestant religion stretching from the South-West to the North-East of the Netherlands presents distinctive cultural properties. One of the political parties that have many supporters in this region and is often the largest party in several rural municipalities is SGP, which is supported by 2% of the national electorate in total. This party was initially founded, more than a century ago, to oppose female voting rights. Even now, and after some legal cases they lost, no female has been ever put on their voting list for the national parliament. There are a few females in municipal councils, who have justified their candidacy on the ground that there were no male candidates and they had to step in as a duty to the good cause. Note that there are also other political parties representing another part of the Calvinist electorate that are more positive to female-led initiatives in the political domain; one of them, CU, has a female party leader and has a larger electorate.

Netherlands spatial planning has contributed to containing urban sprawl, which means that farmland has been protected and that suburbs have been built in a much more concentrated way, meaning that some villages (such as Zoetermeer or Jutphaas and Vreeswijk) have been extended towards cities and others (such as Hazerswoude or Odijk) stayed relatively rural. However, within many rural communities there are people who are from an urban origin (locally nicked as 'import', suggesting that they are still outsiders) and there have been some tensions between newcomers and the original population. From the 1970s on scholars have studied these differences in values using anthropological research methods, which involved moving into a village and studying what was happening between new-settlers and original residents, and a range of other methods.

The Netherlands urban centre is the Randstad in the West of the Netherlands. The Randstad includes major cities as Amsterdam, Rotterdam, Den Haag and Utrecht and a range of intermediary cities, including Almere, Hilversum, Haarlem, Leiden, Delft and Dordrecht. Even in the Randstad, there are rural areas as it has been planned as a Green Heart Metropolis (Burke, 1966). Next to the Randstad in the West, also some rural areas in the adjacent areas in the South (including Breda, Tilburg, Eindhoven and 's Hertogenbosch) and the East (including Ede, Arnhem, Nijmegen) are part of a dense urban network.

Remote area is for the context of this report considered to be rural areas that are further away from the Randstad and adjacent urban networks. This means that, although some regional cities may be nearby, there are less jobs within an easy commuting range than in the areas closer to the main urban centres.



Rural villages. There are many rural villages in the Netherlands. Due to scale enlargements often shops are closing, resulting that community activities include schools and civil society (known as the association live) in villages. In many villages groups of citizens come together once or several times a week to be active in culture sports of other activities. This includes a local department of one of the national female organisations, the local fanfare, sports clubs. Often the local authority has a multifunctional building in a village that can be used for these activities and in which volunteers (often including a village council of active citizens in a village) play a large role in operating it. In some areas these facilities have been sold as consequence of rural decline and choices made by the municipality. Political activities are at a level of the municipality, which has a municipal council). Due to amalgamation rural municipalities may include many villages. About 25 villages in one municipality is no exception anymore in rural areas.

Rural areas close to the city. These are the rural areas relatively close to the central urban networks of the Netherlands. These areas are under pressure of people that aim for combining a rural home with work in the city. This may impact the sense of community as 'import' people may not be well integrated in rural networks. From an entrepreneurial perspective locating close to a city means relatively easy access to urban markets and urban visitors that can be involved in a rural experience.

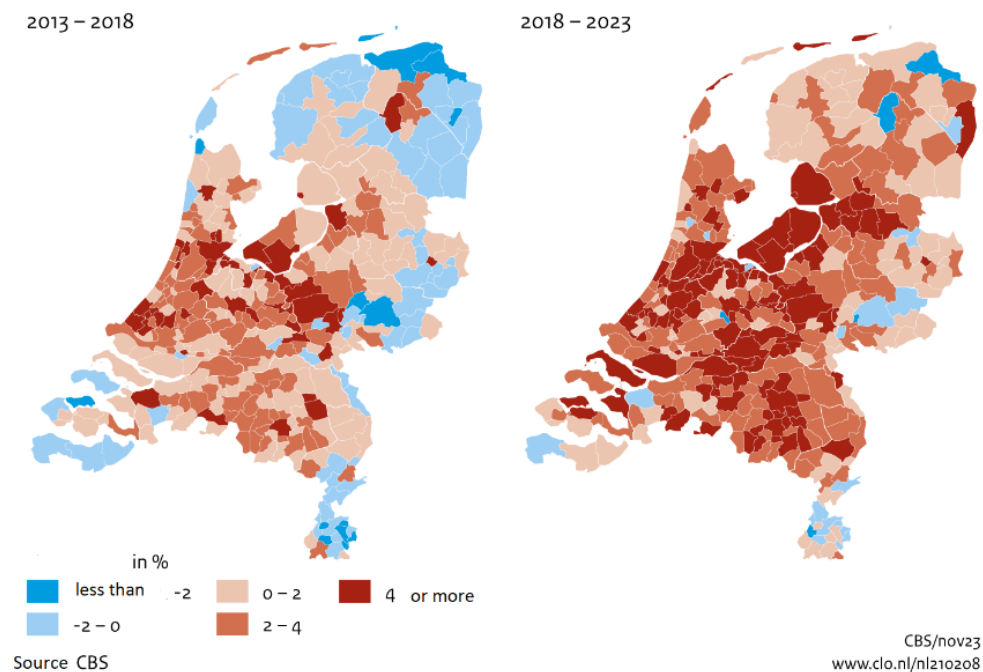


Figure 1. Population development in municipalities in the Netherlands (CBS et al., 2023)

In the practices reflected on in the interviews the differences between these contexts are not as big. This may relate to the dense population in the Netherlands. In some cases some experiences are a little different in the more remote areas. Here some issues of rural decline are happening. About 15 years ago the issue of future rural decline was a



big policy issue (Haartsen & Venhorst, 2010); later the issue has been devolved to the regions themselves (Bock & Haartsen, 2021). Currently, however, many local authorities that have had a decline in population previously, are growing again (Figure 1), which impacts the range of opportunities for female innovators. The issue of population decline in remote regions impacting opportunities for innovations has become much more a local than a regional issue.

Certain regions unexpectedly have been rejuvenating; primary schools that were considered to be under the threat of closure attracted sufficient children again. The issues of remoteness still can play a role, but most matters are of relevance for all types of areas.

2. THE INNOVATIONS

There have been 10 innovations analysed. Many of the females involved have been middle-aged and are well-educated (Table 2).

Table 5. Innovations analysed.

| N. Interview | Age | Educational Level | Legal form of the business/enterprises | Year when it started |
|-------------------------------------|-------------|-------------------|--|----------------------|
| 11 NL_R_EN_1 Remote Rural | 70+ | High, vocational | Association | 1992. |
| 12 NL_R_EN_2 Rural close to city | 50+ | High, theoretical | Foundation | 2012 |
| 13 NL_R_EN_3 Rural villages | 60+ | High, vocational | Foundation | 2018 |
| 14 NL_R_S_4 Remote rural | 50+ | High, theoretical | Cooperative | 2013 |
| 15 NL_R_S_5 Rural close to city | 50+, 60+ | High, vocational | General partnership | 2018 |
| 16 NL_R_S_6 Rural villages | 60+ | High, vocational | Association | 2020 |
| 17 NL_R_EC_7 Remote rural | 40+/50 | High, vocational | Limited Company | 2021 |
| 18 NL_R_EC_8 Rural close to city | 30+ | High, theoretical | Foundation | 2020 |
| 19 NL_R_EC_9 Remote rural. | 30+ | High | Limited Company | 2017 |
| 20 NL_R_C_10 Rural close to city | 60+/ 40+ | High, vocational | Foundation | 2007 |

The innovations itself are often focussing on several of the four dimensions of sustainability (environmental, economic, social, and cultural), which are often integrated. Innovations include setting up an arboretum, supporting the development of oases for bees, setting up a network in the context of community-supported agriculture, developing and marketing a biodegradable lamp, setting up a hiring office for (usually young) urban



citizens to work for harvesting in rural areas, multifunctional innovations, including art, at (former) farms, setting up community housing in a rural village, and developing natural playing areas for children.

3. INNOVATION PATHWAYS

3.1 MOTIVATORS FOR INNOVATION

The typical profile of the females interviewed is more that of a social entrepreneur working on progress on several dimensions of sustainability, than that of a financial entrepreneur, working on private value creation. So, it is often about social return; it is about social and environmental values in a local context.

Many of the females interviewed are of middle age. For them, current initiatives are based on mid-career changes. In several cases, the women are rural newcomers or have made a rural return and have followed their move with engaging in a range of new initiatives. Some of them have a history of entrepreneurial activities, like buying and running a hotel abroad, others have a history in more urban jobs, like being a consultant or working in a garden centre. Another one had an urban background and married to a farmer. The movement to a rural area (sometime motivated by a wish to live with nature) and starting to develop initiatives to contribute to the area and society as a whole is a red thread to activities of many of these female innovators. Many have a history of contributing to good causes in an earlier life. Some indicate that this is the essence of their (working) life, and they cannot imagine working for an employer that is not working on matters of sustainability; they prefer organisations that are supporting the underdog. Many have developed networks based on previous experience that they use to promote initiatives.

Some of the females indicate that social responsibility was one of the aspects that has moved through generations, such as parents active in social work for communities, mothers active in the women liberation movement of the 1960s and 1970s, and in this way being active for the community is partly based on how they are raised. Others indicate that working with plants has been taught from an early age.

One of them indicates that her children have been the motivation to work on sustainable development. It is not good to leave them a life on sinking ship.

Motivations include the willingness to contribute to the village in an area of rural decline, which happens in some more remote rural areas. Initiatives can put the village on the map and create some new qualities. In remote rural areas there are less opportunities. So, this means that you have to grasp such an opportunity as it comes by, as one of the females has done. After the renovation of the village square, there were still some green areas left, and there was debate on what to do with it. Based on her intervention, including a lot of talks, the idea of an arboretum was developed and supported. The village community played a large role in this, and knowledge on the specific trees that were already there. After all it takes some time to grow trees. Getting the project done takes a lot of effort including getting LEADER finance.



Some of the more experienced females looked also back in history and are aware that the movement of acknowledging female initiatives is going in the right direction. One of them reflected on the situation 30 years ago when it still took innovative action to get a mortgage on the female's name, and now females are more at the foreground but still must break down barriers (but some barriers have been broken already resulting in a motivation that progress can be made).

A relative younger innovator reflected of experiences of the family farmers. And the role of seasonal labourers on farms. It is based on more agroecological farming methods and the use of more responsible, local, labour in it. Although relatively young (compared to other innovators) the initiator has a farming background has been active in responsible food production networks for a considerable time. So, also here innovations are based on knowledge of the field.

3.2 CONSTRAINS AND FAVOURABLE CONDITIONS

Although females are more acknowledged as entrepreneurs than decades ago, in the interviews it is indicated that the hidden prejudices of society still expect that if a male and female are together that than the male is the entrepreneur. People ask to see the (male) boss if you aim to make a deal. Female initiators indicate that they have not always been taken seriously. They have the feeling that they had to prove themselves extra. That they were considered to have a 'nice hobby'. However, an initiator indicated that at a certain moment these barriers have been broken and the initiative has been matured to an established status. So, in this case there has been a struggle to become part of the establishment, and after this struggle has won, the barriers became part of the past. As we have interviewed only initiators that have 'won' this struggle, we have no insight in the experience of the initiators who were stuck in front of an impassible barrier. The stories of the initiators we interviewed, suggest that this barrier may be impassible in many cases. The motto of female rights' activist Tendeloo (1897-1956) '*Frappez, frappez toujours!*' (Linders, 2003) seems to be still needed to get things done. At least many of the females show a lot of endurance and have taken a lot of actions to get through with their initiatives. Youthful enthusiasm alone will not get you there.

Another innovator had a counter impression that some men were eager to help just because she was female in a male-dominated context. This may relate to the kind of innovation and the context in which she worked. Another respondent confirms that currently most people welcome contribution from females, in contrary to the situation 20 years ago.

The fact that the women were middle-aged made that many were also beyond the stage of maternity, babies and toddlers, which might have had an impact on the ways by which care could be organised. Afterall, moving away to a rural area may make it more difficult to get support from family members. Some referred to their primary school children as source of inspiration and school meetings as forum to get integrated in a new rural area. Another one has been divorced 30 years ago and her children were born before the divorce.



One of the respondents works as advisor and sees that in farming background the organisation of care is an issue. It much more an hassle to organise it, especially as farms are usually not located next to a care centre.

Some of the females worked with a partner and were having some joint initiatives with clear divisions of tasks. Such a joint operation helped to get forward and make progress. Others referred to their partner as someone also working as an independent worker but on other initiatives.

In a remote area, issues of rural decline have a negative impact on the spirit of innovation. There is a kind of resignation that the rural area will stay in a deplorable state and that initiatives cannot change that. Decline, furthermore, impacts the ability to keep-up with civil society as generational renewal does not take place and it makes that people who are working in innovations are guided to fill in local vacancies in that network, not to develop something new. It has furthermore negative impact on the quality of the infrastructures, such as cycling paths, affordable homes, schools. One of the initiators was also taken on activities to make joint survey of public spaces in the community to get people together to work on the quality of spaces and places.

In some of the project's LEADER has been an important financial support mechanism. Such as in the arboretum and nature playing areas. Finance is discussed as an issue. Margins are often thin.

Many of the females have a profile as social entrepreneur and are agile in creating and developing networks to promote their initiatives. Getting contacts with the alderpersons in the municipality, take joint initiatives to contact provincial authorities, organising open days to make base with the grass roots. Sometimes they also see making time to answer questions of visiting researchers as part of their activities to strengthen the networks around the initiative they are promoting. Important actions are to get the initiative part of the local agenda and to keep it there in a way that if funding will become available it is on the agenda of projects that can be financed.

Part of this is also that politicians make promises to get elected and by framing your initiative as a way that politicians can say that they keep up with their promises by financing the project you can make progress. This involves the ability to look at your target group and consider what they need and how you can frame your initiative to make it be the solution to their issues.

Many of the initiators have been selected for their contributions to a specific project but in fact they are the initiators of a range of projects as they are in the habit of initiating matters.

One of the initiators has also shared that after a long time of networking, working on getting known, at a certain time the situation flipped. People came to the initiator to ask for their contribution. It was not anymore knocking on doors to explain the potential contribution of the interviews, but it was about receiving opportunities that came through your own door; it was surfing the waves of projects that were offered.



COVID19 was key as context for organising harvest camps for local seasonal workers to replace foreign workforce and to provide urban festival workers a way of living. This is an example of an initiative that is launched as response to an emergency. Here, the network with agroecological farmers that were in need of helping hands was of importance as trust is needed to hire a completely different workforce and agroecology was needed to get the target group of urban seasonal workers interested in working in the farm. So, the position of an initiator in a network was also of importance for responding to an emergency as there is no time to build such a network; the harvest does not wait.

3.3 IDEA AND PREPARATIONS/DECISIONS AND PREPARATORY ACTIVITIES

The process of innovation is in some cases just part of a trajectory of (re)settling to a rural area and coming involved in the community and by finding novel ways to contribute to the community. For many respondents, the life change trajectory of a mid-career change has been essential to the innovation. This change is often founded by motivations to contribute to sustainable development in a rural context.

As many of the initiators have a lot of previous experience, they are more comfortable about networking, going to politicians. They know that new opportunities may come as things do not happen in the first instance but work on getting matters on the agenda that may help to get finances as conditions change. They show experience in how to handle people. It is about “The right people in the right location, in the right moment.”

Many have developed new skill to promote their projects. Such as establishing ICT skills to make a fine website.

The seasonal workers labour bureau is in a rural area close to the city. This allows to find urban population that aim to work in farms. As the work is done on ecological farms it attracts an urban population that is aiming for a more sustainable farming method. Background has been that workers in festivals had no work during COVID and influx of seasonal workers from abroad stopped. So, organising seasonal work for this target group hit two birds with one stone.

Another innovator is working in the practice of making innovators of others possible. To support transforming entrepreneurs in getting grants and other financial contributions. Many of them also expressed visions on community building. For example, that it is better that homeless people to build their own tiny house, than to provide a turnkey tiny house to them.



3.4 CONCRETISATION OF INNOVATIONS

Outcomes of the innovations are typically not quantified in the interviews but are qualitatively stated based on the outputs produced.

Trees are visible and provide an environmental quality to the area and also provides a durable (trees last for as long time) identity.

A project is about developing eco communities, a new way of living. Here, the location close to cities is for importance as this enlarges the target group and the ways by which community members can make a living.

Another project is about developing natural play areas for children. This is also located in a rural area close to cities. It is a lively area where there are a number of children that are growing up.

Some innovations are related to farming and the farm production cycle. An interesting one is the development of a biodegradable lamp based on potato starch panels. It has been a long trajectory to consider what could be made from this material.

Finance is key for hiring seasonal workers. Here, it must be affordable for the farmer, it must be attractive for the staff hired and there must be sufficient margin to organise it all.

So, the project result in new jobs, but these are often temporary and seasonal. And some of them are about replacing jobs, such as the seasonal workers in which urban workers in a 'harvest camp' replace foreign seasonal workers. For the impact on jobs it must be noted that unemployment is low in the Netherlands and that there are more vacancies than unemployed people search for a job (CBS, 2024). Rural areas show low unemployment rates. Sometimes even below the 3.6% national rate.

Some also use family members (like a sister) as part of the supporting staff. In this way the rural initiative becomes a family entrepreneurial activity.

3.5 IMPACTS OF INNOVATIONS

Many of the innovations are being framed as ambitious but feasible. Some of them are radical innovations like creating a new way of living, but are still feasible, as this will happen in an eco-community and not for everybody at once. Presenting an initiative as innovative change but feasible to develop within the context of the area is part of the success. Main distinction is here between remote areas where these innovations must be based on a local, rural, hinterland, and the close to the city areas in which the urban hinterland allows for more carrying capacity.

The impacts are related to the various activities done. As the respondents themselves state, nature experiences during childhood have impacted their later life choices. So, providing access to natural playing ground and nature education to children can affect the way they take choices. Supporting community supported agriculture can has an impact on alternative, more nature balanced, local food production and consumption



networks. An arboretum in a remote village sets the quality of the village apart from others and this identity formation impacts the rural attractiveness of the village.

Innovations have potential the impact that less seasonal workers are needed from abroad and that it creates some more urban-rural connections. This impacts a transformation to a more localised food production network with more local labour.

4. INNOVATION ECOSYSTEMS

4.1 POLITICAL

Many of the initiators have done quite a lot of networking with local politicians and have many contacts with local (municipality and province) civil servants. Many of them made use of LEADER funds as this is catered for financing local initiatives.

The respondents are innovators. They are not waiting for others to change the rules but take innovative actions within the current playing field. It is about making local politicians' part of the coalition supporting their innovation and if that happens the rules will be applied in a way that they can work with it. This is not always an easy process.

Rules limiting possibilities are also spatial planning rules making that it is not allowed to build structures on rural land. In some cases, temporary structures are allowed. But for example, a project to place tiny houses on farmland failed. This comes to the high-density of the Netherlands making that the few rural areas that are left are guarded from urban development and construction works for non-farming related innovations are likely not to be allowed outside existing villages and towns. Here, the provinces are the ones setting rules that municipalities must apply in making local land use plans. The innovators see differences between rules of different provinces. This affects their policies. The grass of the neighbours is sometimes greener. Landscapes and urban pressures differ by province, which justifies differences in policy. It might be that provinces close to urban areas have more stringent rules as this is needed to keep the countryside open, and that more is possible in more remote provinces. This policy analysis has, however, not been taken place in the context of this study.

4.2 ECONOMIC

Many sorts of financial incentives are used. Financial base can be users and customers of innovations but can also be the local authority of LEADER funding. Usually, the process has not started with a financial application but by getting support for the project to ensure that the innovation becomes part of the political agenda. If a programme is part of the political agenda a modest financial contribution may come.

Some innovators explicitly indicate that it is not their aim to make a lot of money, but to have a decent compensation but not more. Some indicate that getting this decent income has been an issue.

For some of them, selling a product has been of importance and having support from a few big first customers made a difference. An example is a biodegradable lamp. Here a



search for markets where this can be sold has been of importance. This happened both to contacts with professional parties as by publication in a house decoration journal.

Many need some grants, such as the hiring agency for seasonal workers. In the interview specific hourly wages for farmworkers and margin for company has been shared, showing that transparency is there. The grants are for some innovations, such as an artist in residence, but it is still an issue to get this organised.

4.3 SOCIAL

The females are very much engaged in community level. One of them reflected on a recent meeting with 10 people in a community house as “it is making a society at your own backyard”. Working at sustainable development at a low rural scale is at the essence of most of the initiators.

Many of them also work in networks with other initiators who do their contribution at a local scale. In this way lessons are exchanged, and it motivates people to be active in the movement as well. Here, the more remote areas may be less accessible to join these network activities as there are less accessible using public transport (including transfers by bikes rented at train or bus stations) and must be more picky in choosing to join activities that initiators in villages and rural areas close to cities.

The innovator in the seasonal working agency is very much involved in the agroecological farming network.

Another innovator indicates that students in a transformation course where 90% male. Which fits to the social context of farming in the Netherlands, which have impact on other farming related innovators. In joint companies there are very strict gender roles. The same holds for educational programmes in which there is a strong gender gap between technology and care programmes.

Some of the initiators are an example of challenging these roles.

4.4 TECHNOLOGICAL

Technology is often a transfer from technological solutions to more nature-based practices. It is more about ecological solutions than technological solutions. Replacing technology is also a kind of technological development.

Much more technological; was the development of a biodegradable lamp. Here support of school allowing to use their machines (in interaction with students learning to use them for this material) has been important. The investment for buying these machines would have been unaffordable.



4.5 ENVIRONMENTAL

Many of the practices are about a better environment. It is about eco villages, supporting agroecological practices, learning about nature. Next to an emphasis on local communities, the innovators share a feeling with the environment. Using local products, producing materials as a biodegradable lamp has been an innovation.

Soil conditions are different within the Netherlands and have impact on what you can plant and cultivate. Sustainable development in a peat area involves raising water levels to prevent oxidation, which makes that a sustainable use of the area makes that the area is not accessible during a wet season.

5. MAINSTREAMING ACTIONS

5.1 SCALING UP

Locally norms have changed in a way that projects promoted by the innovators have transferred from a 'nice hobby' to established practices. It remains to be seen whether this has wider impact on the treatment of female innovators. The fact that almost all of the women interviewed are middle-aged suggest that a certain life experience is needed to break through patriarchal structures and that seniority may help to break through this normative framework. i.e. that young females may have even more issues. After all, the 'seniority principle' (Gruber and Szoltysek, 2016, p. 136) is part of the patriarchal complex of ideas.

5.2 SCALING OUT

Most of the initiators are explicitly active in scaling out their initiative by connecting with other initiators in other areas to join forces. They come together, they establish a network, exchange ideas, and promote further uptake. It may be that the process of selection of respondents impacts this outcome. Initiators who like to share the message may be more eager to respond positively to a call for an interview for FLIARA.

One of the initiators is using her knowledge and experience to support farmers that aim for more ecological ways of working.

5.3 SCALING DOWN

Part of the scaling out is also sharing experiences of more established initiatives to new, starting, initiatives. Several initiatives have received LEADER funding, which is an instrument to support local initiatives.

5.4 SCALING IN

The innovators are active in a range of practices. Often they are active in a range of innovations, which means that they can be a role model for other females. Some have also functions relating to educational institutions and are so in direct contact with a new



generation. Usually however there is no explicit gender element in this. But implicit effect by good female role models may help to inspire a new generation.

5.5 SCALING DEEP

Although we like to believe that these actions have contributed to a fundamental change, we do not have evidence that this is the case beyond the fact that every female success story is an axe to the root of patriarchy. In the interviews it has been reported that a general negative appreciation of female innovations have been changed towards a positive evaluation of a specific innovation from a specific female. We have no evidence whether this individual appreciation has casted back to a change in the general evaluation of female-led innovations. The issues seems to be too resilient to change to expect a swift transformation to the better.

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RURAL WOMEN-LED INNOVATIONS IN ROMANIA

CASE STUDY REPORT

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ACRONYMS & ABBREVIATIONS

| | |
|---------------|--|
| CAP | Common Agricultural Policy |
| CSO | Civil Society Organization |
| LAG | Local Action Group |
| CSA | Community Supported Agriculture |
| UN | United Nations |
| UNDROP | United Nations Declaration on the Rights of Peasants and Other People Working in Rural Areas |
| NGO | Non-Governmental Organization |



1. THE NATIONAL CONTEXT

Romania has the 2nd highest percentage of rural areas in the EU - 46.5% - compared to an EU (28) average of 27.3% according to Eurostat data from 2017 (Eurostat, n/a a). The urban population is the majority, with 52.1%, while the rural population is 47.9% / 9,1 million. The percentage of rural residents in Romania is much higher than the EU average of 30.6% (European Union, n/a). The Romanian National Institute of Statistics (INS) provides data that uniformly describes local administrative units (LAUs), distinguishing urban areas (cities or municipalities) from their counterparts—communes, in total 2861 in 2018. According to data published in 2019, the communes with populations ranging from 1000 to 5000 inhabitants accounted for 79.6% of the total number of communes, with 105 communes having less than 1000 inhabitants (INS, 2019). A challenge in analysing urbanisation/ruralisation lies in the contemporary urban and rural landscapes, where traditional city-village distinctions blur, giving rise to numerous entities—like semi-urbanized villages, distinct suburbs, semi-autonomous settlements, underdeveloped towns, and ambitious industrialised villages (Berescu, 2022). However, the legal definition identifies rural areas by their strong emphasis on agriculture or, alternatively, by their lesser territorial resources compared to cities (Stănescu, 2022). In public discourse and collective imagination, rural areas and populations are perceived as underdeveloped (socially, economically, and culturally) compared to urban ones, lacking in infrastructure and inhabitants' lifestyle adaptations (eg. capitalist economic practices, neoliberal modes of production and consumption, globalisation), leading to a focus on urbanisation in territorial governance (Berescu, 2022; Velicu, 2023).

The overall main issue rural areas (all types: close to the city, rural village, remote rural areas) are faced with is depopulation (Dumitru et al., 2021), accompanied by an ageing population. The average age of the rural population is 42.2 years, 0.2 years higher than in urban areas (MDLPA, 2020). Negative natural growth rates, coupled with international migration deficits, led to a significant decrease in the country's resident population, with the rural areas being deeply affected. Multiple factors, encompassing limited access to essential infrastructure (including transportation and public utilities) and services, educational and economic deficiencies, contribute to the diminished quality of life in rural Romania, perpetuated by systemic neglect, further exacerbating discrimination in favour of urban areas (Berbecar et al., 2020; Iftimoaie, 2021; Stănescu, 2022). This neglect results in a critical scarcity of essential social care and support services in remote rural regions, hindering accessibility and perpetuating disparities among vulnerable social groups, such as those with chronic illnesses, the elderly, or disabled individuals, thereby impacting social stratification and correlating with lower life expectancy, higher prevalence of chronic diseases, and reduced overall development (EASPPD, 2018; Stănescu, 2022).

The risk of poverty and social exclusion in Romania for the whole population is 34.4%, the highest in the EU in 2023, compared to the EU average of 22% (Eurostat, 2023). Women in rural areas, particularly single women, older women, women with dependent children, and disabled women are most at risk of poverty and social exclusion, particularly if they also belong to the Roma minority (Eurostat, 2022; Iftimoaie, 2021; European Commission, 2019). All these factors together - economics, access to education and health services,



accessibility, infrastructure, social services - lead to almost half (48.5%) of the people living in rural areas in Romania being at risk of poverty or social exclusion, more than double than the EU average of 23.9%. The same Eurostat article points out that almost 35% of the women living in rural areas in Romania are affected by severe material and social deprivation, with the gender gap being the highest in the EU and on an increasing trend (compared to 2015). In urban areas in Romania, the percentage of persons at risk of poverty or social exclusion is 19.6%, while in towns and suburbs the percentage is 30.5%. There is a clear correlation thus between the risk of poverty or social exclusion and the degree of urbanisation in Romania, with almost half of the rural population being exposed to it. This risk disproportionately affects Romanian women from rural areas, who are the category of population within the EU most exposed to it.

2. THE INNOVATION

The 10 interviews from Romania focus exclusively on rural innovations - that is ecologic (3 case studies), social (3 case studies), economic (3 case studies) and cultural innovation (1 case study) impacting rural communities. A case study consists of desk research regarding the innovation practices of each of the innovative women, and an in-depth semi-structured interview with each of them. Data obtained in these two different ways is analysed according to the methodological FLIARA guidelines.

Table 1. List of Innovations.

| N. Interview | Age | Educational Level | Legal form of the business/enterprises | Year when it started |
|-----------------|-----|-------------------|--|----------------------|
| RO_R_E_1/Int.1 | 39 | University | None | 2020 |
| RO_R_E_2/Int.2 | 62 | Middle school | CSO | 2014 |
| RO_R_E_3/Int.3 | 39 | University | None | 2013 |
| RO_R_S_1/Int.4 | 47 | University | CSO | 2003 |
| RO_R_S_2/Int.5 | 53 | University | CSO | 2000 |
| RO_R_S_3/Int.6 | 42 | University | Local administration | 2020 |
| RO_R_EC_1/Int.7 | 46 | University | LAG | 2015 |
| RO_R_EC_2/Int.8 | 38 | University | CSO | 2011 |
| RO_R_EC_3/Int.9 | 37 | University | Local Gastronomic Point | 2021 |
| RO_R_C_3/Int.10 | 27 | University | None | 2015 |

2.1 ECOLOGICAL INNOVATIONS ANALYZED

Three women engaged in ecological innovations were interviewed, with one woman having initiated a project on biodiversity education. A second woman plays a key role in the fight for the rights of peasants as stewards of seeds, biodiversity, and nature within a national CSO. The final women interviewed within this area was a woman who built her home using natural construction (strawbale house).



2.2 SOCIAL INNOVATIONS ANALYZED

Similar to above, there were again three women interviewed under the banner of social innovations. One woman implements projects focusing on creating empowering women networks within her region, and civic engagement for rural development, while another, an experienced project manager and gender expert is working on increasing rural women's political participation and tackling domestic violence in the NE region of Romania. The final woman in this category, is the first woman deputy mayor (and in the meantime, elected mayor), working on improving the living conditions for the community through sustainable rural development and inclusion practices.

2.3 ECONOMIC INNOVATIONS ANALYZED

This section also highlights the economic innovations of three women, with one woman a LAG manager with various additional initiatives supporting sustainable women entrepreneurship in her commune, also tourism entrepreneur. The second woman is an entrepreneur aiming at supporting local development through sustainable tourism, while the third interviewee is a content creator and entrepreneur who values local gastronomy.

2.4 CULTURAL INNOVATION ANALYZED

The final woman interviewed identified as a cultural innovator is a young photographer and documentary filmmaker working with senior rural people, who established a cultural and educational center in her village offering alternative education through art opportunities to children.

3. INNOVATION PATHWAYS

3.1 MOTIVATORS FOR INNOVATION

The motivation for the sustainable innovations led by the 10 women interviewed is closely linked to how they perceive themselves in relation to their communities. Rather than taking an individualistic approach when critically looking at the current needs and opportunities in rural areas, most respondents find motivation in serving their community and other women. That is, they start their innovation journey with an understanding that the collective wellbeing of the community (and particularly the women in the community) is tightly interwoven with their own wellbeing. As such, their motivations are not individualistic (aimed, for example, at maximizing their individual financial gains, better social status, or more power), but rather seek applied, sustainable, practical solutions to the complex issues affecting the rural community. They think of it in terms of *“being engaged in the community, detecting existing problems, and finding ways to contribute”* with solutions (RO_R_EC_3/Int.9). Some interviewees named as their motivation *“meeting and helping other women”* from their areas, collaborating with women being not only seen as necessary and useful, but also pleasurable (RO_R_S_1/Int.4).

A strong motivation for those women aiming to innovate by creating networks is the need for socializing spaces for rural women. Given that in most rural communities the only space



available for women to socialize is the church (for men there is also a bar, besides the church), and the traditions of community work is dying out, with infrastructures such as village culture houses decaying, a need for a “third space” (Bhabha, 2004) becomes essential for them to define their identities in relation to their local communities through social interaction, and escape what could be called the “rural gender trap”. It is relevant to mention that the use of information technologies for communication and network establishment also serves this function (albeit creating digital communities with different moments of in person meetings). Countering the unequal public representation and community participation of rural women is named as main motivation by RO_R_S_1/Int.4, RO_R_EC_2/Int.8 and RO_R_EC_3/Int.9, and tackled either by creating the physical spaces, women gatherings or women networks (or various combinations of the three). Another layer was noticed here: that of the spaces and networks of women contributing to and being necessary for creating more solidarity among rural women.

In some cases, the motivation is more focused on the individual lifestyle/ life choices. Even then, though, the life choices themselves have a holistic dimension (that is taking on a comprehensive approach of the rural setting) and a community-oriented approach. Living in more harmony with nature, a healthier lifestyle (including by producing their own food) and generally being what could be called ecological citizens was the motivation for RO_R_E_1/Int.1, RO_R_E_3/Int.3, RO_R_EC_2/Int.8, RO_R_EC_3/Int.9 to choose living in a rural community. Other motivations stemming from personal contexts relate to preserving family traditions and carrying out the memory of loved ones who had passed away by continuing their sustainability practices (RO_R_E_2/Int.2). However, this motivation is closely linked to a change in worldview, that is both perceiving social, economic, cultural, and environmental sustainability as interconnected (from the practical, embodied, and personal experience of living in the rural community), as well as perceiving themselves as agents of change who have an impact (and often the responsibility) and contribute to the wellbeing of their communities.

Economic motivation - namely enhancing the economic autonomy of women (RO_R_S_2/Int.5) or supporting entrepreneurial initiatives by rural women in their communities or region is also a motivating factor (RO_R_S_1/Int.4, RO_R_EC_2/Int.8, RO_R_EC_3/Int.9, RO_R_EC_1/Int.7). This generally overlaps with understanding rural women's emancipation at the intersection between self-empowerment, self-realization and participation in community life (including decision making).

For some of them, particularly those who have returned to their home villages/communes and began getting involved after finishing studies in other cities, working in other countries, etc. there is also a dimension of giving back to the community which formed them, while also self-empowering themselves to take leadership positions. Although most of the interviewed women do not see themselves as leaders or innovators and hardly accept the fact that this is a necessary step to fulfil the objectives. It is more important for them to have a community behind them that is empowered and that supports and gives legitimacy to their actions. They (RO_R_EC_1/Int.7, RO_R_S_3/Int.6, RO_R_C_3/Int.10, RO_R_E_1/Int.1) come back with, or develop soon after returning, a clear vision of how they would like their communities to function, develop and approach sustainability: carefully assessing the



distance between the current state of affairs and their vision for a sustainable rural future for their community directs their motivation to engage in specific practices and activities (local administration, LAG, CSO etc.).

3.2 CONSTRAINTS AND FAVOURABLE CONDITIONS

To start with, most women (9 out of 10) come from privileged backgrounds in terms of access to education, information, and to some extent economic resources. In turn, this allowed them to access higher education, travel and develop their identities and worldviews in a much less constrained way than typical rural women in Romania. This is likely due to the efforts and approach adopted by their original family (parents, grandparents, guardians), which thus created these favourable conditions for their self-empowerment, skill development and innovative problem-solving thinking.

When discussing the favourable conditions for women leading sustainable innovation in rural communities in Romania, both personal and contextual factors come into play.

On a personal level, the interviewed women leveraged their great networking capacity to overcome community reluctance towards female leadership positions. All women actively network within the rural community, region, country and sometimes internationally (generally forming or becoming part of a trans local network using information technology). Sometimes the networking itself is a central part of the innovation they are leading (RO_R_S_1/Int.4, RO_R_EC_3/Int.9, RO_R_E_2/Int.2, RO_R_S_2/Int.5).

However, it is essential to note that a common favourable condition identified in all 10 cases is the support of their intimate social circle - their partner / nuclear family/ parents. This always stays as their primary social reference, especially when dealing with the psycho-emotional and physical negative effects of their challenging of the gender roles by taking leadership.

In some cases, these networks extend to also include the political party the woman belongs to, or specialized networks of women, like Women in politics (RO_R_S_3/Int.6). By gathering community support and fostering trust and acceptance, women show they effectively lead sustainable initiatives - while implicitly integrating a social sustainability dimension into their approach to innovation. Additionally, enlisting men from the community as allies and backups has been used as a tactic to help mitigate resistance and enhance the acceptance of female leaders: *"We need to arm ourselves with men who pound their fists on the table. If we do it, we are called hysterical; if they do it, they are seen as strong"* (RO_R_EC_2/Int.8).

From a contextual perspective, the availability of financial resources and infrastructure plays a crucial role. Women leaders like RO_R_EC_2/Int.8, RO_R_S_3/Int.6, RO_R_E_1/Int.1, and potentially RO_R_C_3/Int.10 have been faced with the lack of public transportation - some of them addressing this constraints directly by taking action to change the situation (by advocating for the extension of services). Meanwhile, others have organized community-based solutions, such as carpooling or local shuttle services, to ensure accessibility for all (RO_R_EC_1/Int.7).



Navigating bureaucratic hurdles is another significant challenge. By informing themselves and seeking legal advice, the interviewed women showed how to efficiently handle bureaucratic challenges. One relevant example is that of a deputy mayor being publicly defamed and threatened, who sought legal counsel from the party she is a member of (RO_R_S_3/Int.6).

The lack of access to social educational and care services - in particular lack of schools and childcare facilities is a constraint affecting most rural women in Romania, which also impacted some of the interviewees. As such, some of them have tackled this constraint by creating child-friendly spaces (RO_R_EC_3/Int.9, RO_R_E_2/Int.2), implementing activities which take the mothers' need for childcare into account so that they can ensure their participation (RO_R_EC_2/Int.8), or directly implementing activities aimed at children (RO_R_C_3/Int.10).

To conclude, on a personal level, resilience, determination, and a clear vision are essential qualities that drive Romanian rural women to succeed in their initiatives. The absence of childcare responsibilities can also provide more flexibility and time to focus on their projects. On the other hand, having children can provide a stronger motivation to engage in achieving a sustainable rural future.

Additionally, their networking capacity and family support, whether from parents or partners, further bolster their efforts. Women often bring prior experiences to the table, including skills they have acquired, personal images they have cultivated, and networks they are part of (or create) during their innovation journeys. These factors collectively strengthen their ability to lead effectively. Moreover, all women have shown an impressive capacity to take especially the constraints and tackle them in order to improve the situation for all affected by them (not just themselves, individually). In other words, they act as if they are unstoppable and the challenges they face are integrated into their innovative practice, while also generally increasing their motivation to innovate.

Contextually, the support of the local community is crucial. This support is often achieved through a strong, resilient, and persistent process of community engagement work (which in itself is a form of social sustainability). Women leaders who actively involve and engage with their communities can foster a collaborative environment that facilitates sustainable innovation, women's empowerment and overall a transformation of gender roles in their community (and hopefully beyond).

3.3 IDEA AND PREPARATIONS/DECISIONS AND PREPARATORY ACTIVITIES

Women leading innovation in rural communities in Romania have taken significant decisions and engaged in various actions to transform their motivation into reality. Their motivation often stems from a deep desire to live closer to nature and adopt sustainable living practices. Additionally, they are driven by the need to solve problems and find solutions to improve the quality of life in the villages where they grew up or currently reside. Preserving local traditions and capitalizing on them through educational and touristic initiatives also fuels their passion.



Regardless of the life stage and type of rural area they inhabit, for all interviewed women the motivation to engage in rural innovation is tightly interwoven with a moment of (self)empowerment. This transformative moment in their lives changes how they see the world, but also how they relate to it and also how they perceive themselves. For some, the realization that they can be innovative agents of sustainable change in rural Romanian communities comes during/ in relation to periods when they live abroad, either for studies (RO_R_E_3/Int.3, RO_R_EC_3/Int.9) or work (RO_R_E_1/Int.1, RO_R_S_3/Int.6, RO_R_S_1/Int.4). This is due to the contrasts they perceive between the Romanian (rural) social, economic, and political context and the one(s) abroad, on the one hand. Being exposed to different perceptions and gender dynamics than those specific to Romanian society foments their critical perception of their capacities and the Romanian society. As such, once they gain the awareness that they can be agents of change and the critical gaze towards their Romanian rural context, the search for solutions which they can implement to respond to the issues in their rural communities begins. Since this process tends to be a conscious one - in opposition to that of their male counterparts who are regarded by default (and more often perceive themselves as agents of change) as possible agents of change - finding an adequate, applicable solution also goes beyond the normative possibilities available, allowing them to innovate. This process also consciously relies on all their experiences, both in the public space, as well as in their private lives, allowing them to integrate sustainable, inclusive and complex approaches in their innovation.

To bring their vision to life, many women made the decisive move to return to their home villages after completing their studies or gaining work experience abroad. This decision to move back was often followed by gathering the local community around their ideas, fostering a sense of collective effort and shared purpose.

In preparation for their initiatives, these women often sought financial resources, either through grants (RO_R_EC_1/Int.7, RO_R_EC_2/Int.8, RO_R_S_2/Int.5), loans, local administration or national funding (RO_R_C_3/Int.10), or community fundraising (RO_R_E_1/Int.1), to build the necessary infrastructure and support their projects. They also established networks at various levels, including local, regional, and sometimes even international connections, to gain support, share knowledge, and collaborate effectively (RO_R_E_1/Int.1, RO_R_EC_1/Int.7, RO_R_S_2/Int.5, RO_R_S_1/Int.4, RO_R_EC_2/Int.8). Skill building was another crucial preparatory activity. These women engaged in continuous learning to acquire the necessary skills for their projects, such as business management, sustainable farming practices, technical/digital skills (RO_R_S_2/Int.5) and community organization (RO_R_S_3/Int.6, RO_R_EC_2/Int.8).

To formalize their efforts, many of these women established NGOs/CSOs or local businesses, or they actively engaged with local authorities (or became elected in local administration) to drive their initiatives forward (RO_R_E_1/Int.1, RO_R_EC_1/Int.7, RO_R_S_2/Int.5, RO_R_S_3/Int.6, RO_R_S_1/Int.4, RO_R_EC_2/Int.8). Collaborative efforts were key, as they often partnered with other community members, local businesses, national and international CSOs networks, and external experts to ensure the success and sustainability of their projects. Integrating networks of CSOs is yet another decisive step in consolidating their innovative actions.



Through these decisions and actions, they have successfully transformed their motivations into tangible realities, creating a positive impact on their rural communities.

3.4 CONCRETISATION OF INNOVATIONS

The tangible outcomes of women leading innovation in rural communities in Romania manifest across various dimensions, including environmental, institutional, social, and cultural changes. Environmentally, these initiatives have led to the creation of new sustainable businesses (RO_R_EC_2/Int.8) and social innovation actions (RO_R_EC_3/Int.9), promoting eco-friendly practices and contributing to environmental preservation (RO_R_E_1/Int.1, RO_R_E_3/Int.3). Institutionally, these projects have enhanced leadership roles for women (RO_R_S_3/Int.6, RO_R_EC_1/Int.7), challenging traditional gender roles and stereotypes, and paving the way for greater gender equality. Socially, there has been a significant empowerment of women within local communities (RO_R_E_2/Int.2), fostering increased community engagement and participation (RO_R_S_1/Int.4), while also addressing pressing issues like domestic violence (RO_R_S_2/Int.5). Culturally, these innovations have helped preserve cultural heritage and traditional crafts, ensuring that valuable traditions are maintained and celebrated for future generations (RO_R_C_3/Int.10). Many of the innovations have also created employment opportunities, primarily in the community and rural areas, as well as facilitated access to employment and training opportunities (RO_R_E_1/Int.1, RO_R_EC_1/Int.7, RO_R_S_2/Int.5, RO_R_S_3/Int.6, RO_R_EC_2/Int.8, RO_R_EC_3/Int.9).

3.5 IMPACTS OF INNOVATIONS

The innovations introduced by the interviewed women in rural communities had relevant effects on these areas, contributing to both women's emancipation, gender equality and sustainable rural development. These changes can be categorized as sustaining, disruptive, radical, or incremental innovations, each bringing unique benefits.

Firstly, the innovations led to increased community engagement and women's empowerment, environmental conservation, and educational actions. They also supported the establishment of environmentally sustainable local businesses. These sustaining innovations improved rural living by promoting sustainable practices and enhancing the overall quality of life. These can be considered as innovations sustaining the ecological resources and natural ecosystems.

Secondly, the introduction of leadership roles for women and the challenge to traditional gender roles and stereotypes represented disruptive innovations. By redefining gender dynamics in the community, these changes created a significant shift in societal norms and expectations, with disruptive impact at the level of the rural communities. However, we assess that these changes, as they challenge mentalities and social norms, are the hardest to both maintain at the community level and generalize at the level of society. That is because the resistance from those who feel threatened by these changes to the status quo (or/and hold power under the current gendered structural power relations) - and backlash against the innovators themselves - are quite significant.



Thirdly, the enhancement of local public services and infrastructure can be considered radical innovations. The introduction of new services greatly improved the existing systems and significantly enhanced the quality of life for community members. Radical needs to be understood from a contextual perspective, where if only minimal infrastructure is available in many rural communities, introducing running water, sewerage, making or improving roads already brings significant changes in the lives of the inhabitants (RO_R_S_3/Int.6). This also applies in terms of access to social services - for example, if there is no school or educational institution in a village, even offering short term alternative education to children is a radical improvement (RO_R_C_3/Int.10).

Additionally, women were empowered both economically and socially through these initiatives. These incremental innovations, though small in scale, built on existing practices and gradually improved the socio-economic status of women in these communities.

Lastly, the preservation of cultural heritage and traditional crafts was another incremental innovation. By making small-scale improvements and building on existing practices, these efforts helped maintain and celebrate the rich cultural legacy of the rural communities.

Overall, the innovations had a multifaceted impact on the communities, driving progress in gender equality, environmental sustainability, and sustainable rural socio-economic development.

4. INNOVATION ECOSYSTEMS

4.1 POLITICAL

In theory, legislation and public policies in Romania aim at gender equality and environmental sustainability. Especially those based on EU laws and norms, are supportive of women leading sustainable innovations. However, in practice their effectiveness is conditioned by the institutional comprehension and intention to fully comply with them (rather than just tick the boxes). This holds true for all typologies of rural areas (rural village close to the city, rural village, remote rural village). Another particularity of the rural Romanian political setting is that *“more than party politics, what matters are the people in the community”* (RO_R_S_1/Int.4).

An example was the condition to have gender quotas in the local councils of the municipalities (mentioned in RO_R_S_3/Int.6 and RO_R_EC_2/Int.8), which was questioned by interviewees since it can translate into simply appointing malleable women on the lists, rather than women who would develop an autonomous political agenda (representing the needs of other women in the community, for example). However, we have also found that RO_R_S_3/Int.6 (deputy mayor elected 1st woman mayor in June 2024) has taken concrete steps toward motivating, supporting and including on her list of local council women from the community (including Roma, young etc.) who would be able to represent the needs of the community and come up with / contribute to sustainable public policies to address them. She highlighted the importance of having role models, reciprocal empowerment and solidarity as essential for this change to happen: *“it will be easier for the women who come after [me], because we will be together in this”*. RO_R_S_2/Int.5 is of the



opinion that having more women in local councils would be a game changer in terms of rural women becoming engaged in local politics and implementing a gender-sensitive (and sustainable) political agenda benefiting entire rural communities:

"I have seen that really the situation can be changed in a short time with few resources with one-day workshops that we do with [rural] women from different places that go on personal discovery and empowerment.[...] It's incredible: we've had events, it's a success for us, - where women come there with the idea that they have nothing to do with politics and leave saying they're going to run for office.[...] We're in a culture where women think they're not capable of anything and they believe everyone who tells them that.[...] To me that's the future, it could be the major change - the more women there are in Local Councils (not just one or two), the more their voice is heard, it changes the context, and the decision making, and you already have a group inside that you can then work with on proposals that they want and can bring to the community. With the same [financial] resources, it's just a matter of shifting priorities." (RO_R_S_2/Int.5)

CAP and LEADER Program are policies that align with the efforts and needs of rural women. The CAP National Strategic Plan encourages, for example, investment in infrastructure and social services, such as childcare centres and health facilities, which are essential to enable women to actively participate in the workforce and to balance work-life responsibilities. The LEADER program promotes inclusive community development, encouraging the active participation of women in community initiatives and ensuring their place in governance structures. Through Local Action Groups, LEADER supports projects that specifically address the needs of women and supports their business initiatives.

Interviewees are generally cautious to rely on existing legal and public policy framework, as there is a general understanding that their implementation depends on institutional will, and sometimes the personal understandings and preferences of the individuals who hold the institutional power. However, this is not a reason for them to be deterred - rather, it forces them in many cases to do their own research in terms of legal and public policy opportunities, while also aiming to understand power dynamics at local level (and other levels according to the needs). This in turn equips them better to be realistic and resilient regarding their innovation paths (and its possible complications, delays, shortcuts etc.), and further fuels their self-empowerment through gaining relevant knowledge to navigate this field of power, politics, and public decision-making. For example, when needing to register the natural construction she was building, the woman from interview RO_R_E_3/Int.3 who built a strawbale house with her partner opted for the safer way of declaring that they had redone the traditional derelict house (which was already registered on their property) to simplify the bureaucratic path and avoid possible legal implications related to natural construction materials. For their second house, the bureaucratic hurdles and possible complications related to registering a house built with natural materials have weighed in their decision to build a conventional house. All of this while maintaining a cordial relationship with the village's mayor, who also had knowledge about their strawbale house - this is to say that there are two distinct registers in which rural communities operate, one being the institutional, formal one (which is perceived as rules coming from the top/the



capital/impersonal state institutions), and the informal one of personal relationships which is managed by the community itself.

In general, the interviewed women have the awareness that, in direct interactions and relations with local administration (and institutions more broadly), the fact that they are women hinders them due to stereotypical and conservative gender perceptions. In some cases, the gender dynamic is intertwined with that of age and ethnicity: for RO_R_C_3/Int.10, the fact that she was a young woman, of a different ethnicity than the majority one in the commune, made it difficult for her to get support from the local administration for the cultural community projects she was already planning - which manifested in being promised a small sum of money, which was then halved when actually transferred (due probably to lack of trust). The most common strategy to overcome this unequal balance relationship which disfavours them is by, on the one hand, (1) establishing direct relationships with the persons who hold the power, who generally are men, and on the other (2) establish alliances, networks, and rallying support (and legitimacy) from the community for their initiatives.

All of the interviewed women have directly interacted with the (male) mayor of the communes, and also some with the (mostly male) members of the local councils (including RO_R_E_1/Int.1 and RO_R_EC_3/Int.9). For RO_R_E_2/Int.2, the relationship with the mayor transformed over time in that that her prolonged engagement with a national peasants' rights association (also organizing events in her own village) gained her the recognition and respect of the local mayor, who eventually provided support when requested for the events (by allowing the use of the local school to accommodate events for the association). Interview RO_R_EC_2/Int.8 tells the story of a carefully curated (by the woman) relationship between the innovative woman and the local mayor (and local council), one which started with scepticism and intimidation (direct and physical) from the local administration towards her. In time however, through perseverance, strategic alliances in the community (including with key men from the community as allies), consistency in participating in public debates, and gaining legitimacy by consulting and representing a relevant part of the community, the woman managed to empower herself and gain a leadership position in relation to sustainable rural development in her community. In her own words:

"We need to arm ourselves with men who pound the table. If we [the women] do it, we are hysterical, if they do, they are strong. I had to do a lot more [than a man] to prove myself, to gain people's trust. I never go alone into battle - I make sure I have the community behind me. Now I'm not just an NGOs person who dreams colourfully. Now I'm an entrepreneur generating business for them, and this brings significant openness." (RO_R_EC_2/Int.8)

She has gained her recognition as a partner in the dialogue for future planning and public policies for the community, and as a representative of the civil society - now, after 13 years since moving there, the mayor frequently consults her on relevant issues, and the initiatives she leads have also become more successful. One of such successes in changing public policy is the introduction of public transportation in the village, following a public petition process she led. A similar success was reported also by RO_R_S_3/Int.6, who used her



connections (including personal ones) to negotiate with the company providing the service as representative of the local administration (in which she holds the deputy mayor position).

For RO_R_S_1/Int.4, the relationship and personal interactions with local authorities have not given them enough trust and confidence to advance collaborative project partnerships proposals - this also applies to the local LAG group (beneficiary in one of their projects). However, they are well aware of the importance of engaging with local administrations in general in order for the impact and continuity of their innovative initiatives to be ensured - hence they branched out and collaborated with other local authorities from the region than the ones in their village. And chose to gain their legitimacy and financial support by establishing rather international cooperation relationships and networks, with CSOs with similar values.

Three of the interviewees are working directly in/with institutions and local administration, either as elected representatives in local administration (RO_R_S_3/Int.6 as Deputy Mayor), LAG manager (RO_R_EC_1/Int.7), or manager of a high profile CSO (RO_R_S_2/Int.5). What RO_R_EC_2/Int.8, RO_R_S_3/Int.6 and RO_R_S_2/Int.5 have in common in terms of their engagement in local politics (and some of them beyond local) /public policies / projects with other public institutions is being targeted by males in power through violent acts (intimidation, threats, hate speech, defamation etc.), with the purpose of them renouncing their public presence and public (political) positionings, projects and so on. This type of violence is also manifested in a physical, and direct way, and reaches the extent of life threats. Excepting RO_R_S_3/Int.6 - publicly attacked on social media during the electoral campaigns, none of the other two women chose to pursue the legal path to having this violence sanctioned. Instead, they chose to stay strong in their power and continue their initiatives, adjusting the course to this new reality. The psychological and emotional impact of these episodes of violence against women taking power in the public and political rural space should be explored in future research, as well as possible ways to redress it.

For all women - regardless how they perceive their gender to influence their sustainable innovations - emotional support and empowerment through their families and networks is essential. Most of them have internalized various gendered perspectives on their value and capacities as women - many mentioned during interviews that they “talk too much”, that they don’t have enough structure when they talk/ talk chaotically (neither of the two was objectively the case), and overall displayed believes akin to the impostor syndrome - mostly challenging the idea that they, individually are innovators, leaders, or leaders of innovations, and hesitating in taking credit for their achievements. While in private, familiar settings they can express these ideas, in public they rather tactically opt for emotional detachment, keeping the end goal in mind, and thinking that they serve a higher purpose (community wellbeing) in order to overcome the emotional negative effects of the gendered barriers they encounter as women.

One possible conclusion is that, since women in rural Romania are generally still not perceived as equal partners in politics, public policy decision making and the public sphere more generally, all means to dissuade them can be employed, especially by the individuals



in existing power positions and arrangements (in practice, men in public administration and leading force institutions, such as the Police). At the same time, not all women who do get to have positions in the public sector/administration are also representing the needs and wants of the women in their communities. Both of these point to a strong tendency of maintaining the status quo of power relations and gender roles by existing administrative and institutional structures (regardless of the gender of the persons) - which the interviewed women (aim to) challenge through their innovations. Change in the political field tends to happen when women (a) repeatedly interact with the administrative and institutional structure from a power position (usually legitimized as representative of larger parts of the community), (b) make tactical adjustments to their projects/plans (including by choosing to mirror masculine behaviours associated to political power), and (c) create strategic alliances which further support this power position they have. In other words: to enter local politics women need to believe they can bring a change (self-empowerment); they need to master the rules of the political game as it is now, so that they can enter the game and become relevant players themselves. In the end, through their visions and initiatives, they can bring changes to what the game is, how the game is played, and who can play it - making it more just, sustainable and inclusive. A non-linear progressive approach needs to be taken by the women leaders (to prepare themselves for incremental changes and setbacks), as this is an endurance game with possible direct negative consequences on their wellbeing (including physical safety, mental health, etc.), and implications on their lives overall, not just their public presence.

4.2 ECONOMIC

Generally the women have received little financial support (mostly through EU fundings such as the LEADER program or rural development funding) and have not been included in capacity building programs by public institutions in Romania targeted at rural women. All of those who attained university degrees did so out of their own initiative, being supported while studying abroad through international scholarships (for national university studies there is the possibility to attend free of charge, depending on performance). In some cases, in which they did receive financial support, it was rather in the form of donations from private individuals through crowdfunding campaigns (RO_R_E_1/Int.1), or absurdly small sums received from the local administration (under 1000 euros) to organize a cultural event for the whole community (RO_R_C_3/Int.10). The scarcity of accessible and direct funding programs supporting rural women's entrepreneurship (as well as rural entrepreneurship more broadly), together with the lack of infrastructure, bureaucracy and increasing cost of living make it difficult for the innovative businesses led by rural women to survive. While their main motivation when initiating these endeavours is not the financial one, the lack of economic stability puts them in a precarious position:

"I find it very hard to survive in the Horeca business, especially when it's mostly passion. And you don't think about the financial side. No, I can't think about the profit, but I do it for pleasure, for passion and I think that's what people felt and that's why they came there."
(RO_R_EC_3/Int.9)



For some women, the opportunity to have international scholarships abroad meant they were able to save money (by opting for a simpler, less expensive living) and invest them to support their innovation (RO_R_E_3/Int.3). Occasionally women had access to project-based funding from the national cultural funds. Notably, RO_R_S_2/Int.5 managed to access a small amount to fund the social workers employed by the CSO under a national law stipulating that NGOs providing certain public services are to be funded by the state (being the 1st CSO to do so). Others, like RO_R_C_3/Int.10, make the active and difficult choice of living in economic precarity and insecurity (also depending on their immediate family for support) in order to invest in their innovations (technical equipment, travels, etc.).

On the other hand, those women who have access to funding for distribution (either because they work in local administration or in LAGs - RO_R_S_3/Int.6, RO_R_EC_1/Int.7; or they lead NGOs with access to some funding - RO_R_S_1/Int.4, RO_R_S_2/Int.5) are aware and prone to establishing support schemes for other rural women (but not only). As such, they individually or in their organization find ways to redistribute the small funds they have access to in order to bridge this gap and lack of access to resources most rural women are faced with. They are very pragmatic and creative in the support solutions they implement, which go well beyond simple direct monetary support or training opportunities. Their pragmatism and creativity translate into arrangements rather associated with solidarity and social economy (barter, exchanges, services, gift economy etc.). These can be in the form of offering rides to school to children from the Roma minority who would otherwise not be able to attend (RO_R_EC_1/Int.7); employing or contracting preferentially rural women or persons from marginalized groups (RO_R_E_1/Int.1; RO_R_E_2/Int.2); mentoring women from ethnic minorities who wish to enter politics (RO_R_S_3/Int.6) and generally facilitate networking of rural women (RO_R_EC_3/Int.9, RO_R_EC_2/Int.8, RO_R_C_3/Int.10); implementing projects and organizing visibility campaigns for local rural producers and craftspeople - men and women, or local markets where they can showcase or sell their products (RO_R_E_1/Int.1, RO_R_S_1/Int.4).

Thus, it can be argued that they all show an acute awareness that the lack of access to financial resources and adequate training is a transversal issue, with systemic origins, which affects all rural categories in different proportions. It is interesting to note that the capacity to produce sustainable innovation - be it ecologic, economic, cultural, or social - goes hand in hand with an inclination towards redressing systemic social injustices through individual action or through coordinating collective action, as all the cases of the 10 Romanian women interviewed show. One hypothesis for this is that, rather than an individualistic perspective of their success and realizations in their rural communities, they seem much more inclined, once they empower themselves to implement innovation, to continue to understand critically their socio-economic contexts - thus being able to identify those individuals and categories which the system ignores and are in need of resources. This is a critical and solidarity perspective which, once gained, becomes a transformative and integral part of their approach to life, relating to others, and personal and professional choices. In turn, their self-empowerment, critical perspective and successfully implemented innovations further motivate (or rather compel them, in the sense of being experienced as a duty/responsibility) to find solutions and implement them in order to improve the situation of others.



4.3 SOCIAL

Despite the public policies and public discourse during the decades of communist dictatorship (1947 - 1989) being explicit about gender equality (and generally enacting it de facto in the public space, with the notable exception of the law prohibiting abortion from 1966), the transition to democracy and capitalism/market economy showed that this had not been assimilated into a mentality change in terms of perception and enactments of gender roles within the Romanian society (Magyari-Vincze, 2004). Particularly the growing religious influence of the Romanian Orthodox Church, the decaying infrastructure of educational and care institutions (creches, kindergartens, schools, medical facilities), as well as labour and economic insecurity have influenced significantly since 1989 more conservative gender norms (Băluță, 2020). Research has shown that gender stereotypes are present in today's school manuals, reinforcing the idea of women being associated with passivity and submission, care and the domestic realm, in direct opposition with men (Rughiniș, Grünberg, Popescu, 2015). Combined with a general perception of the rural areas (and people) as lacking in terms of development (while being de facto left behind in terms of infrastructure and services development), this negatively affects women in rural areas where traditional and conservative norms of gender roles overlap.

This means that the women innovators interviewed born in rural areas (RO_R_E_2/Int.2, RO_R_EC_1/Int.7, RO_R_S_3/Int.6, RO_R_C_3/Int.10) have had to face significantly more challenges in their formative years (and beyond) than their counterparts from urban areas (RO_R_E_1/Int.1, RO_R_EC_2/Int.8, RO_R_EC_3/Int.9), and especially those in big urban centres or who grew up abroad (RO_R_S_2/Int.5, RO_R_E_3/Int.3, RO_R_S_1/Int.4). These challenges range from lack of infrastructure (sewerage, running water, centralized gas, lack of public transportation etc.) to more rigid conservative/traditional gender norms, and social norms in general. However, none of the women born and raised in villages has mentioned this as being a negative or constraining factor to their personal development and innovation practices. A relevant difference which correlates with them being able to succeed is the fact that those born and raised in rural areas had and have a strong social support network, consisting generally of their extended family, with whom they maintain close ties. This is due to physical proximity - the fact that more members of the family live in the same village or region (RO_R_S_3/Int.6), and in some cases, including by living in multigenerational households (RO_R_E_2/Int.2). Occasionally this type of physical proximity with family members is part of the reason why some women born in urban areas choose specific villages to move to, as it is the case of RO_R_E_1/Int.1 who chose the village where her parents had already moved to, buying her grandparents' old house and making it her home. For women born and raised in urban areas or abroad, existing social ties in the village they chose to live in do not contribute to their choice, and are rather constituted posterior to their moving, and generally more reduced (their nuclear families) and elective (in that they do not have family members living there) - RO_R_E_3/Int.3, RO_R_S_1/Int.4, RO_R_EC_3/Int.9, RO_R_EC_2/Int.8.

Most of the women face significant challenges from traditional gender stereotypes and roles when aiming to innovate in their rural communities. One notable exception was RO_R_E_1/Int.1, a Hungarian ethnic who stated that she never felt discriminated against



or constrained by being a woman - explorations of how gender stereotypes and roles vary across cultural/ethnic groups in Romania would be suitable. However, the majority of interviewed women who are faced with traditional gender stereotypes and roles consider them both a barrier and motivator for their engagement in innovative activities. Overcoming these norms and stereotypes - innovating despite/in spite of them - is a key challenge, but also drives their determination to demonstrate their capabilities as women. To a certain extent however, this reinforces the (liberal feminist) ideas and practices that (1) through (increased) personal efforts and accomplishments, even (exceptional!) women can achieve results/performances comparable to men's; and most problematically (2) that the responsibility for producing systemic change towards more gender equality still only resides on the shoulders of women (who are the ones most negatively affected by it). This trope of the "superwoman" - at once dealing with patriarchy and capitalism in her personal life, while fiercely battling them in her public one - and by doing so improving the life of her community/other women - can serve both as a model, as well possibly a deterrent for less privileged/women with less capacity to take on this huge (and unfair) double task.

One set of gender stereotypes which was mentioned by a few respondents was the one associating women with motherhood and being a wife, from a highly normative heterosexual and traditional perspective. For unmarried women without children who are active in public space (RO_R_S_3/Int.6), these personal choices are used against them in public discourse to discredit them as not being adequate because they are seen as not fulfilling their duties as women (and presumably having defects which prevent them for doing so). In the sense of "if not even a man wants you, why would we want you as a mayor?". In general, unmarried women, especially after a certain age (35-40) are perceived with more distrust and scepticism than their married counterparts by those more conservative in their communities. However, even for women in marriages with children, social norms still intervene in their daily lives in the form of direct social pressure to conform. Seemingly benevolent persons do not shy away from trying to reinforce/reproduce norms such as the number of children one woman should have (much more frequently than in interactions with their husbands - RO_R_E_3/Int.3), how should they raise their children (including in terms of religious practices), and how they as mothers should behave in general. Discussing how she chose to address this stereotype through her artistic practice, RO_R_EC_3/Int.9 shared that:

"I was questioning a lot of clichés, because it happened to me, and I saw it around me. How mothers are treated or how many children a woman should have. I have three children and then all the time when I said this, people expected me to justify myself. Why? There are a lot of them. Why? Well, am I a Baptist, or a hippie? Or they had to put me in a little box and that's the stuff I was talking about, or what other people tell you when you're a mother. A mother feels a lot of social pressure." (RO_R_EC_3/Int.9)

In terms of labour distribution between men and women in rural communities in comparison to urban areas, RO_R_E_3/Int.3 noted that it is common for men and women to do physical work outside the household (by gathering wood or driving the tractor for example) - pointing to a fairer distribution of physical (hard) work outside the house. However, the same unequal domestic and care work distribution as in urban areas was noticed - indicating thus rather



a false labour emancipation of the women in rural areas (in that they work the “triple shift” - domestic & care work, physical labour in the household, while some also being employed):

“Coming from outside the rural area, I had a certain perception of a more unequal, macho division of gender roles. Living here it was pleasant to notice a bigger involvement of women in physical work together with men, and this seems inspiring to me, which is a good model for younger generations. With the caveat of not falling into self-exploitation or doubling their responsibilities, or complete exhaustion. I am fascinated by the women’s capacity to do hard physical labour and care work for their families every day.” (RO_R_E_3/Int.3)

In the interviews it became clear that the distribution of work and domestic work among spouses is something which is still being perceived as conditioned by gender, be it in terms of harder labour being done by the husband (RO_R_E_2/Int.2) or child care work being done mostly by the wife (RO_R_EC_3/Int.9) - it should be noted that other contextual and objective factors such as the age/health state and age of children also influence this distribution. For women who base their motivation for their innovation on care for others, it becomes difficult to stop doing care work in their homes (RO_R_S_2/Int.5). Awareness and reflexivity of how labour is distributed in the households of the innovative women interviewed was shown. This awareness and self-reflexivity might be a characteristic which contributes to enabling these women to accurately situate themselves in the social realm they inhabit, and consciously position themselves in an innovative posture and mindset.

In terms of community engagement and creating social networks, all interviewed women showed a strong reliance on community bonds and local community participation to implement and sustain their projects. Social networks help them to overcome logistical and bureaucratic challenges and enhance the impact of their innovations (while verifying their adequacy through the feedback they receive). At the same time, engaging with their communities provides additional motivation and legitimacy for their innovative initiatives. This tendency to build networks and actively get involved in community building is not limited to the immediate physical space - their villages or communes - but transcends this and becomes a *modus vivendi* and *modus operandi*. Becoming part of such networks or communities can be a motivation in itself for innovative practices (RO_R_E_2/Int.2 - peasants’ rights association; RO_R_E_3/Int.3 - intentional community), while creating networks can be a goal of the innovative projects they implement (RO_R_S_1/Int.4 - regional women’s network, RO_R_E_3/Int.3 - CSA network; RO_R_E_1/Int.1 - seed saver’s group; RO_R_EC_3/Int.9 - women’s network in the commune; RO_R_EC_2/Int.8 and RO_R_EC_1/Int.7 - connecting local producers with tourists and buyers). In some cases, disseminating the knowledge and good practices about how to create local development networks emerges as a component of the innovation, transcending the local village, the county, and the borders of the country itself (RO_R_S_2/Int.5 - supporting LAG creation in the Republic of Moldova). In many of the cases, the networks that the women are part of are trans local - that is, bring together local experiences from various countries (RO_R_S_1/Int.4 - Longo Mai cooperative; RO_R_E_2/Int.2 - Via Campesina; RO_R_S_2/Int.5 - European Women’s Lobby).



It is relevant to note that the innovative women interviewed have a particular intention of targeting the needs of various social categories, making their practices socially sustainable and contributing to community development. This is made possible because they either have a sensibility or (most likely) have trained themselves (through their personal experiences as women and/or theoretical training) to see how these social categories are differently impacted by the current state of things in their communities and beyond. This applies particularly to either neglected, discriminated, or marginalized categories (children, youth, elderly, Roma, etc.). Although RO_R_C_3/Int.10 is considered to innovate mainly on the cultural sustainability dimension, through her documentary film and photography work she is choosing to engage with elderly rural subjects and listen to their life stories, contributing greatly to counteract them being forgotten and alone. Additionally, through her education through art activities aimed at children, similarly to RO_R_EC_3/Int.9, she contributed to their social development in their rural communities (RO_R_E_3/Int.3 also offered her services at the local kindergarten when they were needed). RO_R_E_1/Int.1, while innovating sustainability in environmental terms, she also actively seeks to employ Roma people in her village in order to implement the holistic sustainability approach of agroecology which implies social sustainability. RO_R_S_2/Int.5 innovative approach to offering support to victims of domestic violence (rural and urban women and children) goes beyond legal and economic support, by fostering their empowerment and training them to become economically autonomous (and thus less exposed in the future to similar threats altogether). For RO_R_S_3/Int.6, her work as elected representative in the local administration necessarily implies staying connected with, representing, and collaborating with all the ethnic groups in the commune (Hungarian, Roma, Romanian), regardless of her Romanian ethnicity.

Most of the interviewed women also showed a clear intention of transforming social interactions by implicitly tackling structural issues deriving from patriarchy, mistrust in centralized bureaucratic state institutions and representative democracy, and the individualistic neoliberal and extractive capitalist model (such as competitiveness, inequality, vertical social hierarchies, centralization, exclusion, exploitation, apathy, polarization, social fragmentation etc.). This tends to happen at the micro level of everyday interactions and shows the values they aim to enact through their innovations: *“Let there be relationships and cooperation and equality at all levels and with all people [...] Now I initiated a seed group to decentralize the work. I mean, because all this comes with a responsibility for each of us”* (RO_R_E_1/Int.1). Many cite as their motivation for their innovation the idea of *“bringing people together”* in order to collectively decide on how to act (RO_R_S_1/Int.4).

4.4 TECHNOLOGICAL

All women interviewed use and rely on information technology (regardless of their ages) to a significant degree. For most, the possibility to communicate with their communities on social media or through instant messaging (RO_R_S_3/Int.6; RO_R_EC_3/Int.9; RO_R_EC_2/Int.8), or with their organizations and trans local networks (RO_R_E_2/Int.2; RO_R_E_3/Int.3; RO_R_S_2/Int.5) is essential. While some have less access to communication infrastructure (RO_R_E_1/Int.1) and see it as a way to reduce consumption and live more simply, other choose to develop their own technical skills in order to overcome



economic limitations in employing communications specialists (RO_R_S_2/Int.5). Having internet access in order to work remotely (RO_R_E_3/Int.3) and developing an internet presence (website) for their businesses (RO_R_EC_2/Int.8, RO_R_E_2/Int.2) ensures their economic stability.

RO_R_C_3/Int.10 leveraged particular technologies such as photography, video recording and digital storytelling tools to develop her innovations. These technologies played a crucial role in enabling her to document and disseminate the stories of rural people and sustainable practices, raising awareness and inspiring others.

Technological advances are generally perceived by the interviewed women as enabling women-led innovations in rural areas. On one hand, access to technologies like digital cameras, smartphones, and the internet empower women by providing them with the tools needed to capture and disseminate their work and innovations more widely. These tools help in building networks, accessing markets, and gaining visibility for their innovations. On the other hand, it is important to notice that - especially for women engaged in environmental sustainable innovation (RO_R_E_1/Int.1, RO_R_E_2/Int.2, RO_R_E_3/Int.3) - the idea of technology is not limited to current industrially mass created tools and products. Rather, they perceive the creation and use of technical means in a wider sense, which allows them to conserve, recuperate and opt for traditional or alternative, more ecologically (and oftentimes economically and socially) sustainable technologies.

For RO_R_E_3/Int.3, this translated into opting for building with her own hands (together with her partner) a natural construction house, namely a 7x3 meters footprint + 10-12 sq. meters in the attic – 30 sq. meters in total strawbale home. A definitory moment for her was when she became passionate and trained in bike repair, which empowered her to do challenging tasks with her own hands, promoting clean transport while simultaneously challenging gender barriers and enhancing her perception of technical skills beyond traditional gender patterns. Although aiming for an ecological living within the intentional community they tried to integrate when moving to the village in 2013, an additional motivation/constrain for choosing a natural building and building by themselves were the budget constraints – namely not being able to afford to pay a constructor to build their house, or to buy the materials for conservative buildings. The international scholarship money which they both saved allowed them to buy a piece of land with a garden at the end of the village by the forest. The plot had a small old house which they tore down with their hands.

The process of building their own strawbale home began with lengthy research for options, starting with mud homes. They found that, from an energetic consumption perspective/insulation, the strawbale house was more efficient. While they initially aimed at building without a wooden structure, the particular weather conditions during building caused them to need to protect the straw bales from the rainy weather, eventually making them decide to build a wooden structure and roof to protect the straw bales. They thus had to be flexible and adapt their project to the particular conditions they were facing. They thus embarked on a process of trying, seeing it could be done, which enhanced their self-confidence from one day to the other. In the spring of 2014, they started building the



foundation, wooden structure, walls, roof, and eventually started the plastering of the walls. With help from friends and after overcoming various hurdles related to the acquisition of wood (bureaucratic, change in law affected price) and strawbale (opportunistic sellers increased price when they found out it was for a house), they built the roof in the summer of 2014.

The construction process lasted from spring 2014 to autumn 2016, implied their full dedication and support from volunteers, friends, and people from the community. When they move. In time they researched the electricity part and were able to do the connection safely by themselves, build a dry toiled and overall improved amenities and their living conditions. While this process in itself was a successful one (albeit time and energy consuming) which allowed them to live according to their ecological principles, the change in their conditions - the birth of their daughter and need to work to ensure their subsistence - prompted them to opt for a conventional house when they required larger living space.

4.5 ENVIRONMENTAL

As the interviews and the scientific literature show, a common perception in rural Romania is that there is an opposition between development, on one side, and tradition on the other. Development is associated with urbanization, industrialization, consumerism, extractivism, individualism - that is the non-sustainable approach of unlimited (economic) growth regardless of the planetary boundaries. Tradition, on the other hand, is perceived as closer to an untamed nature (both human and more than human), conservatorism and community living, overlapping - to a certain extent - an environmentally sustainable communitarian peasant way of life.

A concern for ecological sustainability is present for all interviewees, regardless of the main selected sustainability dimension. A possible hypothesis is that this is in direct relation with their perception (likely conditioned/influenced by a gendered socialization) on the multidimensional and comprehensive issues their communities are faced with, as well as the capacity for perceiving the needs related to a collective good of community in an intertwined and multidimensional way with those of the environment. This concern is also explicitly related by some with mental and physical health (RO_R_E_1/Int.1, RO_R_E_2/Int.2), good and healthy food (RO_R_E_2/Int.2, RO_R_E_3/Int.3), and the possibility of a liveable future for their children (RO_R_EC_3/Int.9). It is noticeable that a direct link between human/personal life and wellbeing and environmental wellbeing is made primarily by those women innovating in environmental sustainability.

The general environmental sustainability awareness displayed by all interviewed women might also be linked to the environmental richness existing in rural Romania, as well as current ecological threats (biodiversity loss, industrial agriculture, pollution, water scarcity etc.). The fact that these threats and their visible and direct effects are relatively recent in Romania (due to a late industrialization and significant surfaces of natural areas) motivates them to engage either in conserving the rich natural environments, or in integrating ecological sustainability dimension in their innovations in different ways: natural construction building - RO_R_E_2/Int.2; biodiversity education - RO_R_E_1/Int.1; localized



food production and consumption - RO_R_E_1/Int.1, RO_R_E_2/Int.2, RO_R_E_3/Int.3, RO_R_EC_3/Int.9; degrowth approaches - RO_R_EC_2/Int.8; advocacy for peasants and nature rights - RO_R_EC_3/Int.9; RO_R_E_2/Int.2, civic engagement for the protection of natural areas - RO_R_S_1/Int.4; protected areas valorisation/ecotourism - RO_R_EC_1/Int.7, RO_R_S_2/Int.5 (some of the innovative women combine more than one approach). The legacy of the peasant agrarian society is still present in villages, people understanding that their well-being is directly linked to the wellbeing of the environment: “good for us and good for nature” (RO_R_S_1/Int.4), or by the idea of living “with nature, in harmony with nature” (RO_R_E_1/Int.1). This shows a clear positioning outside the normative (capitalist) idea and practices of nature exploitation and extractivism. This possibly correlates with their commitment to communitarian approaches, rather than individualistic ones.

One of the interviewed women (RO_R_S_2/Int.5) was elected as representative for gender equality within the Advisory Council for Sustainable Development within the General Secretariat of the Romanian Government. This governmental body works on developing the National Sustainable Development Strategy aiming for the implementation of the United Nations 2030 Agenda for Sustainable Development. Through the work of the national CSO peasants’ right network she is part of, RO_R_E_2/Int.2 disseminates about and advocates for the transposition of the United Nations Declaration on the Rights of Peasants and Other People Working in Rural Areas (2018), which includes collective rights (such as the right to seeds) and nature rights (biodiversity, clear water etc.).

5. MAINSTREAMING ACTIONS

5.1 SCALING UP

Some of the interviewed women (50%) directly work with influencing/changing public laws and/or public policy at national level as CSO representatives (RO_R_S_2/Int.5) or through the CSO networks they are part of (RO_R_E_2/Int.2); as well as at local level as elected members of the local administration (RO_R_S_3/Int.6), LAG managers (RO_R_EC_1/Int.7), or CSO leaders and gender experts (RO_R_EC_2/Int.8). It is notable that for the LAG manager (RO_R_EC_1/Int.7) and CSO leader (RO_R_EC_2/Int.8) impacting local public policies, the dimension in which they intervene at the local public policy level is not (only) the economic one (in which we categorized them to innovate sustainably), but also in equal measure on social topics (with cultural and environmental impact), the two oftentimes being intertwined. For example, the fact that RO_R_EC_2/Int.8 was highly involved as a civil society partner of the local administration in the process of enhancing the public transport opportunities in her village has an impact on the business in the village - in that it allows for more clients to reach them. At the same time, availability of public transportation also improves the access to educational, health, cultural, judicial institutions located in the closest city for all the people in the village (thus improving their mobility and access to essential public and social services) which increases their quality of life. Additionally, public transportation has an environmental impact in that its usage can reduce the use of private cars and hence reduce pollution in the area (improving, among others, air quality for the villagers, reducing noise pollution, etc.). Similarly, the current



project of urban planning RO_R_EC_2/Int.8 is leading - in which the villagers are being consulted in order to choose the most appropriate street names - will facilitate local businesses being easily accessible (to clients and providers), while at the same time enhancing social cohesion by contributing to a consolidated local identity (as the street names are meant to reflect the traditional local landmarks). The process of public, direct consultation with the community in itself will contribute to community cohesion and community engagement into local development.

As Deputy Mayor of a multiethnic and multi-confessional commune with almost 4.500 inhabitants, RO_R_S_3/Int.6 has had intentionally a significant impact on local public policy and local council decision (equivalent of local law), focusing on social inclusivity, fairness of distribution of public funds and improvement of public infrastructure. In particular, as a member of the local Education, Culture, and Religious Affairs Committee, she facilitated effective communication between the City Council and school management, ensured fair evaluation processes for principal appointments, and oversaw the allocation of EU funding to religious organizations. In order to ensure that public funds are spent correctly (and available for needed improvements), she proposed and organized a commission to control the local tourist baths company's activity, participating in the financial accounting control, initiated the local council decision for the financial audit, and organized the competition for the provisional administrator position, while consistently supporting the company to enhance transparency and efficiency. As the company was siphoning money to the clientele of the dominating party, this had a drastic effect on how the local administration is perceived - the change of focus from (political and economic) clientelism to actually serving the communities best interests became clear for all, leading to her election as mayor (as well significant public backlash).

One of the interviewed women is, besides a CSO leader with more than 20 years of experience, also a nationally and internationally recognized expert on gender and rural development (RO_R_S_2/Int.5). Her extensive expertise as program coordinator in the fields of domestic violence, social inclusion of unemployed women, rural development, cross-border initiatives, victim protection and women's rights more generally have made her suitable to engage in influencing national legislation. Together with the CSO she leads, they constantly produce policy briefs on topics like equal opportunities for rural women, women and digitalization, women, and climate change. Even more, they have been actively involved in working together with lawmakers to shape the Mediation Law 192 from 2006. More notably, she and the organization worked on Law 217 on domestic violence and assistance to victims: they were involved in several stages of consultation and are currently part of a working group at the National Agency for Equal Opportunities working on amendments according to feedback from the field. They equally contributed to the methodological rules for the application of the law.

Additionally, improving public policy is a constant endeavour in order to improve the situation of rural women, and rural communities as well. Together with other civil society partners, they provided significant input on the associativity measures within the National Strategic Plan (part of the CAP 2023-2027), including LEADER, particularly by supporting that Measure 16.4 was a priority (which was achieved). The organization also developed



and supported 4 public policy proposals on gender budgeting, which have been agreed from 2020/2021. Several components were highlighted during the interview: the area of (public/social) services, domestic violence, and the introduction of the role of experts for equal opportunities in public institutions. Additionally, they have also proposed amendments to the Electoral law in order to increase women's access to political participation (through the proportionality and zipper principles).

Her (RO_R_S_2/Int.5) exceptional merits both in terms of expertise and experience have also been recognized by national and international institutions who elected her for various positions relevant to public policy. As such, she was elected as one of the 15 members for the Group of Experts on Action against Violence against Women and Domestic Violence (GREVIO) of the Council of Europe, a European expert group team which monitors the progress of each country that has ratified the Istanbul Convention, the most important international legal treaty setting out binding commitments to prevent and combat violence against women. Additionally, she was elected as representative for gender equality within the Advisory Council for Sustainable Development within the General Secretariat of the Romanian Government - institution which develops and monitors the implementation of the National Strategy for Sustainable Development of Romania 2030, aimed at transposing the 17 goals of the UN 2030 Agenda for Sustainable Development. Thus, her individual professional work, within the CSO and beyond it, is to both implement projects at the community level, as well as to bring these experiences into improving and transforming public policies and law in order to support women's emancipation, with a particular focus on rural women and sustainable development.

In order to amplify the impact of such transformations, more financing for CSOs would be needed, in order to ensure the everyday functioning of their programs (and impact on the women they are targeting). This would also allow them to allocate more resources to providing deep analysis of both the practical approaches used, as well current public policy and laws which either constrain or help their objectives - in this way they could further provide relevant input to decision and policy makers. However, a significant barrier at this point is the lack of genuine political will or interest in promoting gender equality and women's emancipation from those individuals and parties elected as democratic representatives.

5.2 SCALING OUT

All women interviewed showed an understanding that creating or being part of networks, beyond their community, is both a means to support and strengthen their own innovations, as well as to enhance their impacts at a (bio)regional, national, and international level. For some, the motivation to initiate their sustainable innovations was precisely replicating good practices regarding gender equality and rural community development they have encountered abroad (RO_R_S_2/Int.5). In most cases, women are in contact or collaborate with local administration, LAGs, other CSOs, experts and researchers in the fields they activate in, national and international institutions.

One telling example is that of RO_R_S_2/Int.5, who collaborates with CSOs focused on women from other areas of Romania on projects, made the CSO she is leading member of the National Rural Development networks since its establishment, while also working on



replicating the good practices she tested in the Republic of Moldova (by supporting the creation of LAGs and collaborative projects). The CSO she leads is also a partner in international projects, working with many other CSO and institutional partners from various European countries. Additionally, she is also the president of the Romanian Women's Lobby association, affiliated to the European Women's Lobby, and working on replicating this model of network in the Republic of Moldova. At the same time, she collaborates with various public institutions, be it through her role as representative for gender equality within the Advisory Council for Sustainable Development within the General Secretariat of the Romanian Government, or as initiator of various public policy initiatives, such as the one on Romania's "National Plan for Women, Peace and Security" - Resolution UN1325, by bringing together various CSOs networks, relevant state institutions (ministries) and experts. She engages with various other international experts on gender and national institutions through her role as member for the Group of Experts on Action against Violence against Women and Domestic Violence (GREVIO) of the Council of Europe. Additionally, through events such as the Feminist Solidarity Forums (national event bringing together CSO, experts, researchers, and national institutions) she fosters trans-sectorial collaborative work between women, rural - urban, replicating practices which improve women's self-perception. Thus, she is in permanent contact and able to replicate not just good practices employed in various areas of Romania, but also keep her innovations updated with the latest developments at the European level. This permanent trans local dialogue allows her to bring the best approaches to micro practices of rural women's self-empowerment, while also relating local rural development with macro transformation in terms of laws and public policies.

Other women interviewed also chose, as part of the innovations, to become part (either individually or through their CSO) of trans local networks with similar values (from Europe and beyond), which serve to support them, as learning and knowledge exchange platforms, while providing them with the possibility of replicating and adapting their practices to other contexts. RO_R_S_1/Int.4 mentioned being part of Longo Mai European - Latin American Agricultural Cooperative Network, while also sharing the good practices of creating and registering local traditional dairy products with Ukrainian rural women (in order for them to gain economic autonomy during the war). The organization that RO_R_E_2/Int.2 is an activist for is part of the Via Campesina, an international movement that unites peasant organizations of small and mid-scale producers, agricultural workers, rural women, and indigenous communities from Asia, Africa, the Americas, and Europe. She supported the organization of the 2nd Nyéléni Forum in Romania in 2026 (Nyéléni a Europe and Central Asia Food Sovereignty Movement), with participants from 42 countries. More recently, as a response to the geopolitical instability in the region, the threat to peasant's life in Ukraine and the possibility of UNDROP adoption and implementation, the CSO she is part of (as part of the Council) established the Alliance for Agroecology in Eastern Europe and Central Asia, which aims to replicate sustainable and political models of ensuring the continuation of the peasant way of life in the region, while also preserving the environment and biodiversity.

Their innovative projects and activities also have a ripple effect in their communities and bioregions, the impact perceived through direct transfer being that of a "small impulses in



other communities” and ensuring continuity of sustainable innovations at the community level (RO_R_S_1/Int.4). This type of impact can be mediated through existing networks - such as the LAGs networks, as it is the case for RO_R_EC_1/Int.7, as well as direct collaboration with other CSO from the (bio)region. In turn, for women innovating from a local administration representative position, the political party can serve as a network to disseminate their practices, as well as national networks of women in politics (RO_R_S_3/Int.6).

The start of the Russian invasion of Ukraine in February 2022 and having a war at the border of the country had a direct and dramatic impact on the innovations of some of the interviewed women (RO_R_S_3/Int.6, RO_R_S_2/Int.5, RO_R_S_1/Int.4, RO_R_E_2/Int.2). The initial shock was accompanied by the need to take immediate action (within the first 1-2 days of the start of the armed conflict), out of solidarity with the Ukrainian rural communities, women and children. As such, pre-existing personal and CSO regional (as in Romania-Ukraine, Romania-Moldova) contact networks were activated, expanded and strengthened in order to gauge what the most pressing needs were and find solutions to address them. The women, either through new initiatives or the CSOs they are part of, redirected most of their resources (in some cases pausing the innovative actions they were carrying out) towards supporting Ukrainian rural women (among other groups, such as Ukrainian refugees). They organized experience exchanges, supported entrepreneurship initiatives, donated/provided and organized food and seeds transports to Ukraine and refugee centres in Romania. Additionally, perceiving the security threat also prompted national initiatives, namely the coordination of the update of Romania’s “National Plan for Women, Peace and Security” - Resolution UN1325, by bringing together various CSOs networks, relevant state institutions (ministries) and experts (under the coordination of RO_R_S_2/Int.5).

It becomes clear that, while the women interviewed aim their sustainable innovative practices at improving primarily the immediate environment - the rural community they inhabit and the situation of women in that community, the way they conceive their innovation and the values which drive them are deeply connected to an understanding of the global ecosystem as interconnected, and the issues of women enduring in various national context. Moreover, their drive to innovate comes rather out of necessity, given the national context: “Women in Romania especially, due to the acute lack of resources they have, are forced to innovate all the time. That's why I have discovered extraordinary women entrepreneurs and not only, who have created very interesting role models in the community to help them solve their problems, and at the same time become inspiring role models for others. They are not things that they have to do not because there is an EU policy, but because they have a lot of common sense, and living in the middle of nature they try to protect it, protect their children, healthy food, better life. I am very happy, I see, I meet every day so many young people with so many ideas and enthusiasm and who are so close to nature and health, I am very positive that things will change for the better one day” (RO_R_S_3/Int.6).

5.3 SCALING DOWN



Various of the interviewees have been conditioned to scale down their innovations due to material contextual constraints and lack of public care services for children. For RO_R_E_3/Int.3, the choice to build a second bigger family house out of conventional materials and using contractors (rather than a diy straw bale house) came when faced with the reality of not having the time available for natural construction while having professional engagements and being a mother (despite sharing responsibilities and care work equitably with her partner). Additionally, bureaucratic concerns regarding the licensing of the new building made out of natural materials also weighed in the decision making.

In the second case, faced with a lack of continuous stable funding for the CSO she leads, RO_R_S_2/Int.5 opted for the unsustainable option of reducing her own payable management/ coordination work hours (on paper) in order to be able to keep paying essential social workers. Also, instead of hiring for example graphic design professionals, she chose to learn the skills herself in order to cut spendings. And overall, also because of problematic relationships with public institutions, together with the rest of the organization, they decided to reduce their number of projects and be more selective when applying for different types of institutional aid.

For young mothers like RO_R_EC_3/Int.9, the decision to stop altogether her innovative practice in the horeca business came as a result of both the lack of economic sustainability of her endeavour (due to systemic economic issues), as well as prioritization of family life and wellbeing of her children. She opted for spending more time with them, leaving open the possibility to engage in entrepreneurial activities once they grow older.

In another case, the option to not engage in economic growth is a conscious one grounded on a critique of the unsustainable capitalist unlimited growth model. As such, RO_R_EC_2/Int.8 opted to rather keep her business stable (in terms of number of employees), rather than focus on expanding it. A possible degrowth attitude, this option was also based on a realistic perception of her own limited resources, particularly time and energy.

All cases mentioned show a deep self-awareness regarding what the practice of sustainability is at a personal level, and an acute understanding of systemic limitations in relation to their innovations. They also indicate opposition to an unsustainable economic model which prioritizes productive work (and profit) over reproductive work (be it in their homes or in their communities).

5.4 SCALING IN

Women innovators in rural Romania value the capacity of organizations and institutions to support women-led innovations. However, they find that existing institutional structures are often too rigid and bureaucratic (both funding ones and training ones). They recognize the need for more practical support and believe that universities, including agricultural ones, should create departments that blend scientific rigor with the practical experiences of rural women. The women entrepreneurs, for example, lack scientific rigor and thus ability (and economic support) to fully implement their innovations. Infrastructures for product testing and analysis, local gastronomic centres, and support for bed and breakfast and equitable



tourism businesses could transform regional economies. However, the support needs to be non-bureaucratic and flexible.

Women innovators suggest that partnerships, such as those offered by the European Commission Horizon Programme, and access to business services and information are crucial. They highlight the absence of non-bureaucratic forms of support for rural women's innovation efforts in Romania. Any support or information provided to them, and small rural organizations would be highly beneficial in fostering innovation and economic growth.

From a perspective more linked to the rural communities and changes to be done by local administrations, what is missing is *“opportunities, of training, employment, which would need to be adequate to the specificities and needs of women, this would help significantly. And social services: even if you have an employment opportunity but you have no creche or the child cannot stay with their father or grandparents, then it doesn't matter. Training and education opportunities, medical services included in social services. And regarding gender violence.”* (RO_R_E_3/Int.3)

5.5 SCALING DEEP

Regarding the impact on mentalities and social norms, the innovations led by the interviewed women, as well as their individual attitudes, practices and behaviours have brought significant changes to their local communities. One woman reflects on this transformation of women being perceived as agents of change for sustainable transformation in their communities: *“If it was clear before that the mayor had to be a man, now it's not so clear; now it's clear that we need someone who will get involved and do what's necessary”*. She adds, *“I believe that we (women) here have gained courage”* and confidently asserts, *“I believe that I have changed that mentality”* (RO_R_S_3/Int.6). She is optimistic that future generations of women will find it easier to succeed in public office due to having successful models and being preceded by the current trailblazers who became agents of change in their communities.

Another example of how changes in social norms are beginning to take root can be seen in the story of another woman interviewed (RO_R_EC_2/Int.8). Through hard work and well-prepared arguments, she has earned respect and influence within her community, becoming its spokesperson in discussions with local authorities. She believes that a diplomatic and patient approach is essential for effective persuasion, and she has been accepted as a dialogue partner and an agent of change within her community. Sometimes, the mayor even consults her on various issues. This shift is also reflected in the increasing participation of women in community life. Women are now more engaged and committed in volunteer activities. They no longer need to be convinced of the community's importance; instead, they are driven to invest in the stories of their fellow residents and to contribute to the enhancement of their lives.

To foster and amplify this impact, it is important to build on these women-led innovations and support them to sustain their progress in order to produce lasting change. These women serve as powerful examples that inspire and empower other women to follow on the paths built by them. It is crucial to keep success alive until it becomes the norm. Failure or



decline would make all their work wasted, including in relation to how other women perceive themselves and the attitudes toward gender roles and stereotypes: *“A lot can be done with few resources. It's important to create critical mass so that more women feel empowered. In these meetings they see that they are not alone, that things can be done, that they are part of something bigger. In the end change is driven by people, if you can change the way they see themselves in relation to the world, you can change things.”* (RO_R_S_2/Int.5)

Modelling, transferring knowledge and building each other up are one set of methods of increasing emancipatory behaviour for rural women, which ensures that more of them come to see themselves and act as agents of sustainable change in their rural communities (and beyond). However, more than replicating what they do, how they chose to do things and the sustainability values they chose to embody also bring significant changes to social norms, values, and practices. Their approaches challenge traditional top-down, hierarchical structures by emphasizing collaboration, mutual empowerment and self-empowerment, community, and network building. From this perspective, being a woman is perceived as a positive aspect: *“It helped a lot that I'm a woman. Many of the women I've met possess the same kind of skills. Primarily the ability to negotiate, diplomacy and conflict resolution, patience (it came much later, with age probably), teamwork, being able to see things, being complementary with others, being able to multitask - it's a great strength of most women”* (RO_R_S_3/Int.6).

This radical shift inspires changes in thinking, self-perception, and the ability to overcome internalized self-limiting beliefs (especially for women, but not only). Through their localized, transformative, and embodied experiences, highly interconnected to trans local networks, these women are learning to speak up for themselves and drive innovative, sustainable change beyond their rural communities, and even beyond the goal of gender equality. They show that taking the collective good (of humans, and more than humans) as paramount and setting oneself up as an agent of change in bringing it about is equally beneficial at an individual level. In many ways, they are working on reconstructing a social and communitarian fabric based on collaboration, inclusion, equality, and fairness which was systematically destroyed both by the communist dictatorship, as well as by the transition to a capitalist democratic regime. While the impacts of this profound challenge to the patriarchal and capitalist norms are rather difficult to see beyond the community level (with some exceptions, such as the change in laws and public policies), their work is essential in reconfiguring sustainably gender equality and rural development. In other words, they are not only pointing out what does not work, but they make it their lives' work to find pragmatic, contextualized solutions to current problems and sustainable alternatives to systemic issues from a global perspective.

6. CONCLUSIONS

In terms of national geographical coverage of this research, the women interviewed come from 7 different counties in Romania (out of 41), with a slight overrepresentation of the NW area (NUTS 2 RO11) - where the counties of Cluj and Zalău are represented by 2 interviews each. RO12 (Central Romania) is represented by 2 interviewees from 2 different counties, RO21 (NE), RO22 (SE) and RO42 (W) are each represented by 1 interviewee. The regions



RO41 (SW), RO31 (S), and RO32 (Bucharest metropolitan area) are not represented in this study. This is a clear limitation of the current analysis which can be overcome by including women from more areas of Romania in future research on the topic. The overrepresentation of the NW region is due to the physical proximity and familiarity of the researchers with the NW region, which generated disproportionate access to information regarding women-led innovation in specific areas. Attempts have been made to reach a national coverage of all development regions.

Remote rural areas are explored in 3 interviews focusing on ecological, social and economic innovations. 4 interviewees come from rural areas (ecological, social, economic and cultural innovations), and 3 from rural areas close to the city (ecological, social and economic innovations). Our analysis on the specificities of the three typologies of areas (rural village, remote rural, rural close to the city) shows that there is little variation on specifically the constraints the innovative women (and rural communities) are faced with. Issues related to infrastructure, such as lack of public transportation, lack of good roads, access to utilities (water, sewerage, gas in particular) are transversal to all types of areas. However, there is a slightly improved access to public and social services (schools, clinics, pharmacies) in rural villages close to the city, which also correlates with the size in terms of population of the municipality/commune. In communes of various rural villages, there is significant variation - also in correlation to the population size of the village - among both the infrastructure and access to public services (RO_R_EC_1/Int.7, RO_R_S_3/Int.6) - the main village where the municipality is, and tends to be more populated, has better access to services and infrastructure.

In terms of age variation, we have interviewed women between the ages of 27 and 62 years old, with 7 of the interviewees belonging to the age group 37 - 47. The data set is too small to explore relevant correlations or conclusions regarding the age of the women and their innovation leadership, but this aspect could be included in future studies to get a better understanding of when in the women's life trajectories leadership and innovation are more likely to occur. Another limitation of the current data set is the fact that 9 out of 10 have university degrees (with 2 of them having PhD degrees, and 3 having Master degrees). It is interesting to note that the most senior woman (62 years old) is also the only one with secondary education, so exploring generational perspectives and especially variations in access to education (for rural women) can be included in future analysis.

Four of the women are unmarried and have no children. The rest of the women have at least 1 child (RO_R_E_3/Int.3, RO_R_S_1/Int.4), with one having 2 adopted children (RO_R_EC_2/Int.8) and the rest of three women having 3 children each (RO_R_E_2/Int.2, RO_R_S_2/Int.5, RO_R_EC_3/Int.9). All women who have children are living with their life partners and fathers of the children. Further down in the Social section of the Innovation Ecosystems analysis we will discuss more in depth the implications of this information.

Four of the women interviewed were born in the villages/communes they currently live and implement their innovations. The other 6 were born and raised in cities, later in life (as adults) making the conscious, intentional choice to move to the respective rural communities where they now live and lead sustainable innovations.



Out of the 10 women, only one belongs to the Hungarian ethnic minority. The Hungarian ethnics are the largest ethnic minority, making up 6% of Romania's population (INS, 2023) (so a 10% presence in this study is statistically an over representation). The 2nd largest ethnic minority in Romania is the Roma (3,4%) (idem). While we intended to include at least 1 Roma woman in this study (due to the statistical representativity and the particularly difficult context they are faced with due to racist attitudes), the limitations of this project prevented us from being able to do so. Future studies continuing this work should include rural Roma women for a clearer understanding of the different types of experiences, constraints and opportunities. Information about religious beliefs and practices has not been purposefully collected (although it tends to be a relevant identity dimension in rural communities). This analysis is also limited by the fact that all women seem to be cis-gender and heterosexual (although specific, explicit data was not collected), thus the LGBTIQ+ minority not being represented.

While the innovations have been classified according to one main innovation dimension (ecologic, social, economic and cultural), in all cases there is overlap between at least two, and in some cases all dimensions. For example, for RO_R_E_1/Int.1, being able to engage in educational activities implies that her own agricultural production at the own homestead is agroecological, for cognitive coherence, as well as to be able to test solutions and showcase diverse practical learnings during the educational activities (for example, tree pruning).

Additionally, applying the principles of agroecology - a science, a set of practices and a social movement - implies that she integrates in her practices the human and social values of dignity, equity, inclusion and justice (FAO, n/a). What this translates into, as an example, is her employing agricultural workers from her village, including from the Roma minority who are generally marginalized. As such, ecological sustainability innovation goes hand in hand with social and economic sustainability innovation (by offering economic opportunities to marginalized persons and hence contributing to an improved social cohesion in the community).

A concern for ecological and social sustainability is present for all interviewees, regardless of the main selected sustainability dimension. Further explorations are available below.

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RURAL WOMEN-LED INNOVATIONS IN SLOVENIA

CASE STUDY REPORT

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ACRONYMS & ABBREVIATIONS

| | |
|-------------|--|
| CAP | Common Agricultural Policy |
| UAA | Utilized agricultural area |
| SORS | Statistical office of the republic of Slovenia |
| LAG | Local Action Group |



1. THE NATIONAL CONTEXT

The entire Slovenian territory (with the exception of 16 settlements with more than 10,000 inhabitants) is defined as “rural”. At NUTS 3 level, 9 out of 12 regions are defined as predominantly rural, while 3 regions are defined as intermediate regions. A combination of the criteria (population density, population change index, share of agricultural population, settlements with a certain degree of centrality) resulted in three types of settlements: Rural settlements (5,165 or 85.6% of all settlements in Slovenia) had either a population density of less than 100 inhabitants/km² (in 2020) or a population change index (2020/2012) of less than 110, a share of agricultural population in the municipality of more than 10% (2019), Suburbanised settlements (rural settlements close to the city; 816 or 13.5% of all settlements in Slovenia) had either a population density of more than 100 inhabitants/km² (2020), a population change index of more than 110 (2020/2012) or a share of agricultural population below 10% (2019) and Urban settlements (only 55 settlements).

According to the more general typology based on the NUTS 5 level (municipality level – 212 municipalities in Slovenia), there are two types of rural municipalities (together represent 50% of Slovene territory, 24,6% of total population):

A) Rural municipalities with a shrinking population (together 82 municipalities): these are mostly border municipalities that are remote from transport and have been facing population decline and stagnation for a long time. This type of municipality is characterised by both the number of municipalities and the largest share of the area (29.2%; population density is 43.9 inhabitants/km²). The population density has decreased due to the decline in the number of inhabitants (by almost 5% in the period 2008–2017; 12.6% of the population of Slovenia) at the expense of negative natural growth and emigration; the ageing index is high. More than a quarter of housing is vacant in these municipalities.

B) Rural municipalities with a growing population (61 municipalities): rural municipalities, mostly located in valleys and basins, with good transport links or with a long history of stable population growth. This type makes up the smaller part of the country (19.35%). The number of inhabitants has risen by almost 8% in the last ten years (2008–2017), making up 14% of Slovenia's total population. In this type of municipality, the number of inhabitants is growing the fastest, mainly due to immigration, although this type has a below-average population density (73 inhabitants/km²). The result of positive demographic processes is a significantly below-average ageing index (compared to the Slovenian average). Compared to the national average, there is a lower number of businesses and a higher proportion of agricultural population. The proportion of daily migrants is above average (77%, while the national average is 50%). The registered unemployment rate is the lowest. There are significantly larger families (with four or more children) in the municipalities analysed. It is also interesting to note that in rural municipalities with growing populations over the last 30 years, the phenomenon of the growth of small towns can be observed (settlements with 2,501 inhabitants and more).



2. THE INNOVATIONS

After interviews and learning about the innovative rural practices in Slovenia, we found that the scope of innovation for many of the women interviewed could either be expanded (e.g. from environmental to social) or changed. It is evident that the women identified and included in the research are often innovating on multiple dimensions of sustainability.

The innovations represented ranged from NGOs, social enterprises, cooperative, private institute to associations.

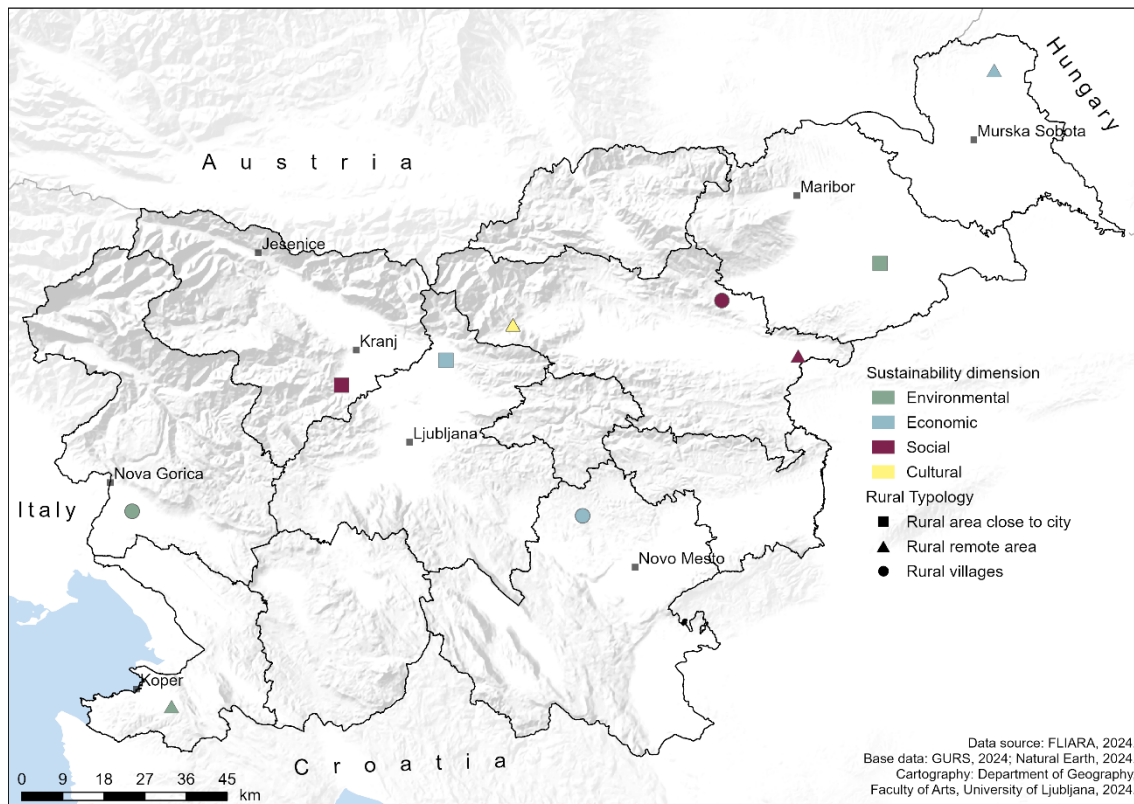


Figure 1. The spatial distribution of rural innovations analysed in Slovenia by the typology of rural area and sustainability dimensions.

In the spatial distribution of selected rural innovations, we notice that southern and south-eastern (karst) and north-western (mountainous Alpine) Slovenia are »neglected«. A higher density of innovative women occurs in eastern and north-eastern Slovenia.

Among our 10 innovations analysed, two practices are run by two women (a total of 12 women interviewed). The women's ages ranged from mid-thirties to early sixties, the average age of rural innovators is 47.2 years and, as it was already mentioned in the report on farming innovations, less favourable than farm interviewees practice (41.4 years). We've noticed that some women are starting an innovative practice in their more mature years, or it's their second career.



Table 6. The list of rural innovations analysed in Slovenia.

| N. Interview | Age | Educational Level | Legal form of the business/enterprises | Year when it started |
|-----------------|-----|---|---|----------------------|
| SI_R_EN_1/Int.1 | 43 | tertiary (higher education) | NGO | 2013 |
| SI_R_EN_2/Int.2 | 41 | tertiary (higher education) | Sole proprietorship/self-employed | 2008 |
| SI_R_EN_3/Int.3 | 61 | tertiary (higher education, PhD) | NGO, later association | 2010 |
| SI_R_S_1/Int.4 | 52 | tertiary (higher education) | private institute, NGO, social enterprise | 2018 |
| SI_R_S_2/Int.5 | 40 | tertiary (higher education) | NGO | 2016 |
| SI_R_S_3/Int.6 | 56 | tertiary (higher education, PhD) | social enterprise, limited company, cooperative | 2009 |
| SI_R_EC_1/Int.7 | 60 | tertiary (higher education) | social enterprise | 2013 |
| SI_R_EC_2/Int.8 | 35 | tertiary (higher education) | limited company | 2014 |
| SI_R_EC_3/Int.9 | 49 | tertiary (higher education) | public institute | 2012 |
| SI_R_C_1/Int.10 | 35 | secondary and tertiary (higher education) | LLC | 2018 |

One business was established in 2008 and one in 2009, but all the other eight business were set up after 2010. All ten Slovene women interviewed had third level qualifications.

3. INNOVATION PATHWAYS

3.1 MOTIVATORS FOR INNOVATION

The rural women chose to innovate for a variety of reasons, but common to most of the women interviewed is a combination of personal motives (e.g. independence, financial stability, work-life balance, love of hometown, local community) and a desire for environmental and/or social sustainability and/or rural development.

In five interviewees covering different types of rural areas, women from rural areas were motivated by a strong commitment to environmental sustainability. For example, the women were driven by their passion for organic farming and a desire to promote it in public schools (*"The main motivation was to promote organic farming. The aim was to give children the opportunity to get involved with growing food and gardening. This was of particular importance to me in my own childhood"*). Others were inspired by a desire



to make vulnerable groups, such as people with disabilities, more visible in their communities. Their goal is to provide personal assistance and support while addressing the unmet needs of the community (*"I quickly realized that I could develop almost anything in the area of social products because there was a glaring lack in our rural area. An absolute lack."*). In one case, innovation was driven by a combination of circular waste management and social inclusion of marginalized groups. Last but not least, for one interviewee, *"the main objective was to address the needs of the local environment through volunteering. We want to support green jobs in rural areas and promote a more solidary society"*.

Three women interviewed were striving for independence and financial stability, and innovation began based on a personal idea (*"The main reason we started our organization was because we wanted to be independent."*), often by combining personal interests with education or career reorientation to create a livelihood (*"After changing customs operations (o.p. practice from a remote rural area next to the border) there was a need to reorient myself professionally and find something that was perhaps more in line with my own beliefs and values and came from within, especially in the later years of life"*). This drive stems from the need to support themselves and their families financially. For one of the women, innovation is driven by a desire to improve their quality of life by creating jobs that align with their family commitments, fulfilling childhood dreams and starting businesses that fit into their everyday lives (*"I aspire to create my own entrepreneurial story that allows for a balanced lifestyle that seamlessly integrates my family life."*).

Three women in different types of rural areas recognized the potentials and challenges in agriculture, local tourism, food processing, green jobs, etc. and focused on rural development (*"It all started with a social initiative. Twenty years ago, we founded an association that was strongly committed to rural development"*). And finally, there are women who, out of love for their hometown, want to set up businesses and attract tourism to areas steeped in history in order to boost the local economy and preserve the cultural heritage (*"I've a deep affection for my hometown; I'm very attached to it. We recognized the potential of Gornji Grad as a place where there was really nothing going on at the time. At the same time, we wanted to create our employment opportunities in our hometown"*).

3.2 CONSTRAINS AND FAVOURABLE CONDITIONS

The constraints faced by the interviewees are diverse and do not differ according to the type of rural area in Slovenia.

Of the 10 women interviewed, 7 mentioned finances as the most common constraint (*"Financially, I had to sell so many things to cover all my expenses and to earn the minimum wage"*). Lack of funds was the most common reason (*"In the beginning, of course, you make sure that the deficit, which grows month by month, is as small as possible. How do you get to a threshold, and how do you get funds somewhere that cover a fraction? Uh, how long does that take..."*), the often unstable financing, which



entails many unknowns, and the lack of specific funds (e.g. for infrastructure) (*"In the beginning, the financing was there. Now you have to somehow find enough funds to be able to set up the infrastructure at all. Then you have to find suitable premises that someone will entrust to you. You cannot buy them because you do not have the money."*). Another major constraint (related to funding) is securing own premises to implement the innovation, which was emphasised by five interviewees (*"Let us say our biggest problem at the moment is that we do not have our own premises yet. We are a social enterprise, but we are still in an incubator"*).

Half of the women interviewed also pointed out constraints related to (lack of) established networks in the local area. This leads to limited access to information, a lack of relevant contacts, difficulties in communicating with public institutions and, above all, a lack of networking with other actors in the local area (*"I would like to see more networking in the region. Absolutely. I would like the mayors to look beyond the boundaries of their municipality in terms of tourism, agriculture, integration and local self-sufficiency. There is such potential here."*). Another, but no less relevant, constraint is visibility in the local environment, as they were confronted with a lack of support (*"Perhaps I would ... finally, I would point out that it is very important to know someone - to 'hook' them in the way you want or to get them to talk to you in the first place. Let us say we put a lot of energy into establishing ourselves in our local environment"*), lack of understanding (*"I think maybe the main obstacle was that they did not understand what we were doing. We understood that we were a bit ahead of the curve with certain things."*) and lack of trust from the local community (*"It's different to gain the trust of suppliers because you do not have a financial picture to start with. These small entrepreneurs have basically already had bad experiences, because they have often worked with shops or entrepreneurs who accepted products and then closed down very quickly, and then their invoices were not paid"*).

Many of the constraints were also of a political nature. In particular, interviewees pointed to the lack of support for NGOs (*"Institutionally of course not, but as a private non-profit organisation we were a thorn in the side of many because of the issue we were working on - organic farming."*), the lack of provinces (as a political structure) (*"We are a regional hub and the hubs were also founded with the idea that provinces are founded and we as a hub have no counterpart on the other side at the regional level, but we work at the level of the region."*), the lack of understanding of social entrepreneurship and the lack of incentives for it (*"Unfortunately, we have a poor understanding of social entrepreneurship on the part of the state. In the beginning there were good incentives, but now there are practically none."*).

Some of the constraints were specific to certain practises, but it is important to emphasise them as they could also occur in other environments:

- Lack of entrepreneurial skills (*"I never did any entrepreneurial training or learnt how to work with people. I was a manager and had employees. You are very self-centred, you have certain character traits and weaknesses that are very difficult*



to deal with. But you do not have the skills to deal with them so that conflicts do not arise.");

- the remoteness of the area and the associated demographic challenges;
- the mentality and values of the local environment (*"They absolutely do not appreciate what they have. I guess it's in the nature of things that what you have either does not interest you or you take it for granted"*);
- work-life balance;
- lack of competitiveness due to smallness.

The floods that hit Slovenia in August 2023 affected only one practise but had serious consequences (*"Our environment is basically very harsh. I don't know what else is going on here, but the floods also showed that our space is simply not yet ready for the big picture, for a better vision and for disconnectedness in general"*). However, we need to be aware that there will be more such constraints in the future as we face the increasing effects of climate change.

The favourable conditions for women driving innovation in rural areas can be summarized as follows.

Support from the partner/family members played an important role in the favourable conditions for women leading innovations in rural areas, as it was mentioned in 6 out of 10 interviewees. In one case, the partner is also actively involved in the innovation process. Some examples of how women described these favourable condition: *"I always had that support; my husband has always been involved as well, so I wasn't completely alone in that regard"*; *"My family is proud of me and kind of supports me in my work"*; *"We didn't get any other support except from family members who were really on the sidelines and didn't know exactly what it was about."*

Five women pointed out, that support from the local community and stakeholders was very appreciated. Working closely with community members and partnering with other organizations enables innovation implementation or knowledge sharing and collective action towards common goals: *"Support from different institutions, public institutions, the municipality, even the tourism board, if only morally, but that's enough for me..."*.

Financial support and alternative funding options were discussed in 4 interviews. Access to funding, whether through seed capital or alternative funding, municipal tenders, reduces financial barriers and enables the initiation and sustainability of innovation projects: *"In our institute we always had a lot of activities. Occasionally there were marketing activities in which we acted as a service provider, and in such cases, it was possible to generate a financial surplus. We were then able to finance our innovations with this financial surplus."* Two women received support in the form of non-profit leases and similar arrangements. Personal financial resources (savings) were also mentioned in three interviews.



Networking capabilities and references from previous projects were highlighted in two interviews. Strong networking skills and positive references have contributed to credibility and facilitate cooperation within the community: *"... that was a really good reference, which then helped us further. People, especially in the local community, believed in what we were doing, that we had good intentions, that we knew something, that we weren't just bluffing and that nothing would come of it. Because there's a lot of that too."*

Finally, particular geographical circumstances, such as remote or border locations, offer opportunities for customized innovative solutions: *"... now I see my mission as exactly that. I believe that it was bound to happen and that it's also my job to show these people the potential that lies here in our remote rural area."*

3.3 IDEA AND PREPARATIONS/DECISIONS AND PREPARATORY ACTIVITIES

The preparatory activities of the respondents are very different. In Slovenia, on the other hand, there are no differences depending on the type of rural area. What they all undoubtedly have in common is that it was their own (autonomous) decision, supported by family members, and that the realisation of the innovation would have been impossible without their support (*"Financially, I had to sell so much to cover all my expenses, and I had to earn the minimum wage. It was not even an eight-hour day, it was a 12-hour day, so my personal life might have taken a bit of a backseat at the time, but I feel like my partner, my now husband, was by my side the whole time, he really understood and supported me."*).

Regardless of the type of innovation, it seems that for the majority of innovators (seven to be exact), the first step to realising the idea was to secure funding. Most of them obtained funding through various tenders, but some also had to resort to loans (*"I got a 4000 € student loan because I was employed six months before and a student six months before at the time, so it was nothing and I had 4000 € to buy my first job."*). However, it turned out that certain areas (e.g. problem areas close to the border) have the opportunity to apply for several different tenders and funding programmes due to their location in a rural remote area. Directly related to securing funding was the provision of their own premises (either through purchase or rent), for which some also received financial or municipal support.

For all interviewees, networking in the local environment was crucial for the launch of the innovation. In particular, they emphasised the establishment of new networks and cooperation with local actors, which also resulted in greater confidence in their innovation (*"One of the most important things is networking, perseverance and competence, really being there, always being there... That's the problem with European projects... You get funded for three years, but to be there and to stay there, to survive, to go beyond this project activity... That's why we decided not to do so many of our own projects, because we believe that you often rape the local environment with something it does not need... We have decided that we are the ones who will support the others so that they can*



continue, and by doing so we will also empower those we help, the volunteers."). One of the innovators used the project ambassadors to publicise the innovation (*"I mean, we thought about it, so we also built in elements like having some ambassadors for the project, and that's why we chose Manka Košir, because at the time I had just read something by her on the topic of the earth and children, and that worked really well."*).

More than half of them also emphasised knowledge and education as an important preparatory activity (*"And if you consider that Gornji Grad is a very phenomenal place in terms of history and all the starting points, in terms of cultural heritage, and especially the herbs that were here before the bishops, when there were still Benedictine monks dealing with them... So it was basically about drinking very good water. And we also studied everything very well. The basic idea was herbs, but that also had to be transferred to the room, and I think we succeeded very well."*). Four innovators identified the experience gained in previous employment as crucial, two emphasised learning and gaining experience from foresight practices, and others also highlighted the importance of subsequent trainings and courses to build on new and existing knowledge and acquire specific skills (e.g. for crowdfunding, marketing, etc.).

3.4 CONCRETISATION OF INNOVATIONS

The Slovene innovative women contribute to local economic growth by creating new jobs in 9 out of 10 cases, from three female innovators outcomes manifest dominantly as social, while in three practices the results are environmental. One practice contributes to cultural sustainability and develops a tourism product at the same time. However, there is often a mix of different outcomes and sustainability dimensions in one practice (e.g. a reuse centre that operates as a social enterprise and employs disabled people).

9 out of 10 interviewees reported that one of the most important outcomes of the innovation process is job creation. In two practices one job was created. In the case of three interviewees, two jobs were created. In one practice about 5 new jobs were created and in finally three practices reported that more than 10 new jobs were created (maximum 32 new jobs).

Eight out of ten interviewees reported new services (see below) and six out of ten practices reported new products (development of new food and artisanal products under the collective regional brand, upcycled items from the reuse centre, redesigned clothing, own food brand, adapted bicycles for people with disabilities, herbal products).

Social inclusion is promoted in the following three practices, one practice from each type of rural area: employment of vulnerable groups of people in reuse centres (rural villages); personal assistance at home and social inclusion activities for people with disabilities (e.g. cycling for people with disabilities) (rural, remote area); and provision of immigrant integration activities, intergenerational workshops on women's empowerment, and promotion of gender equality, etc. (rural area close to the city). In two practices, the tangible results focus on circular economy practises: a practice on the first reuse centre in Slovenia (rural villages), which was further upgraded in the network of reuse centres



in Slovenia, and a case on the solo idea of redesigning and recycling clothes and organising workshops for knowledge exchange on sewing and recycling clothes, which are also promoted as a social gathering of women (rural area close to the city).

Tangible outcomes of the innovations also include offering volunteer services and supporting local communities in remote rural areas: *"In the last 10 years, we have hosted about 1,300 volunteers from 56 countries worldwide, in total about 3,400 volunteer placements and about 105,000 volunteer hours in the region."*, the creation of unique tourism experiences focusing on local cultural heritage in remote rural areas, the implementation of innovative educational practises (school gardens as outdoor classroom represented in all rural and also in some urban areas), advising on the renovation of farms and houses using natural building materials, promoting self-sufficiency and local development in remote rural areas and developing own brand (local store in a rural area close to the city). In another practice from rural villages in a rural area, developing a regional collective brand with over 700 products and receiving recognition as an organisation working in the public interest of agriculture and tourism promotion.

3.5 IMPACTS OF INNOVATIONS

The impacts of rural innovations are diverse and far-reaching. Compared to farm innovations, we found that the social and environmental impacts are much more pronounced, while the economic impacts were not particularly emphasised by respondents. Rural innovations had a greater impact on the political sphere, with two practises influencing new legislation.

In fact, only two innovators addressed the impact of their innovation in the economic sphere, with one emphasising support in the creation of green jobs and the other the provision of support for small, local entrepreneurs, farmers and artisans (*"...that we now support a whole range of suppliers for whom the "our practice" makes up the majority of their monthly income, enabling the whole family to live off it."*).

However, the strongest and most far-reaching effects were identified in the social sphere. Four interviewees emphasised the inclusion of hard-to-place and vulnerable people and thus resulting in better quality of life for them (*"We also employ vulnerable groups, although we have no status, but that seems to me to fit in with our story. You have a responsibility towards nature, towards the environment, towards people, towards... I am saying that it's a more difficult path..."*). In the area of improving quality of life, the impact on the provision of services for people with various disabilities is also important (*"We have great cycle paths here, great infrastructure, which I assume was built mainly with European funding. So once again these local decision-makers have forgotten that there are groups of people here for whom these cycle lanes mean nothing because they can only look at them, they can not get to them, they do not have bikes, they can not do it. And that's how we got involved with our first project, the Active Citizens Fund. These are Norwegian mechanisms. As part of this project, we conducted a market study, we interviewed people with disabilities. A broad survey was carried out on whether people*



would cycle if they had the opportunity to do so. It turned out that people are very interested in cycling, but see it as almost impossible. After analysing the survey, we went to the city council and said: "We have a group of people for whom something needs to be done, we need to buy special bikes"). In the social sphere it is also important to establish networks and connect with the local environment, which has an impact on the further development of the local community and the region, and to foster a culture of cooperation, support and creativity that ultimately leads to vibrant communities, as five of the interviewees emphasised (*"We knew about the potential, that there was a demand for it, and we also recognised the potential of Gornji Grad as a place where nothing was really real at that time. In the first few years when we opened the doors, there was not a single tourist. So in hindsight, we took a very, very big step"*). In some municipalities, this has also led to the creation of new associations (e.g. the Association of Organic Farmers of Pomurje Rodna grüda) and co-operatives linking local producers and processors.

The impact in the environmental pillar of sustainability was also strongly emphasised. The most frequently emphasised impacts were related to recycling awareness, reuse and circular economy awareness. Two interviewees emphasised education (including for younger generations) about the importance of growing your own food, organic production and healthy eating, which is increasingly being included in school curricula. In the long term, this leads to contact with the garden, plants and nature and creates a renewed interest in growing one's own food (leading to an increase in food self-sufficiency in the long term) (*"Self-sufficiency has largely been abandoned in rural areas. Some people who used to have a garden have practically given it up because it's no longer worth it, they say, because it's so cheap in the shops, and because it takes time anyway, and people have less and less time. They say that now that the kids are doing it at school, they have been encouraged in many places to start a garden again at home, when they have nothing else to do, the kid gets fed up and then they start again."*).

Another important contribution is the cultural contribution, which was emphasised by five interviewees. Three of the respondents see their impact in the area of getting to know and preserve the local cultural heritage, one of them also in the revitalisation of the abandoned town centre, which is also a protected cultural heritage (*"The Zlata ptička approach has attracted many people from all over Slovenia and we have been an important part of it. We and the residents and the place and all these local authorities are very grateful, and I am glad that they express this gratitude so clearly, because we need to hear it."*). It is also important to emphasise the preservation of intangible heritage, which was highlighted by one of the interviewees who is committed to preserving old sewing and craft techniques (*"Yes, my biggest achievement is basically realising that you should not keep all the knowledge you gain through processes to yourself."*).

4. INNOVATION ECOSYSTEMS

4.1 POLITICAL



Political decisions can significantly affect the motivation, opportunities, and challenges for women entrepreneurs in rural areas. While some of them were supported by the government and local institutions, others faced obstacles.

Since it is difficult for a non-profit organization to build infrastructure on its own, some rent it from the government/public institutions. However, this arrangement can lead to uncertainty when the contracts expire, which affects long-term planning and stability: *"As a non-profit organization, we are in a situation where it is really difficult to build our own infrastructure, and therefore also in a kind of uncertainty about what will happen in five years, right? What if we do not get an extension of the lease? So it also depends on politics, on political will..."* Another political challenge was no support for organic farming during the period of innovation development. Conflicts with authorities, particularly in relation to organic farming, and insufficient support for non-governmental organizations at state level were noted: *"Because organic farming was considered undesirable at the time, we were in conflict with practically all agricultural institutions. Then, when organic farming became more desirable, we were confronted with the fact that we were not welcome because we were doing certain things that others wanted to do. Even though they had much, much less knowledge and experience and different motivations..."*

Another challenge is the lack of understanding of social entrepreneurship on the part of the government, resulting in limited support and survival rates for social enterprises: *"Unfortunately, the government here has little understanding of social entrepreneurship. In the beginning there were good incentives, but now there are practically none."* The first social enterprise in Slovenia pointed to the lack of supportive legislation and infrastructure for social enterprises in Slovenia at the time: *"When I started approaching the ministries, an official from the Ministry of Labor and Family said to me: 'What I do not understand is that if it does not work out financially, we should close the business and send people to the employment office, because we have an institution for that' I said: 'Do you actually know what you are saying! How dare you?' We have to find systems, mechanisms to integrate these people into the work process."* In addition, the low survival rates of social enterprises in Slovenia and the misunderstanding of social enterprises among the public due to wrong political decisions were pointed out: *"The biggest mistake was in 2017 when the call for applications was published and many associations applied then to obtain the status of a social enterprise... None of them are still operating as such today, and this is also the reason that in statistical data there is only one employee on average in social enterprises in Slovenia... This is because an association cannot be a company; it has a completely different function. Moreover, the main reason for founding such an association is not to employ people... And this is where the focus has been lost, there is a lot of mistrust in social enterprises because of such appeals."*

For one woman, the hindering element of the political system is also a lack of continuous support for NGOs at national level. On the other hand, at the European level, recently there is a good example of funding through the European Solidarity Corps: *"In recent years, there has been a program called the European Solidarity Corps. This is funding provided by the European Commission and our project fits perfectly into this program. In*



recent years, this program has helped us implement our project and allowed us to maintain ourselves in a more normal way."

Another hindering factor is the lack of a corresponding institution or partner at regional level, as there are no functioning regional administrative units in Slovenia, although there have been discussions for many years that they should be established: *"We are a regional hub, and such hubs were established with the idea that regions would be formed. But as a hub, we lack a counterpart on the other side at regional level, even though we are active at regional level."*

Most of the women interviewed pointed out the importance of some financial mechanisms, such as the Rural Development Programme, especially LEADER/CLLD. However, the individuals or groups face the challenge of getting the necessary institutional support to effectively implement and scale up their initiatives in rural areas: *"Maybe we're also a thorn in the side of these institutions as they basically just withdraw money and create projects for the sake of projects. But that's not something that lasts in the long term... We have really put all our heart, time and money into what we have done, and people don't give up. We had to knock on a lot of doors several times. Even though these doors should have been open to us because we were working in rural areas, right? But we persisted and we also worked well" together."*

The suggestions for improving the policy vary from case to case. For example, advocating for education about the importance of volunteering and recognising and supporting proactive individuals, possibly through municipal budgets, to empower them to effect positive change in their communities. In addition, women mentioned that reducing bureaucracy and simplifying paperwork could ease burdensome processes. Policy and regulatory changes are proposed to take into account the voices of people with disabilities in the local context and create a more conducive environment for social entrepreneurship and circular economy initiatives. In addition, a more practical and supportive approach is called for in government regulations to promote entrepreneurship in rural areas, possibly through various rural development programmes: *"I believe that with more pragmatic approaches to government regulations, we could promote entrepreneurship in rural areas. Everyone always makes excuses and says it's because of European directives. But that's not true. In Slovenia, we have strict standards that are much more demanding than in Austria or Italy... We should simplify the conditions for creating business opportunities in rural areas and make them more favourable."*

4.2 ECONOMIC

All women interviewed have received European, national, or municipal financial incentives from different mechanisms, although in Slovenia we did not find that the type of rural area influences access to financial incentives, but to a certain extent the sustainability area of their work influences the open tenders they applied for.

Among the European funding received by respondents, LEADER/CLLD funding was highlighted by five respondents (*"Mostly LEADER, but we have now also applied for the*



second time to the Ministry of Agriculture for the second project to implement the directive..."). Those working in the field of social innovation additionally pointed to funding from the European Solidarity Corps and the Erasmus + programme. At international level, other calls for proposals were also mentioned that enabled them to get the innovation off the ground, such as the Norwegian fund ("And that's how we got started with our first project, the Active Citizens Fund. These are Norwegian mechanisms. In this project, we conducted market research and interviewed people with disabilities. As part of the first project, the municipality signed a letter of intent for us that they would finance the purchase of two bicycles. Then we said, what now, now we need to move on, and we did that with the next project and built on the original purchase of the bikes"), the Swiss fund and Interreg projects that are more accessible for innovation in rural remote areas.

At a national level, innovators apply to various ministries and relevant agencies for topic-specific tenders. For example, the Ministry of Public Administration (tenders from the NGO fund), the Ministry of Education, the Ministry of Culture, the Ministry of Agriculture, Forestry and Food (tenders for short chains in rural areas), the Employment Service of the Republic of Slovenia (incentives for youth employment), funds for start-ups ("Yes, when I opened my own business, I mean, as an individual entrepreneur you received about 4,000 euros to start a business, and that was actually a kind of start-up aid. If you closed your business after two years, you had to pay it back, so I said, "Try it out and see how it goes.") etc.

Financial incentives at the local (municipal) level are also important as they indicate support and acceptance of the innovation by the local community and its stakeholders, as several interviewees emphasised ("...but we apply for these municipal tenders that are for rent subsidies in the old town. It's not much, but it's something, and we get 10 per cent back every year. ").

The final type of funding that was also highlighted was other external funding - for example, obtaining loans, introducing an annual membership fee ("And then in the second year or after the project finished we introduced a membership fee for those who wanted to join, we did it purely for hygiene reasons, because we found that half of the people who signed up to the programme with us were not really interested in it and were only in it for that reason. We had a lot of work to do with them and said we would charge a symbolic membership fee. That will put off those who are not serious, but all those who are interested enough to pay 50 euros a year will stay, and that has proved to be very good so far. If it's free, it's not worth anything, is it?") or the funding they receive from the side activities they still pursue (tourism, sales of products, etc.).

4.3 SOCIAL

Social factors such as cultural norms, gender roles, community support and social networks play an important role in influencing the motivation and challenges women face when innovating in rural areas.



Women innovators actively engage in networking, both at the local and regional level (see below) and at the national level (working with ministries, some agencies, faculties, etc.) and even at the international level ("*...if we weren't internationally networked, we wouldn't survive.*"), forming robust networks that sustain and expand themselves.

At the community level, the women are highly engaged in various activities such as workshops, business promotion ("*We have created entrepreneurship in all the rural areas where we're present.*"), awareness raising and community building ("*...through these recycling workshops we have created a new community and brought our ideas to the local environment. This has contributed to a gradual spread of awareness of sustainable practices as people who have participated in the workshops share their experiences with family and friends. It's not exponential growth, but rather a slow, silent spread of ideas and values*"). Most of the women interviewed emphasized the strong support from the local community, some mayors and institutions such as municipalities and tourist offices, local schools and some associations, LAG officers and regional development agencies ("*The local mayors are the decision-makers who open doors. I work with them, but with some you can't do much, they don't even let you in; 'We're very well connected in the local community and beyond, and I know that is a strength. We're connected with the Sožitje association, we're connected with the Invalide association, and we're connected with the elementary school for children with special needs'; 'We're really happy with our local community, we're supported by all kinds of institutions, public institutions, the municipality, even the tourist board, even if only morally. But for me, that's enough...'*").

However, there are also cases where the local environment is slower to progress and less cooperative, due to factors such as lack of familiarity or negative attitudes towards certain activities, such as herbalism, and the perception of the role of women: "*Our local environment is hard. Very tough. And as a woman in rural areas, in whatever capacity... Especially what we started with, which is a bit more ethereal, like gathering herbs, and people don't really take that seriously. We've made jokes about it at some presentations, but unfortunately, it's true that you do get a bit of harassment. Just like that. With this activity that they don't recognize as something good, even though we've created an exceptional product.*"

In summary, social factors can both facilitate and hinder women's involvement in rural innovations, but active community engagement and networking opportunities play a critical role in overcoming challenges and promoting progress.

4.4 TECHNOLOGICAL

Common to all innovators is the use of social networks (website, Facebook, Instagram) ("*I always start from a website that is a pretty good representation of who we're. And if someone is thinking about whether they should work with us or not, they may already be able to see something on the website. Then of course there's social media, which I've to say also makes a difference in the local area. For example, if we publish general information, there is no reaction. But if we put a person involved in an activity in the local*").



area, people basically come alive and seem to respond to that kind of information. We network."), and some of them, because of the nature of the innovation, use different platforms that they have joined (e.g. the PASS platform) ("This programme, the European Solidarity Corps, has a platform, it's called PASS. There the volunteers have access to all kinds of projects all over Europe, and that's how they find us. That's one, but the others are Workaway and Helpx. In these projects, the volunteers basically come on their own without Europe covering their travel costs or their food, for example.") or were developed in the course of developing an innovation (e.g. the Organic school gardens app, web shops). While some innovators pointed out that they don't utilise social networks enough and don't fully exploit their potential, others see it differently and the dissemination of their innovation on social networks has also brought them other, more public media publications and guest appearances ("Basically, we have a Facebook page and a website. And then there's Instagram. We were lucky enough to be on TV shows *Ambienti*, and *Na lepše*. We were on *Ambienti* because of the space and on *Na lepše* because of these five-star experiences, because half the time you're in this Slovenia Unique Experience collection, you also get to do one thing, and that's the release on the *I Feel Slovenia* website, and then there's the *Na lepše* show. That was the main thing. And then basically the journalists found us themselves, I think we were already in all the newspapers.").

Three innovators highlighted technologies related to the use of renewable energy sources: the use of photovoltaics, electric cars, and the installation of a charging station for them, and the use of natural building technologies.

Two innovators use specific technological tools related to the nature of their innovation. The first uses a variety of sewing machines, while the second uses a range of techniques and technologies for the recovery and reuse of a variety of items.

4.5 ENVIRONMENTAL

Environmental factors play an important role in shaping the nature of innovations in rural areas. Four women prioritize environmental sustainability by advocating 1) green jobs and the organization of voluntary environmental actions ("In terms of environmental sustainability, we support green jobs aimed at preserving natural heritage sites, organizing clean-up actions to contribute to a cleaner environment, and promoting a healthier and higher quality of life in rural areas, which ultimately becomes more attractive to young people. For example, one project we are currently supporting is a permaculture center. Our aim is to support others so that more such projects can spring up here and in rural areas and so that those already engaged in green initiatives can have green jobs in rural areas, encouraging them to stay here rather than migrating to the cities where it may be easier."); 2) increasing ecological awareness and agricultural knowledge among school children through Organic School Gardens; 3) promoting practices such as recycling, reuse, waste prevention and circular economy concepts (in two practices).



Three women mentioned their efforts aimed at preserving natural heritage sites and promoting self-sufficiency, organic farming, natural building, herbalism, and a healthier and higher quality of life in rural communities.

However, not all innovations have a specific focus on environmental issues. In three practices, particularly where social and health-related services are prominent, some initiatives lack a specific focus on environmental considerations.

Overall, there is a wide range of approaches to addressing environmental issues and promoting environmental sustainability in rural innovation efforts in our practices.

5. MAINSTREAMING ACTIONS

5.1 SCALING UP

Compared to farming innovations, rural innovations had a greater impact on the political sphere, with two practices influencing new legislation: 1) the first on reuse centres influenced legislation on waste management and, as the first social enterprise in Slovenia, also influenced legislation on social entrepreneurship; 2) the second on organic school gardens was included in the Action Plan for Organic Farming in Slovenia 2020-2027. Another woman would like to influence the change of legislation on water resources in the region, but this has not yet been achieved.

In terms of policy changes, a practice on regional collective brands has influenced new policies related to agricultural cooperation and collective brands. They had a particular impact on the consolidation of small, highly fragmented collective brands that were transformed into regional brands.

Two practices have illustrated that certain norms may have shifted, one in relation to the promotion of voluntarism and solidarity and one in relation to gender equality.

In terms of suggestions as to what would be needed to promote this impact, the responses were varied and very specific. For example, in order to promote and support more Organic School Gardens, the wish was expressed to follow the Hungarian practise, where a foundation for school gardens was established that works independently of the Ministry of Agriculture.

5.2 SCALING OUT

Some innovative actions remain localized and specific to rural contexts. For example, volunteer services in the Primorska region, clothes recycling workshops in Ptuj, consulting local stakeholders and supporting rural development in remote rural area of Goričko, herbal tourist experiences in Gornji Grad, and a local grocery store in Kamnik. In some practices, the scope is extended, such as collaborating with more partner organizations every year or adding new activities, products. However, they are still limited in geographical coverage. These initiatives may have a strong impact within their immediate community or region but have not been replicated or expanded



geographically. Nor do they plan to expand. However, these practices have often served as an inspiration for others and indirectly influenced the spread of “best practices”. In some cases, they are also mentors for new innovations. For example, volunteers expressed interest in starting similar projects in their own localities.

Two women carried out a direct geographical replication. They opened ‘regional collective brand’ stores in two new locations and reuse centres at seven new locations: *"The next project was a network of reuse centres across Slovenia in 2014. We established 7 new centres at 7 new locations. Later there were also various smaller local projects, then we also expanded..."*

Some initiatives have successfully transferred their practices to related areas, such as eco-schools, local biodynamic associations, and local communities. Innovations that aim to create and expand networks (four practices) are open to the involvement of other actors if they share the same values and principles. As mentioned in the previous sections of this report, women collaborate with local communities and stakeholders whenever they have the opportunity to do so, if local administrations welcome their initiatives and are willing to support them. Indeed, support from local communities is essential and helpful, but it is not always available. In another practice there is potential for international expansion, as demonstrated by an invitation to run similar educational programs in Slovenia, as is already being done in Austria, and cross-border project-based cooperation.

In addition, it was emphasized that the visibility achieved through specific campaigns at regional or national level, including newspaper coverage, television broadcasts, and online and social media presence, has the potential to inspire women in different rural contexts to undertake similar projects.

5.3 SCALING DOWN

All the women interviewed have received European, national and/or municipal financial incentives from various funding mechanisms, although in Slovenia we did not find that the type of rural area influences access to funding, but to some extent the sustainability area of their work influences the open tenders they applied for. Funding is described in detail in section 4.2 of this report.

In most of the practices, the (formal and informal) educational background of our women was crucial to the development of innovations. In addition, two women participated in courses, e.g. a course on social entrepreneurship offered in the framework of the Erasmus KA project "Social Business Educational EcoSystem for Sustainability and Growth" or an international course at the EIAP Institute in Austria to deepen knowledge on herbalism. After completing these courses, both women started their own businesses or added some activities. Two women also emphasised that during the innovation process and ongoing work, they often participate in various capacity building events and workshops, depending on the area of their work. For example, in the field of volunteering, they participate in events offered by Erasmus and the European Solidarity Corps; they



also received technical support and funding from these organisations. On the other hand, one woman participates in trainings on food processing, branding in tourism, etc., mostly offered by different AKIS actors at national level. Two women also participate in trainings that focus on working with vulnerable groups, including people with disabilities. One woman also noted that she participates in various international circular economy projects that provide her with capacity building but also funding.

Reasons why women have not participated or received support in some cases could include barriers such as lack of access to information, resources, expertise, or networks, as well as cultural or societal factors and language barriers that can hinder women's participation in certain sectors or areas.

5.4 SCALING IN

Women innovators definitely value the capacity of organisations and institutions to support their businesses and ideas. However, this support is sometimes limited or non-existent when it comes to specific skills, knowledge and advice.

Our women received a lot of support and trust from local organisations and partners, with more than 70% reporting positive experiences in this regard. However, only one woman reported receiving support from national actors and three women highlighted international support, knowledge, and advice.

This support often takes the form of knowledge sharing through workshops and mentoring programmes, sharing information on funding opportunities, and less often in the form of support for skills development, creativity, and community cohesion. In addition, the female innovators are committed to mutual support and cooperation. One woman promoted a change in the practises/values of these organisations/institutions.

However, they express their disappointment with the lack of support from institutions and the government regarding certain issues/sectors: social entrepreneurship, formalisation of organic school gardens as part of the curriculum, umbrella organisation for the promotion of tourism in the region, etc., and they call for a more enabling environment: *"I approached different support networks at the time because I was expecting assistance, but I received answers like: "Sorry, we can't help you right now. You have to take it into your own hands because you founded and run it." To be honest, I didn't receive any valuable information or support from the existing environment."*

5.5 SCALING DEEP

Women's actions have indeed contributed to changing societal values and behaviours regarding gender equality, especially by challenging stereotypical views and traditional gender roles prevalent in rural areas. While the importance of including women in certain policies, e.g. LEADER/CLLD projects, is recognized, actual changes in practice remain limited and vary depending on the actors/people involved.



Nevertheless, changing societal values and behaviours related to gender equality is a slow process, especially in remote rural areas (as the examples from Gornji Grad and Goričko show). However, being young may be a greater barrier, as it may cause some people to underestimate or dismiss women's abilities and contributions, especially in an environment where age is equated with experience or authority. This double burden of gender and age bias can be frustrating and discouraging for young women trying to make a name for themselves in different fields. However, the women interviewed noted that over time they have been respected by all local stakeholders.

Some women may feel more empowered and openly advocate for gender equality, while others contribute more indirectly to positive change by encouraging other women to start similar businesses. Their presence and visibility as successful entrepreneurs serve as strong role models for other women and inspire them to pursue their entrepreneurial aspirations despite societal barriers and gender biases. By breaking stereotypes and demonstrating the potential of women in business, these trailblazers are helping to change perceptions and attitudes towards female entrepreneurship in their communities.

In addition, women's involvement in local/national political bodies and entrepreneurial organizations is critical to promoting gender equality and challenging patriarchal norms at the grassroots level. Women in these positions could influence policies and decision-making processes that directly impact female entrepreneurship. By championing initiatives that support women's economic empowerment, such as access to finance, mentorship programs and networking opportunities, they help to create a more inclusive and supportive environment for women entrepreneurs. In addition, improving support services and programs, such as childcare facilities, etc., is crucial for women to effectively balance their work and family responsibilities. Many women recognize that support from their partner or family plays a crucial role in enabling them to pursue their entrepreneurial aspirations.



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RURAL WOMEN-LED INNOVATIONS IN SPAIN

CASE STUDY REPORT

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1. THE NATIONAL CONTEXT

Spain's rural areas are a tapestry woven with diverse communities, each bearing distinct challenges and opportunities. Through a comprehensive analysis, this report aims to shed light on the shared narratives, unique characteristics, and strategic pathways for sustainable development, focusing on three primary typologies: rural villages, remote areas, and peri-urban zones.

1.1 A SHARED RURAL NARRATIVE: CHALLENGES AND TRENDS

Across rural Spain, common themes reverberate, presenting both challenges and trends that shape the socio-economic landscape:

- **Population Decline:** A notable concern is the migration of younger generations to urban centres, leading to demographic imbalances and labour shortages in rural communities.
- **Economic Challenges:** Traditional agricultural sectors grapple with global market pressures and ageing workforces, accentuated by limited technological access and infrastructural deficits.

1.2 RURAL VILLAGES: PRESERVING TRADITIONS WHILE EMBRACING INNOVATION

Rural villages epitomise cultural heritage and community cohesion, yet they face formidable hurdles:

Strengths:

- Robust social networks and existing infrastructure foster collaboration and knowledge exchange.
- Cultural heritage and local products offer potential for tourism and niche markets.

Challenges:

- Sustainability of small-scale farming amidst economic pressures.
- Limited resources for technological advancements and attracting youth to agrarian careers.

Opportunities for Rural Villages:

- Agritourism initiatives to showcase traditional practices and attract tourists.
- Leveraging e-commerce for direct marketing of local produce.
- Establishing Community-Supported Agriculture (CSA) models for sustainable farming.

1.3 RURAL REMOTE AREAS: BRIDGING THE GAP

Remote rural areas exhibit resilience amidst isolation yet confront notable challenges:



Strengths:

- Unique landscapes and ecosystems are conducive to sustainable tourism and specialty agriculture.
- Strong community cohesion and self-sufficiency ethos.

Challenges:

- Limited access to essential services, markets, and educational resources.
- Lack of modern infrastructure for agricultural innovation.

Opportunities for Rural Remote Areas:

- Utilising mobile technology for healthcare and educational outreach.
- Collaborative marketing cooperatives to access wider markets.
- Promoting sustainable practices and eco-tourism ventures.

1.4 RURAL AREAS CLOSE TO THE CITY: A BALANCING ACT

Peri-urban zones straddle rural and urban dynamics, presenting a nuanced landscape.

Strengths:

- Proximity to urban amenities, research institutions, and markets.
- Potential for peri-urban agriculture and value-added products.

Challenges:

- Pressures from urban sprawl and land-use changes.
- Affordability and accessibility barriers for young farmers.

Opportunities for Rural Areas Close to the City:

- Urban agriculture initiatives leverage innovative farming methods.
- Value addition and branding of local products for urban markets.
- Creating rural co-working spaces to attract remote workers and entrepreneurs.

The rural fabric of Spain reflects a complex interplay of challenges and opportunities. Tailored strategies can nurture sustainable development, preserve cultural heritage, and invigorate rural economies by understanding and addressing the unique characteristics of each rural typology. Collaborative efforts, technological innovations, and strategic investments are pivotal in crafting a vibrant and resilient rural landscape across Spain.

1.5 ANALYSIS OF CHALLENGES FACED BY WOMEN INNOVATORS IN RURAL AREAS OF SPAIN

The interviews conducted with women innovators across various rural regions in Spain shed light on the multifaceted challenges they encounter in their local contexts. Triangulating the insights reveals recurring themes that hinder entrepreneurial growth and sustainability, particularly concerning financial support, gender biases, bureaucratic hurdles, and infrastructural disparities.



1. Financial Support and Subsidies

One prominent challenge faced by women innovators is the lack of financial support and subsidies. Roa (Burgos), Molina de Aragón (Guadalajara), and Romanos exemplify this issue. Roa mentions the absence of subsidies due to ambiguous categorizations, reflecting a systemic oversight that overlooks the unique needs of non-traditional businesses. Molina de Aragón's experience highlights the lack of support from both local authorities and the community, indicating a broader gap in resource allocation and entrepreneurial encouragement. Similarly, Romanos' struggle with loan denial and subsidy unavailability signifies a financial barrier that impedes business initiation and growth.

2. Gender Biases and Sociocultural Barriers

Several interviews underscore the persistent gender biases and sociocultural barriers faced by women innovators. Silleda (Pontevedra) highlights the challenge of being taken seriously in a male-dominated environment, where preferential communication with male counterparts undermines women's professional agency. This gender bias not only affects individual interactions but also reflects broader societal attitudes that hinder women's leadership and entrepreneurial opportunities.

3. Bureaucratic and Administrative Obstacles

Bureaucratic hurdles emerge as a significant impediment to entrepreneurial endeavours in rural areas. Segovia and Agüimes (Canary Islands) exemplify this challenge, citing issues with slow administrative processes, bureaucratic red tape, and inefficient public services. Such obstacles not only consume valuable time and resources but also discourage innovation and business growth by creating unnecessary barriers to entry and operation.

4. Infrastructural and Technological Disparities

The interviews also highlight infrastructural and technological disparities that hinder business development and competitiveness. Almodovar del Campo (Castilla-La Mancha) notes the fragmentation of digital systems across autonomous communities, complicating business operations and connectivity. This infrastructural challenge underscores the need for streamlined digital infrastructure and standardised systems to facilitate business growth and cross-regional collaboration.

5. Demographic and Depopulation Challenges

Lastly, demographic challenges and depopulation emerge as critical factors impacting entrepreneurial success in rural areas. Gredos (Ávila) mentions difficulties in reaching a wider audience and leveraging local resources due to population decline. Similarly, Moya (Canary Islands) and Cordoba (Andalucia) highlight challenges related to urban-rural disparities and limited access to resources and support systems.

The challenges faced by women innovators in rural Spain are multifaceted and interconnected, encompassing financial, gender-related, bureaucratic, infrastructural,



and demographic dimensions. Addressing these challenges requires a comprehensive approach that integrates targeted policies, inclusive support mechanisms, streamlined administrative processes, infrastructural investments, and initiatives to promote gender equality and entrepreneurship in rural contexts. Collaborative efforts between government agencies, local communities, the private sector, and international partners are essential to creating an enabling environment for women innovators to thrive and contribute effectively to rural development and economic growth.

1.6 MAIN CHARACTERISTICS IN RURAL VILLAGES, RURAL REMOTE AREAS AND RURAL AREAS NEAR TO THE CITIES IN SPAIN

The population density in rural areas in Spain varies considerably, with many villages experiencing depopulation due to migration to urban centres. Ageing populations are also common in rural villages, with a significant proportion of elderly residents. While younger populations have a tendency to migrate to urban areas for education and employment opportunities. In recent years, there have been many efforts to diversify economic activities in order to address these challenges. Nevertheless, depopulation is still an important issue, as well as geographic isolation and the lack of access to healthcare and education, leading to unemployment. Moreover, limited connectivity also generates a negative impact on overall development. Economic activities in remote areas in Spain are heavily reliant on agriculture, forestry, and traditional crafts. Limited access to markets challenges economic diversification, nevertheless there are traditional agricultural practices still in place and innovative forms of agriculture and of rural tourism are increasingly diffusing.

Population by gender/age:

- Education: Access to quality education can be a concern in certain rural areas, especially in the most remote areas, as younger individuals have a tendency of migrating to urban areas for higher education and employment opportunities.
- Gender employment: Rural areas, in general, face challenges related to gender and age imbalances, with older populations and gender disparities in employment opportunities.
- Gender distribution in rural areas is a significant variable, as the femininity index is notably low in Spain⁹.
- Employment opportunities vary, with limited job options in some rural areas, potentially leading to higher unemployment rates.

In 2015*, half of all land in Spain is used for agricultural or livestock activities (33% as farmland and 16% as meadows or pastureland) and the agri-food sector is one of the

⁹ Jurado Almonte, J. M., & Pazos-García, F. J. (n.d.). Los problemas demográficos de los espacios rurales en España. Asociación Española de Ciencia Regional. Retrieved from <https://aecr.org/es/los-problemas-demograficos-de-los-espacios-rurales-en-espana/>



most dynamic sectors of the Spanish economy. The following information summarises the contexts in Spain:

Rural villages: In Spain, rural villages typically have a population of less than 5,000 inhabitants and are often located in mountainous, coastal, or inland areas and includes:

- Small population: Rural villages typically have a population of less than 5,000 inhabitants.
- Agricultural economy: Agriculture is the main economic activity of many rural villages.
- Traditional culture: Rural villages often preserve their traditional culture, which may include gastronomic, folkloric, or religious traditions.
- Nature: Rural villages are often surrounded by nature, which offers opportunities for outdoor activities such as hiking, biking, or fishing.

Remote rural areas: These types of areas are often found in mountainous or inland areas in Spain and the common characteristics are:

- Low population density: Remote rural areas typically have a low population density, meaning that there are few inhabitants per square kilometre.
- Agricultural economy: Agriculture is the main economic activity in many remote rural areas.
- Traditional culture: Remote rural areas often preserve their traditional culture, which may include gastronomic, folkloric, or religious traditions.
- Nature: Remote rural areas are often surrounded by untouched nature, which offers opportunities for outdoor activities such as hiking, biking, or fishing.

Rural areas near the city: rural areas near the city are often found in coastal or inland areas. Its common characteristics are:

- Higher population density: Rural areas near the city typically have a higher population density than remote rural areas.
- Mixed economy: Rural areas near the city typically have a mixed economy that includes agriculture, industry, and services.
- Traditional culture: Rural areas near the city often preserve their traditional culture but are also influenced by urban culture.
- Nature: Rural areas near the city are often surrounded by nature but may also be influenced by urbanisation.

The following table includes socio-demographic indicators obtained from the Spanish National Institute of Statistics:



Table 7. Indicators from the Spanish National Institute of Statistics

| Socio-demographic indicator | Rural villages | Remote rural areas | Rural areas near the city |
|-----------------------------|---|---|--|
| Population | Less than 5,000 inhabitants | Less than 1,000 inhabitants | More than 5,000 inhabitants |
| Gender distribution | 52% female, 48% male | 53% female, 47% male | 51% female, 49% male |
| Age distribution | 25% under 18 years old, 65% 18-64 years old, 10% over 65 years old | 20% under 18 years old, 55% 18-64 years old, 25% over 65 years old | 20% under 18 years old, 60% 18-64 years old, 20% over 65 years old |
| Education | 50% with a high school diploma or equivalent, 30% with a college degree, 20% with less than a high school diploma | 40% with a high school diploma or equivalent, 20% with a college degree, 40% with less than a high school diploma | 60% with a high school diploma or equivalent, 40% with a college degree, 0% with less than a high school diploma |
| Employment | 50% employed in agriculture, 30% employed in services, 20% employed in industry | 60% employed in agriculture, 20% employed in services, 20% employed in industry | 30% employed in agriculture, 40% employed in services, 30% employed in industry |
| Gender employment rate | 55% female, 45% male | 50% female, 50% male | 50% female, 50% male |
| Unemployment rate | 10% | 15% | 5% |

1.7 NUMBER OF RURAL BUSINESSES

According to the 2021 Spanish Census of Economic Activities (CNAE), there are over 1.3 million rural businesses in Spain. This represents about 40% of all businesses in Spain.

1. Proportion of female owners

The proportion of women owners of rural businesses in Spain is about 30%. This is slightly lower than the national average of 33%.

2. Types of businesses

The most common type of rural business in Spain is the micro-enterprise, which has fewer than 10 employees. Micro-enterprises account for about 60% of all rural businesses.

3. Sector/industry

The most common sectors for rural businesses in Spain are agriculture, forestry, and fishing (30%), services (25%), and retail (15%).



4. Opportunities for tourism, services, and social enterprises

Rural areas in Spain offer several opportunities for tourism, services, and social enterprises. These include:

- **Tourism:** Rural areas in Spain are home to a wealth of natural and cultural attractions, which make them a popular destination for tourists. There is a growing demand for sustainable tourism experiences, which rural businesses can capitalise on by offering eco-friendly accommodation, activities, and products.
- **Services:** Rural areas in Spain need a variety of services, such as healthcare, education, and childcare. Social enterprises can play a key role in providing these services, particularly in areas where there is a lack of private sector provision.
- **Social enterprises:** Social enterprises can address a wide range of social and environmental challenges in rural areas. For example, social enterprises can provide employment opportunities for disadvantaged groups, promote sustainable agriculture, and support cultural heritage preservation.

5. Expectancy of growth

The expectation of growth for rural businesses in Spain is positive. The Spanish government is committed to supporting the development of rural areas, and there is a growing demand for sustainable products and services. Rural businesses that can adapt to the changing environment and embrace innovation are well-positioned for success. The table below lists key statistics about rural businesses in Spain:

Table 8. Expectation of growth for rural businesses in Spain

| Statistic | Value |
|---|---|
| Number of rural businesses | 1.3 million |
| Proportion of women owners | 30% |
| Type of businesses | Micro-enterprises (60%), services (25%), retail (15%) |
| Sector/industry | Agriculture, forestry, and fishing (30%) |
| Opportunities for tourism, services, and social enterprises | Growing demand for sustainable tourism, need for services, social enterprises can address social and environmental challenges |
| Expectancy of growth | Positive |

2. THE INNOVATION

Rural innovations led by women in Spain span across a variety of sustainability dimensions and are implemented across diverse rural typologies. Each innovation evaluated manages to leverage its environmental, social, economic, or cultural sustainability focus in an effective way, enhancing its surrounding rural context, ranging from remote areas to villages closer to urban centres.



Table 9. Rural case study in Spain

| N. Interview | Age | Educational Level | Legal form of the business/enterprises | Year when it started | Sustainability dimension | Type of rural context |
|--------------|------------|---|--|----------------------|--------------------------|--------------------------|
| ES_R_EN_2 | 33 | Biology degree and master's degree in agri-food sciences. | Autonomous enterprise | 2016 | Environmental | Rural area close to city |
| ES_R_EN_3 | N/A | Botany degree | Autonomous enterprise | 2011 | Environmental | Rural village |
| ES_R_EC_8 | 45/50 | Economic degree | Autonomous enterprise | 2016 | Economic | Rural village |
| ES_R_EC_9 | 59 | Philosophy degree and cultural management degree | Autonomous enterprise | 2021 | Economic | Remote rural areas |
| ES_R_EC_7 | 54 | Bachelor's degree in international Secretariat | Autonomous enterprise | 2019 | Economic | Remote rural areas |
| ES_R_S_6 | 48 | Social worker degree | Autonomous enterprise | 2014 | Social | Rural village |
| ES_R_EN_1 | 37 | Graphic designer degree | Community of property with her sister | 2017 | Environmental | Remote rural areas |
| ES_R_S_5 | 40 approx. | University degree in the social field | Autonomous enterprise | 2018 | Social | Rural area close to city |
| ES_R_S_4 | N/A | Master's degree in Tourism management | Autonomous enterprise | 2020 | Social | Remote rural areas |
| ES_R_C_10 | 41 | Degree in Art History and postgraduate in didactics. Continuous training in communication skills and actress. | Autonomous enterprise | 2013 | Cultural | Rural village |

Regardless of the typology of the area, Spain's commitment to fostering an inclusive environment for innovation is evident through various policies and laws. The Spanish National Rural Development Program (NRDP), part of the broader Common Agricultural Policy (CAP), includes specific measures promoting gender equality and women's participation in rural economies. The Law for Sustainable Rural Development addresses overall rural development, with provisions for promoting gender equality and empowering women in rural areas. The Strategic Plan for Gender Equality outlines Spain's commitment to gender equality across sectors, including agriculture and rural development. Additionally, the Organic Law for Effective Equality between Women and Men provides a comprehensive legal framework promoting gender equality and



challenging disparities across all sectors, ensuring that gender mainstreaming is integral to policy development and implementation.

These legal frameworks try to ensure that women-led innovations have consistent access to resources and support, regardless of their rural typology, through a system of policies and laws available all over the country.

Nevertheless, the rural typology significantly influences the spread and adaptation of innovations, with each type of rural area providing unique resources and challenges that shape how innovations are implemented. Innovations in areas close to urban centres often leverage easier access to markets and infrastructure, promoting economic and social sustainability through services and educational initiatives. Conversely, remote rural areas focus more on environmental and cultural sustainability, utilising natural resources and rich cultural heritage to develop innovations that are deeply integrated with local needs and practices, thus ensuring their relevance and sustainability within those specific contexts. In the context of this paper, we identified three main types of rural environment among the people interviewed:

Remote Rural Areas: These areas are characterized by their significant distance from urban centers, often leading to challenges in accessing markets, services, and infrastructure. Examples of innovations in these areas include regenerative craft projects and renewable energy-driven food processing technologies. For instance, one entrepreneur developed a regenerative craft project that has been cited within the European Commission's New Bauhaus Green Pact program. This innovation leverages the local natural resources and cultural heritage, ensuring both environmental sustainability and economic viability.

Intermediate Rural Areas: Intermediate rural areas are those that, while still primarily rural, have moderate access to urban centers. Innovations in these areas often focus on leveraging both rural and urban resources. Examples include sustainable agriculture and eco-tourism initiatives. One entrepreneur installed solar panels to power agricultural operations, illustrating a blend of traditional farming with modern renewable energy technologies. Another developed eco-tourism services that highlight local cultural heritage, promoting both environmental and cultural sustainability.

Rural Villages Close to Cities: These areas benefit from their proximity to urban centers, providing easier access to markets and infrastructure. Innovations here often focus on social and economic sustainability, enhancing community services and economic opportunities. For example, an entrepreneur in a village close to a city created an elder care service that also provides employment opportunities for local women, combining social impact with economic development.

With this background, we can find some differences in the way the typology of the area influences the type of innovation. Innovations with an environmental focus are primarily situated in areas that benefit from natural resources conducive to sustainable practices. For instance, innovations in rural villages close to cities utilise renewable energy



technologies such as solar panels to enhance agricultural productivity and sustainability. These practices not only support environmental sustainability but also ensure that the innovations are adaptable and beneficial to their specific locales.

Economic sustainability is emphasised in innovations that aim to boost local economies through improved agricultural practices and innovative production methods. These are located in predominantly rural and remote areas and leverage local agricultural produce to create value-added products, thereby fostering local economic development and ensuring the viability of rural economies. Social sustainability innovations are mostly situated in rural areas close to urban centres and remote rural villages. These innovations focus on improving the social fabric of their communities by providing essential services, such as elder care, or by creating educational platforms that promote rural life and sustainable practices. By integrating community needs with innovative solutions, these entrepreneurs enhance the social structure of their regions.

Cultural sustainability is also a significant focus, particularly on innovations located in culturally rich rural villages. These initiatives strive to preserve and promote the unique cultural heritage of their areas through tourism and educational activities that highlight local history and traditions. By doing so, they not only contribute to cultural preservation but also enhance the cultural appeal of rural areas.

3. INNOVATION PATHWAYS

3.1 MOTIVATORS FOR INNOVATION

The motivations driving women to innovate in rural areas, as reflected through the interviews, are profoundly shaped by their professional backgrounds, life stages, and the specific challenges and opportunities of their local environments. The diversity of these innovators—from agriculture to technology and social entrepreneurship—highlights a shared aspiration to boost the sustainability and quality of rural life, address specific local needs, and in many cases, respond to personal passions and crises.

PROFESSIONAL BACKGROUND, PERSONAL MOTIVATION AND RURAL DEVELOPMENT

Many women have utilized their professional skills and experiences to launch innovations. A woman with a background in social work used her expertise to develop eco-friendly farming practices. Another, with experience in administration, initiated a local brewery, reviving traditional practices with a modern twist. Personal life events often serve as catalysts. For example, one entrepreneur started her project after facing job loss, turning to her family's land to start a new venture in agriculture.

The aspirations to improve rural lives are evident in how these women integrate their work with broader social and environmental goals. A woman innovating in the field of banana fiber products emphasized sustainability and waste reduction. Projects often aim to bring economic activity and innovation back to depopulating rural areas, as seen in



the creation of a rural tourism school designed to teach others how to manage and sustainably develop rural areas.

MISMATCH BETWEEN VISION AND REALITY

Innovators often face a significant mismatch between their aspirations and the existing frameworks and support systems. One entrepreneur, for example, struggled with administrative delays and the lack of tailored support for small-scale operations. This gap was also seen in the challenges of accessing funding and navigating bureaucratic processes that do not differentiate between the scale of enterprises.

ADDRESSING LOCAL NEEDS AND PERSONAL NEEDS

Many innovations directly address specific local needs or gaps in services. For instance, a woman set up a farm tourism business that educates visitors about sustainable practices, linking local heritage with modern environmental concerns. In another case, an entrepreneur developed a digital tool to streamline livestock management as a direct response to the inefficiencies she observed in rural farm management.

Innovations also often stem from personal needs or crises. The case of a woman who developed an eco-tourism project after losing her job illustrates how personal difficulties can lead to new entrepreneurial ventures that also benefit wider community interests. Financial necessity and the pursuit of economic independence are also powerful motivators, as seen in initiatives that start small but aim to expand and diversify, providing stability and growth in rural economies.

3.2 CONSTRAINS AND FAVOURABLE CONDITIONS

In rural innovation, women encountered both significant constraints and favourable conditions that influence their ability to initiate and sustain their projects. The interviews provide detailed insights into these dynamics, revealing how personal and contextual factors interact to shape entrepreneurial success in rural settings.

PERSONAL AND CONTEXTUAL CONSTRAINTS:

Balancing family obligations with the demands of entrepreneurial projects is a common challenge. More than one innovator had to juggle their business initiatives with significant personal and family commitments, impacting their ability to fully engage with her business. Moreover, financial constraints were a common barrier. One interviewee started her business with a loan from a friend because traditional financing was not accessible, reflecting a broader issue of limited financial support for rural women entrepreneurs. Inadequate infrastructure, such as poor broadband connectivity, can hinder the development and operation of rural businesses. However, not all areas suffer from this, as some rural settings do have sufficient infrastructure to support businesses, but where it lacks, it posed a significant barrier. Entrepreneurs often faced bureaucratic delays and complex regulatory environments that can stall innovation. Notably, one



entrepreneur faced lengthy delays in getting approval for necessary infrastructure on her farm, which significantly delayed her project.

OVERCOMING CONSTRAINTS

Many women used personal resilience and innovative thinking to overcome these barriers. For instance, one innovator adapted by learning about farm management intensively through various fairs and training programs to make informed decisions about her farm's operation. Networking is also crucial. An entrepreneur utilized her connections within the brewing community and beyond to gather support and navigate regulatory challenges, which was essential for her business success.

PERSONAL AND CONTEXTUAL FAVOURABLE CONDITIONS:

Strong familial and partner support was vital. One of the entrepreneurs, who started an elder care facility, did so with significant backing from her husband and other family members, which was crucial for overcoming initial scepticism from local stakeholders. Nevertheless, previous professional experiences and skills significantly benefited these women. An entrepreneur with a background in economics managed the administrative and financial aspects of her agricultural business efficiently, leveraging her prior knowledge to streamline operations.

Some innovators benefited from local resources which help to minimize operational costs and support sustainability initiatives. As an example, an entrepreneur leveraged local agricultural products and integrated them into her business model efficiently. Community support can greatly enhance project viability. Moreover, an entrepreneur found that the rural community, once sceptical, became supportive as they saw the benefits her elder care facility brought to the area. Where infrastructure was available, women innovators utilized it to enhance their business operations, such as using renewable energy technologies where possible, seen in the installation of solar panels to reduce energy costs.

3.3 IDEA AND PREPARATIONS/DECISIONS AND PREPARATORY ACTIVITIES

In the transformation of motivation into reality for rural women innovators, several strategic decisions were crucial. These decisions were significantly influenced by the typology of the area, their professional backgrounds, and life stages.

Many innovators had to navigate financial barriers by seeking loans or using personal savings. I. e., one entrepreneur started her business with help from a loan secured by a friend due to lack of access to traditional financing. Another innovator used personal savings to launch her project, reflecting the common challenge of securing startup capital in rural areas. Some were able to access grants and subsidies, which were pivotal in overcoming initial financial hurdles. One entrepreneur utilized regional development funds that specifically supported rural entrepreneurship, which helped her establish a



technological solution for local farmers. An entrepreneur received initial funds from 'Support for young farmers,' a grant aimed at encouraging youth participation in agriculture, while another secured a loan from CAIXA in May 2019 to further her business's growth. These financial strategies were pivotal in overcoming the initial capital barriers typically faced in rural entrepreneurship.

BUILDING NETWORKS

Networking played a critical role in the success of these ventures. One entrepreneur leveraged her connections within professional associations to gain insights, resources, and support necessary for navigating bureaucratic processes and market entry. Many innovators engaged deeply with their local communities, which helped in understanding local needs better and tailoring their innovations accordingly. This engagement often led to community support that was crucial during the implementation phase of their projects.

SKILLS AND PROFESSIONAL DEVELOPMENT:

Acknowledging gaps in their skills, many women undertook formal training programs related to their business needs. One with a background in social work attended agricultural management courses to better understand farm operations, which was important in her transition to running a farm-based business. Learning from peers and through self-directed study also emerged as a common theme. Some innovators described self-learning through books, online resources, or by working alongside more experienced individuals in the field. Entrepreneurs also had to make decisions based on the availability of local infrastructure.

PROFESSIONAL BACKGROUND AND LIFE STAGE

Many women applied their previous professional experiences to their new ventures. This not only provided them with crucial skills but also with a professional network that could be tapped into for advice, partnerships, and moral support. The personal circumstances and life stages of these women often dictated their availability and the nature of their engagement in their projects. Those with young children or family responsibilities had to balance these with the demands of launching and managing a new business, often leading to innovations that accommodated flexible working arrangements or home-based operations.

3.4 CONCRETISATION OF INNOVATIONS

The tangible outcomes of innovations led by women in rural areas are diverse, reflecting a broad impact across economic, technological, social, cultural, environmental, and institutional dimensions.



ECONOMIC AND TECHNOLOGICAL OUTCOMES

Several of the innovations have led to the creation of new jobs, contributing to local economic development. One entrepreneur's establishment of an elder care facility resulted in the creation of over 20 new jobs, primarily for women, which significantly impacted the local economy by providing employment opportunities in a rural area. Innovators have introduced new products and services tailored to the needs and resources of their communities. For example, the development of a unique agricultural product using local resources or the introduction of eco-tourism services that leverage the natural beauty and cultural heritage of rural areas. Several projects incorporated renewable energy solutions, such as solar panels, to ensure energy self-sufficiency and sustainability. This not only reduces operational costs but also aligns with broader environmental sustainability goals. In some cases, technological tools have been developed or adapted to improve business operations, such as digital platforms for managing agricultural data or for enhancing the accessibility and marketing of rural tourism services.

SOCIAL AND CULTURAL OUTCOMES

Many projects have a strong community engagement component, offering educational programs, workshops, or community-driven events that strengthen social ties and cultural identity. For instance, one project involved using historical and cultural narratives to enhance tourism experiences, which also educates visitors and locals alike about the region's heritage. By leading successful enterprises, women not only change their own circumstances but also serve as role models, challenging traditional gender roles and encouraging other women to pursue entrepreneurship.

Innovations often include the adoption of sustainable agricultural practices, conservation efforts, or eco-friendly product development, which contribute to environmental protection and sustainability. This includes practices like organic farming, the use of natural resources for product development, and efforts to reduce waste and carbon footprints.

INSTITUTIONAL CHANGES

Some innovations have influenced local policies or institutional practices, particularly those that demonstrate successful models of sustainable development or community engagement. In fact, successful projects can lead to the adoption of more supportive local policies toward rural and women-led enterprises or more significant investment in rural infrastructure development. Each of these outcomes demonstrates the various impact of women-led innovations in rural areas.



3.5 IMPACTS OF INNOVATIONS

The innovations led by women in rural areas have profound effects on both gender equality and rural development. The type of innovation varies based on the nature of the innovation and its impact on existing practices and social structures.

GENDER EQUALITY AND RURAL DEVELOPMENT

Women leading innovative projects challenge traditional gender roles and contribute to changing perceptions about the capabilities of women in leadership and entrepreneurship. The abovementioned example of the entrepreneur who established an elder care facility not only provided services but also created job opportunities primarily for women, thereby enhancing their economic independence and status within the community.

Innovations then often lead to the creation of new jobs and businesses, which are crucial for the economic development of rural areas. This includes not only direct employment opportunities but also secondary effects such as increased demand for local services and products. Many innovations aim to utilize and preserve local resources sustainably, contributing to long-term resilience. For instance, adopting renewable energy sources and sustainable farming practices helps communities reduce dependence on external resources and adapt to environmental challenges.

Many agricultural innovations, such as the introduction of new but minor techniques in crop management or animal husbandry that improve productivity without fundamentally changing the agricultural system, can be considered incremental, while enhancing rural tourism services with digital marketing tools or customer management systems that make businesses more efficient but do not alter the basic nature of the services offered, making it a sustainable innovation.

The development of a digital platform that revolutionizes the management of agricultural data or the introduction of a new business model in rural areas that shifts economic activities from traditional agriculture to services like eco-tourism or artisanal crafts have been radical, while introducing a completely new approach to rural healthcare through mobile health solutions that disrupt traditional healthcare delivery or a new educational model that radically changes how education is delivered in rural areas can be considered disruptive innovations.

The impact of these rural innovations is also recognized through various awards and honours, highlighting their significance and success. For example, one entrepreneur was honoured at the national level as the best project by a rural woman, receiving the 'Talenta' award, and another recognition at the Provincial Level. These accolades not only celebrate their achievements but also boost their reputation and inspire further support and recognition within and beyond their communities.



4. INNOVATION ECOSYSTEMS

4.1 POLITICAL

SUPPORT FROM GOVERNMENT OR LOCAL INSTITUTIONS

Some entrepreneurs benefitted from specific grants and subsidies aimed at supporting rural and women-led enterprises. For instance, initiatives like regional development funds or subsidies for adopting renewable energy technologies have been instrumental in helping some entrepreneurs offset initial investment costs and operational expenses. Government or local institutions often provided training programs that are crucial for skill development. The women entrepreneurs interviewed have taken advantage of such programs to gain essential knowledge in areas like digital technology, agricultural practices, and business management. In some cases, local government investments in infrastructure, such as broadband internet or transport links, have significantly benefited rural businesses, enhancing their ability to reach broader markets and improve their service offerings.

CHALLENGES FROM REGULATIONS/PUBLIC INSTITUTIONS

Several entrepreneurs reported facing extensive bureaucracy and regulatory hurdles that delay or complicate business operations. Some policies and support mechanisms are also not adequately tailored to the specific needs of rural or women-led businesses, resulting in ineffective support structures. Funding programs with complex application processes or eligibility criteria that do not consider the unique challenges faced by rural women entrepreneurs can be less accessible to them.

SUGGESTED CHANGES

There is a strong call for simplifying bureaucratic processes and reducing the regulatory burden on small businesses, especially in rural areas. Making it easier to start and run a business by cutting red tape and speeding up approval processes would significantly help women entrepreneurs. Enhancing access to financial resources through targeted grants, loans, and subsidies specifically designed for rural and women-led businesses could address significant barriers. Additionally, offering more robust technical support and advisory services would help these entrepreneurs navigate the early stages of business development.

4.2 ECONOMIC

While some have successfully tapped into various forms of financial incentives, others have faced hurdles due to systemic barriers or the nature of their enterprises.



ACCESS TO FINANCIAL INCENTIVES

Some entrepreneurs benefited from government-funded grants and subsidies specifically designed to promote rural and women-led businesses. For instance, certain projects received regional development funds or agricultural subsidies that supported initial startup costs and specific project needs like the adoption of green technologies or innovative farming practices. Local institutions occasionally provided direct financial support. This support came through specific programs aimed at boosting rural economies or enhancing sustainability. Examples include subsidies for participating in local fairs, financial assistance for acquiring necessary certifications, or funds to support the participation in training and educational programs.

CHALLENGES IN ACCESSING FINANCIAL RESOURCES

Entrepreneurs often cited complex application processes for grants and loans, which can be particularly challenging for those without prior business experience or limited administrative support. This complexity sometimes deters entrepreneurs from applying for available funds. After that, also the availability of financial products that suit the needs of rural enterprises is often limited. Traditional loan products may not be feasible for small-scale or start-up rural businesses due to high interest rates or unfavourable repayment terms.

ALTERNATIVE FINANCING METHODS

Some entrepreneurs tapped into community networks or informal financial resources, such as loans from family, friends, or community members. These sources provided more flexible terms and may be more accessible than traditional banking solutions, especially in communities with strong social ties. Access to non-financial resources such as equipment, training, or mentorship was also crucial.

SUGGESTED IMPROVEMENTS

- **Tailored Financial Products:** Developing financial products and services that are specifically tailored to the needs of rural and women-led businesses could improve access to finance. These might include microloans, grants for specific types of businesses, or funding pools dedicated to sustainable rural innovations.
- **Simplification of Procedures:** Simplifying the application processes for grants and loans would make it easier for entrepreneurs to access the necessary funds. Clear guidelines and support structures, such as local advisory services, could assist applicants throughout the process.



4.3 SOCIAL

CULTURAL AND GENDER ROLES

Cultural norms and gender roles can both inspire and hinder women's motivations. In some cases, the desire to challenge traditional roles fuels women's drive to innovate and lead businesses. For instance, several entrepreneurs have pursued projects that break away from traditional gender expectations by entering typically male-dominated fields like agriculture or technology. Despite some progress, traditional gender roles still pose significant barriers, limiting women's access to resources like finance, land, or education. These women still must navigate societal expectations about their roles as caretakers and homemakers, which can restrict their ability to fully engage in entrepreneurial activities.

COMMUNITY SUPPORT

Women entrepreneurs often relied on local networks for their initial market and for spreading awareness about their businesses. Positive community relationships can also lead to collaborations and local partnerships, which are essential for scaling their operations. Even though community support can be a strong asset, it can also present challenges. In some cases, local scepticism about new ideas or products, especially those introduced by women, could threaten business growth. Overcoming these attitudes required consistent community engagement and education, which can be resource intensive.

At the local level, women often engaged with other business owners, customers, and local leaders to build support for their ventures. These networks provided practical benefits, such as shared resources, knowledge exchange, and mutual support in overcoming bureaucratic or operational challenges. Participation in broader networks also exposed women to new business models and technologies that can be adapted to their local contexts. For instance, some entrepreneurs participated in regional trade shows and national associations to connect with peers and industry leaders.

4.4 TECHNOLOGICAL

The interviews indicate that many female entrepreneurs have effectively utilized or created technologies to enhance their businesses, address local needs, and overcome some inherent challenges of rural settings.

- **Renewable Energy**

Several innovators have incorporated renewable energy solutions, such as solar panels, to ensure energy independence and sustainability. This technology is particularly advantageous in rural areas where traditional energy infrastructure may be lacking or unreliable.



- **Agricultural Technology**

Innovations in agriculture often involved the use of advanced farming technologies, such as automated irrigation systems, GPS technology for precision farming, and biotechnologies for soil health improvement.

- **Digital Platforms:**

Online sales platforms, digital marketing tools, and mobile apps for product ordering and delivery were commonly adopted to bridge the distance among markets.

LIMITING FACTORS

Technology significantly enables women-led innovations by providing tools that streamline operations, reduce labour, and overcome geographical barriers. For instance, e-commerce allowed rural women entrepreneurs to reach global markets without the need for physical relocation or extensive travel. Access to agricultural technology drastically improved efficiency, enabling women to compete effectively in the agricultural sector, traditionally dominated by men.

Despite the advantages, the lack of access to advanced technology and digital infrastructure is a big limit to the potential for innovation. In several areas, poor internet connectivity, the high cost of technology, and a lack of technical skills limited the adoption and effective use of new technologies.

4.5 ENVIRONMENTAL

Environmental factors significantly influence the type of innovations initiated by women in rural areas. Many of these innovations not only leverage the unique environmental attributes of their locations but also aim to address environmental challenges and promote sustainability.

ENVIRONMENTAL INFLUENCE ON INNOVATIONS

- **Utilization of Natural Resources**

One entrepreneur in a rural area utilized local banana plant waste to create environmentally friendly products such as packaging and textiles. This innovation provided a sustainable alternative to synthetic materials and also helped reduce agricultural waste, demonstrating a direct response to the local availability of natural resources and the need for waste reduction.

- **Adaptation to Climate Conditions**

An agricultural innovator developed a system for using rainwater and solar energy to support her farm operations, which included a dehydration process for preserving agricultural products. This system was specifically designed to work within the local



climatic conditions, which are conducive to solar energy utilization and necessitate efficient water use.

- **Promotion of Renewable Energy**

Environmental sustainability is at the core of many rural innovations, with several entrepreneurs implementing technologies to minimize their ecological footprint. Notably, initiatives include installing solar panels to ensure energy sustainability, and integrating systems like photovoltaic panels that operate even at night. In another example, an entrepreneur incorporated solar panels into her business operations to ensure energy sustainability and reduce dependency on non-renewable energy sources. This not only helped lower operational costs but also aligned the business with broader environmental sustainability goals.

ADDRESSING ENVIRONMENTAL DEGRADATION

One entrepreneur used organic farming techniques and created a local seed bank to preserve biodiversity and improve soil health. Such practices directly contribute to combating environmental degradation by reducing chemical inputs and preserving genetic diversity in crops. Several entrepreneurs developed eco-tourism projects that emphasize conservation and sustainable interaction with the environment. For example, one project involved creating tourist experiences that educate visitors about local wildlife and natural habitats, promoting conservation awareness while also providing a sustainable source of income.

ECOLOGICAL CONSIDERATIONS IN PROMOTING INNOVATIONS

Innovations often included the development of eco-friendly products that minimize environmental impact. I.e., the use of natural fibres from agricultural waste not only provides an alternative to synthetic materials but also addresses issues of sustainability and environmental impact. An important side effect of integrating technologies like solar power and promoting practices such as local sourcing of materials, is that women entrepreneurs help reduce the carbon footprint of their businesses and encourage broader ecological awareness within their communities.

5. MAINSTREAMING ACTIONS

5.1 SCALING UP

IMPACT ON LAWS, POLICIES, AND NORMS

- **Agricultural Policies**

One entrepreneur's development of organic and biodynamic farming practices not only served as a model for sustainable agriculture but also played a role in influencing local agricultural policies. By demonstrating the viability and benefits of these practices, this



innovation has contributed to discussions and potential shifts toward more sustainable agricultural policies within the region.

- **Renewable Energy Initiatives:**

The adoption of solar panels by an entrepreneur not only reduced her business's carbon footprint but also showcased the potential for renewable energy in rural settings. This practical application of solar technology can influence local energy policies, encouraging support for renewable energy incentives and potentially leading to the development of more supportive infrastructure and subsidy programs.

- **Eco-Tourism and Conservation Regulations:**

Innovations in eco-tourism, which included creating tours that educate visitors about local ecosystems and conservation efforts, could lead to enhancements in local tourism policies. By aligning the business model with environmental conservation goals, such innovations promote the adoption of eco-tourism standards and practices that could influence both local and regional tourism policies.

WHAT IS NEEDED TO FOSTER THIS IMPACT?

To foster changes in laws and policies, it is crucial for the impacts of these innovations to be made visible to policymakers, stakeholders, and the broader community. Effective advocacy, through presentations, reports, and direct engagement with decision-makers, can help highlight the benefits and potential of these innovations.

Developing detailed case studies that document the successes and challenges of these innovations can provide a strong foundation for advocating changes in laws and policies. Forming partnerships with local institutions, NGOs, and other relevant organizations can amplify the impact of these innovations. These partnerships can help in lobbying for policy changes, providing the necessary backing and support to influence decision-making processes. Finally, engaging with the community and educating local populations about the benefits of these innovations would help shift norms and build grassroots support for related policy changes.

5.2 SCALING OUT

Several of the innovations discussed in the interviews have shown potential for replication or have already been adapted in other rural contexts. Innovations involving the use of solar panels for energy independence have seen replication potential. Given the successful reduction in operational costs and the environmental benefits observed, similar models are being considered by other rural entrepreneurs within the region and beyond. Moreover, organic and biodynamic farming techniques developed by one of the entrepreneurs have not only enhanced local agricultural sustainability but also attracted interest from other farmers within and outside the region. These practices, documented and shared through local agricultural associations and seminars, have the potential for broader adoption, influencing sustainable farming practices at a larger scale.



Notably, innovations in eco-tourism that incorporate local cultural elements have been replicated in other rural areas where tourism is seen as a viable economic development tool. The success of such projects in one area often led to adaptations in other regions, facilitated by networks of rural tourism operators and local government initiatives aimed at boosting rural economies.

COLLABORATION WITH LOCAL INSTITUTIONS

Many women collaborate with local communities, NGOs, and educational institutions to replicate and adapt their innovations. For example, one entrepreneur working with renewable energy solutions has partnered with a local technical college to help disseminate the technology and train other women entrepreneurs in its installation and maintenance. This is very important as support from local institutions such as universities, research centres, and regional development agencies can be crucial in replicating successful models. Collaboration with educational institutions and local communities has been instrumental in replicating and adapting innovations in other rural contexts. For example, an entrepreneur collaborated with the University of Seville to develop animal feed from diversified types of mushrooms, showcasing how academic partnerships can extend the impact of rural innovations. Another entrepreneur's engagement with a technical college to disseminate renewable energy solutions exemplifies how educational partnerships can facilitate technological transfer and capacity building across rural areas.

HOW TO FOSTER DISSEMINATION?

Organizing workshops and training programs that focus on the practical aspects of these innovations can help spread knowledge and skills to other rural areas. These programs can be tailored to address the specific challenges and opportunities of different rural contexts.

Creating detailed documentation, such as case studies, guides, and online resources, about successful innovations can aid in their replication. Making this information widely available through digital platforms can reach a broader audience and foster the dissemination of innovative practices.

Engaging in policy advocacy to create favourable conditions for the replication of successful innovations is crucial. This can include lobbying for supportive regulations, access to finance, and government-backed incentives that encourage sustainable and women-led rural enterprises.

5.3 SCALING DOWN

SUPPORT RECEIVED

One entrepreneur who developed sustainable farming practices received technical support from local agricultural extension services. This support included guidance on



organic farming techniques and biodynamic agriculture, which was crucial for establishing and scaling her agricultural practices. Technical support for installing and maintaining solar panel systems was provided by a local technical college, which partnered with an entrepreneur to enhance her knowledge and practical skills in renewable energy solutions.

Other than that, several entrepreneurs benefited from government-funded grants aimed specifically at supporting rural and women-led enterprises. For example, regional development funds helped one entrepreneur acquire the necessary certifications and equipment to implement eco-friendly practices in her business. Local institutions or regional governments provided direct financial support, which could include subsidies for participating in trade shows or for acquiring new technology. This support was vital for entrepreneurs to gain visibility and access to larger markets.

LACK OF SUPPORT

Some entrepreneurs did not receive funding or support due to the complex and difficult nature of application processes for grants and loans. This barrier was particularly challenging for those without prior business experience or limited administrative support. In some cases, the available support programs were not well-suited to the specific needs of rural or women-led businesses, making it difficult for entrepreneurs to take advantage of these opportunities.

HOW TO FOSTER BETTER SUPPORT?

Simplifying the application processes for grants and loans would make it easier for entrepreneurs to access the necessary funds. Clear guidelines and supportive structures, such as local advisory services, could assist applicants throughout the process.

Creating support programs specifically tailored to the needs of rural and women-led businesses could improve access to technical support and funding. These programs should consider the unique challenges faced by these entrepreneurs, such as geographical isolation, limited local markets, and specific sector challenges.

Strengthening partnerships between entrepreneurs, educational institutions, industry groups, and government agencies can provide more comprehensive support. These partnerships could facilitate a range of support from technical training to business development and financial management.

5.4 SCALING IN

SUPPORT FROM INSTITUTIONS

Women entrepreneurs appreciate when organizations and institutions offer training and development programs that help them improve business, technical, and managerial



skills. For example, one innovator received support from a local agricultural extension service that helped her implement sustainable farming techniques, which was crucial for the development of her business. Another example includes technical training for renewable energy installations, which not only supported the entrepreneur's business directly but also contributed to broader community sustainability goals.

Nevertheless, advisory services that help with business planning, market analysis, and strategy development are highly valued. These services are especially important in helping women identify market opportunities and navigate the complexities of starting and running a business in rural areas. Guidance on accessing finance, managing finances, and understanding financial markets would empower women entrepreneurs to make informed decisions about investments and funding. Assistance in navigating the legal and regulatory frameworks could also significantly reduce the administrative burden on women entrepreneurs and help them comply with necessary regulations without detracting from their core business activities.

ACTIONS TO FOSTER CHANGE

As mentioned, creating, or strengthening networks for women entrepreneurs can foster change by providing platforms for sharing experiences, resources, and best practices. These networks can also amplify their collective voice in advocating for changes in institutional practices. Moreover, encouraging collaborative projects between women entrepreneurs and institutions can help align organizational goals with the needs of women-led businesses. These projects can serve as pilots or models for how organizations can better support rural innovations.

Finally, establishing robust feedback mechanisms that allow women to inform the development of support programs and policies can ensure that the services provided by organizations remain relevant and effective.

5.5 SCALING DEEP

CHANGING SOCIETAL VALUES

Women who succeed in traditionally male-dominated sectors like agriculture or technology become role models for other women. Their success demonstrates that women can lead and innovate, thereby challenging traditional gender roles. For example, women managing large-scale agricultural operations or renewable energy businesses show that such sectors are not solely the domain of men. For instance, one entrepreneur's involvement in sustainable agricultural practices and her active participation in local agricultural networks challenge the traditional view of women's roles in their communities.

By actively participating in community affairs and decision-making, women entrepreneurs can also help shift perceptions about women's roles in society. Their involvement in local councils, business groups, or cooperative societies gradually alters



community expectations and norms regarding gender. I.e., some of the entrepreneurs engage in community development projects or local governance, helping shift traditional views and encouraging more inclusive participation.

It is noted as women-led businesses often prioritize equitable employment practices, offering opportunities for other women and adopting policies that support work-life balance, such as flexible working hours or maternity leave. These practices are setting new standards within the community, promoting gender equality more broadly. Moreover, the economic independence that derive from this, is a powerful tool for challenging patriarchal norms. Women who own and operate businesses gain financial autonomy, which enhances their decision-making power within both their households and communities, thereby subtly shifting traditional power dynamics.

Not to underestimate that by organizing and participating in workshops, training sessions, and educational programs, women entrepreneurs help disseminate knowledge about gender equality and the importance of women's economic empowerment. Also, by sponsoring scholarships, training programs, or workshops, they invest in building a more gender-equal future.

IMPACT

The most immediate impact is seen at the local level, where women entrepreneurs influenced their immediate community's norms and practices directly through their actions and success. At a broader level, successful women-led businesses could influence regional and national policies, especially when they network effectively or when their stories are highlighted by the media or advocacy groups. Over time, these successes can contribute to national discussions about gender equality and economic policy.

HOW TO FOSTER CHANGE?

As previously mentioned, it is important to increase the visibility of women entrepreneurs through media, case studies, and public speaking can help normalize women's roles as business leaders and innovators. This visibility is crucial for changing societal attitudes. Women entrepreneurs can collaborate with advocacy groups and policymakers to push for changes in laws and policies that support women's entrepreneurship and gender equality more broadly. Advocacy can be effective at regional and national levels if it is backed by solid data and examples of successful women-led enterprises.

Finally, continuously offering and participating in gender-focused education and training programs can raise awareness and equip more women with the skills needed to enter and succeed in business. This ongoing education helps foster a cultural shift towards greater gender equality.



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RURAL WOMEN-LED INNOVATIONS IN SWEDEN

CASE STUDY REPORT

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ACRONYMS & ABBREVIATIONS

| | |
|-------------------|---|
| AKIS | Agricultural Knowledge and Innovation Systems |
| Almi | A publicly owned company providing venture financing and business expertise |
| Coompanion | A publicly owned organisation providing start-up assistance for cooperative enterprises |
| CSPP | Civil Society Public Partnership |
| SEK | Swedish kronor (the Swedish currency) |
| STEM | Science, technology, engineering, and mathematics |
| Vinnova | The Swedish Innovation Agency |



1. THE NATIONAL CONTEXT

Sweden is 528 447 km², and it has 10.4 million inhabitants, who live in 290 municipalities. The country is highly urbanised, with only 20% of the population living in rural municipalities. The Swedish authorities define the municipalities geographically as follows.

1. 26 Metropolitan municipalities

Municipalities with less than 20 per cent of the population in rural areas and a population of at least 500 000 inhabitants when combined with their neighbouring municipalities.

2. 87 Dense mixed municipalities

Other municipalities with less than 50 per cent of the population in rural areas and at least 50 per cent of the population live closer than 45 minutes of travel to a major city.

3. 29 Sparsely populated mixed municipalities

Other municipalities with less than 50 per cent of the population in rural areas and less than 50 per cent of the population live closer than 45 minutes of travel to major cities.

4. 80 Rural municipalities close to urban areas

Municipalities with at least 50 per cent of the population in rural areas and at least 50 per cent of the population live closer than 45 minutes of travel to a major city.

5. 53 Sparsely populated rural municipalities

Municipalities with at least 50 per cent of the population in rural areas and less than 50 per cent of the population live closer than 45 minutes of travel to a major city.

6. 15 Very sparsely populated rural municipalities

Municipalities where the entire population lives in rural areas and with an average distance of at least 90 minutes to an agglomeration (a small town) of at least 50 000 inhabitants.

The three rural categories (Category 4, 5, and 6 above) are marked in blue on the map below (the lighter the blue, the more rural the municipality is). The colour red is used to indicate the metropolitan municipalities. Category 3 is marked in yellow and Category 2 in orange.

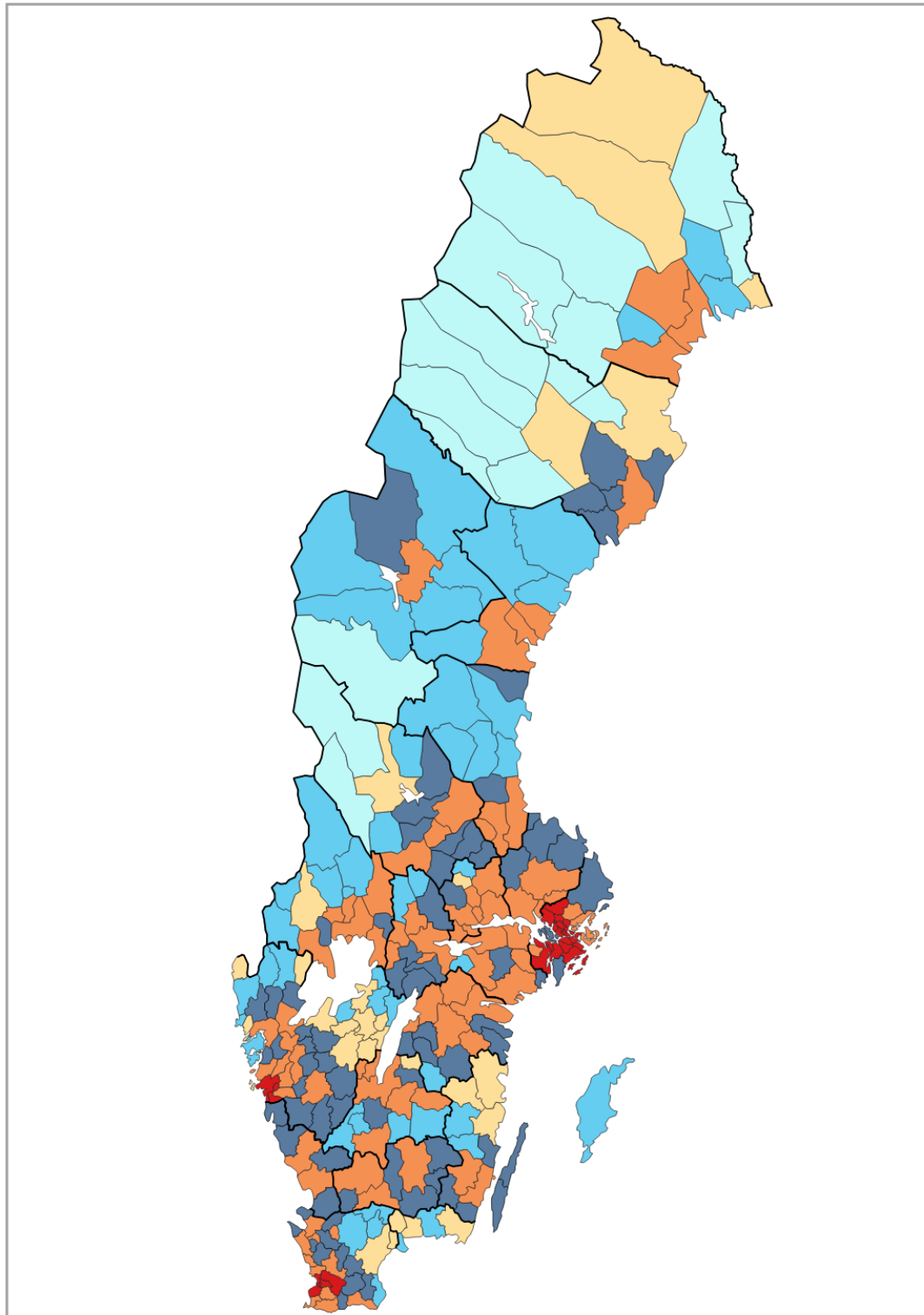


Figure 1. A map of the 290 municipalities in Sweden



For the purpose of this study, we selected respondents from the southern half of Sweden and from rural municipalities in Category 4 and Category 5. (Category 6 is primarily found in the mountain range in northern Sweden and represents only 1% of the Swedish population).

Three of our respondents are located in the southern tip of Sweden, which is dominated by agricultural activities. The other respondents live in rural areas consisting of a mix of arable fields, forests, and lakes. However, most of Sweden is covered by pine forests.

During our selection of the respondents according to a pre-defined rural typology, we found no systematic differences between the responses to the interview questions that could be related to the type of rural location. For example, a company owner in a mid-sized rural town lamented the lack of bus service, while one respondent in a remote rural area praised the bus service since the respondent happened to be located by the road between two cities which enjoy frequent bus services.

One reason there are no systematic differences in the responses we received in regard to type of rural location may be because the challenges and problems that women meet are related to type of innovation rather than location. Moreover, even if located far from a larger city, all of our respondents lived in or were reasonably close to a village or town that provided the area's inhabitants with basic services. Another reason why there are no systematic differences in the responses we received, and the type of rural location may be attributed to the fact that the innovations that we report on here (with some exceptions) were not dependent on place-specific rural resources. The innovators simply started their businesses where they wished to live. The innovators then embarked on their projects given the resources, amenities, and support systems available at the time and adapted their business activities accordingly.

The only instances where issues related to the respondents' location arose were when circumstances *changed*: for example, when services were discontinued, such as closing down the bus route or a school, or when other things changed in the local environment, such as local plans for the construction of a solar park or commissioning of a mine. Such changes were the impetus for three of our respondents to reverse trends in the deterioration of services, and can be clearly seen in the case of the villager who started a village revival company.

Instead, the differences that we observed were primarily related to the type of innovation the respondents were responsible for and to the organisational form of the business.

We identified several similarities and differences between organisations of similar types. Consequently, the following discussion will not further consider the type of rural area in which the respondents live, except for instances where it is explicitly called for in the interview data (see 3.5 and 4.3 regarding social innovations in villages).



2. THE INNOVATIONS

Table 1. An overview of the organisations interviewed.

| N. Interview* | Age | Education Level | Legal form | Year when established |
|---|-----|-----------------|--------------------------------|---------------------------------|
| SE_R_EN_1/ 1 The Horsecloth Company | 44 | Tertiary | Inc | 2021 |
| SE_R_EN_2/ 2 The Upcyclers | 71 | Tertiary | Informal group | 2019 |
| SE_R_EN_3/ 3 The Eco Centre | 72 | Tertiary | Sole proprietorship | Initialized 2006, opened 2012 |
| SE_R_S_1/ 4 The Art Gallery | 34 | Tertiary | Non-profit association | 1998 |
| SE_R_S_2/ 5 The Library | 78 | Secondary | CSPP | Initialized 2019, opened 2021 |
| SE_R_S_3/ 6 The Revival Co. | 60 | Tertiary | Inc and non-profit association | 2018 |
| SE_R_EC_1/ 7 The Innovation Advisor | 61 | Tertiary | Municipal project | 2016 |
| SE_R_EC_2/ 8 MedTex | 42 | Tertiary | Inc | Start 2011, Inc 2014, sold 2023 |
| SE_R_EC_3/ 9 The Driving School | 39 | Vocational | Inc | 2014 |
| SE_R_C_1/ 10 The Hatmaker | 43 | Vocational | Sole proprietorship Inc | 2008 2013 |

*SE=Sweden, R= Rural innovation, EN=Environmental sustainability, S=Social sustainability, EC=Economic sustainability, C=Cultural sustainability. 1=Remote rural location, 2=Rural location close to a city, 3=Rural village. The final number is the interview number. Organisation names are fictional.

2.1 ENVIRONMENTAL INNOVATIONS

1. The Horsecloth Company has invented a sustainable horsecloth (a blanket) with interchangeable parts for sports horses. The cloth moves freely with the horse, can be replaced in sections, uses sustainable materials, and is manufactured in Europe by people who enjoy good working conditions. In addition, the cloth is equipped with a sensor that measures the horse's temperature, thereby making it easier for the horse's owner to regulate the amount of cover it needs. This is thus better for the health of the horse. After a long product development period, the company has recently started to sell the horsecloths and is looking to expand to markets in Norway and Germany. The company is currently looking for an investor to help with the planned international launch. The company has a rural location on an island. The nearest city is half an hour away by car.



2. **The Upcyclers** consists of a group of retired female volunteers, some with a background as tailors or sewing teachers (Sewing is a school subject in Sweden), who offer weekly workshops in the local library, where people can bring their old clothes and learn how to mend and upcycle them. They also arrange upcycled fashion shows, 'more refined' flea markets, and have participated in artisan exhibitions. The group travels to other places in Sweden to inspire local groups to start their own upcycling workshops. However, these efforts have thus far been met with limited success. Since this group has the explicit purpose of reducing consumption as a measure to counteract climate change, diverse public support organisations geared towards stimulating economic activity are not interested in the group's activities. Instead, the Upcyclers have cooperated with Extinction Rebellion and other climate activists. The Upcyclers are located in a small, rural town in an agricultural district. A few larger towns that provide many amenities are reasonably close, but it takes an hour by car to travel to the nearest city.

3. **The Eco Centre** is a rural knowledge centre that serves as a model for sustainable living. They run a number of eco-friendly, sustainable guest houses, a vegan café, an ecological garden of seven hectares, and offer accommodation and courses in anything sustainable, including building techniques, eco-farming, yoga, alternative medicine, sustainable energy, sustainable animal husbandry, linseed oil or tempera painting, water management, and tai chi, to name a few activities. The centre was started and is run single-handedly by a single woman who has to battle with the authorities instead of receiving help from them. The centre is located in a tiny village that is so small that there are no population statistics available. A town is reasonably close by, but it takes over an hour by car to get to the nearest city.

2.2 SOCIAL INNOVATIONS

4. **The Art Gallery** was opened in an abandoned furniture factory in 1998 on the initiative of a local artist. In 2004, they built a 1600 m² exhibition hall that houses art exhibitions on various themes, including wood art, textile art, the invisible work in the household, sustainable architecture, sustainable consumption, and social sustainability. The gallery includes a vegan café, organizes cultural events, and cooperates with other arts and cultural institutions, nationally and internationally. It is owned by a non-profit organisation, currently employs three women, and is financed by public funds and private foundations. The Art Gallery's annual turnover is SEK 4 million. The gallery is situated in a rural location, outside a village with about 2000 inhabitants.

5. **The Library.** When, in 2019, the municipality decided to close the village library, a group of engaged readers protested vehemently. A consultant from Coompanion was engaged, who suggested establishing a Civil Society Public Partnership (CSPP) between the municipality and a collaboration of 14 local associations. A facility was offered to the partnership, plus some basic financing for expenses and new books (budgeted at SEK 80 000 per year). Moving the library, re-cataloguing the books, and staffing the library during opening hours twice a week are activities that are performed by a group of ten volunteers, all elderly women. In addition to its collection of books, the



library has become a 'local living-room' used by other associations. In this guise, it houses cultural events, not least for children. The library is located in a village with less than 800 inhabitants and is situated within a half-hour car commute to the nearest city.

6. The Revival Company was started by a woman who wanted to save her village. She had prior experience from a village broadband project, which was successfully installed in 2014. When the local village store closed, she formed a non-profit organisation owned by ten local associations (in a village of 150 inhabitants), which, in turn, now owns the company that took over the store in 2018. Since 150 customers cannot sustain a store, more businesses were needed. Step by step, they added a café, a library corner, an activity centre, RV parking, and a senior citizens' home. These facilities are run by separate companies. The village is now growing. The finances of the Revival Company remain uncertain, not least due to the pandemic. Notwithstanding this, plans are still made for further diversification of the organisation's operations, including growing vegetables, land-based fish farming, biochar production, and the installation of a local solar energy system and a solar park. The village is a 50-minute drive from the nearest city, but several mid-sized towns are closer by.

2.3 ECONOMIC INNOVATIONS

7. The Innovation Advisor operates as an intermediary between innovation support systems and rural entrepreneurs by helping entrepreneurs obtain access to innovation support systems. The Innovation Advisor provides business counselling, training, and networking events. They also network with national and regional actors in several innovation support systems. The centre is hosted by a rural municipality and employs two people part-time. It started as a time-limited project funded by a rural municipality, but the head consultant, a woman, has been very successful and has received continued financing from several sources. They are now secure in their operations until 2026 and hope to continue beyond that date. The consultant travels to her clients on farms and in rural villages and organizes open information events in these locations.

8. MedTex has developed advanced, research-based medical compression products in co-operation with a textile engineering research institute that began working on the innovation in 2007. The founder joined the R&D team in 2011, setting up financing and production of the innovation. The business was incorporated in 2014. The company was then sold to a Swiss manufacturer and distributor in 2023. The founder is now employed as the CTO (chief technology officer). The company currently employs three persons, including the founder, who live in different locations. Their work collaborations are primarily web-based. The company founder started the company when she lived on a farm, but she then moved to a small town with 7400 inhabitants. The company is connected to her current locality only by virtue of the fact that she lives there. However, she actively contributes to the community through the local female entrepreneur network and through an artisanal foundry that was started in co-operation with her husband. The nearest city is 45 minutes away by car.

9. The Driving School was started by a woman in 2014. Her company changed the norms in the industry – at least regionally – by, at first, employing only women driving



instructors. This move became a competitive advantage for her driving school since many students of either sex prefer women instructors. This successful change paved the way for women to become employed as driving instructors at other driving schools. Today, the Driving School employs twelve instructors across three communities. The business is continually expanding. The driving school has two locations: one in a small town and one in a large town, 40 minutes away by car. This business serves the entire surrounding, sparsely populated rural area. It takes 2,5 hours to get to the nearest large city.

2.4 CULTURAL INNOVATION

10. The Hatmaker was started by a master hatmaker and her husband, a jewellery designer. She is the CEO and the chief *modiste*. She creates upscale and very expensive felt hats from rabbit or beaver fur. The furs are processed in a unique way, which she developed. The hatmaker thus sustains and has developed an old handicraft. The couple live and work in an old farmhouse but sell their products internationally. They exhibit their work at a Paris convention twice a year, where they take orders from selected retailers from twenty countries. They operate a flagship store under a different name near their house where visitors come from around the world to order custom-made hats. They offer their customers accommodation and a pleasant experience. They recently opened a webshop, which now accounts for 25% of their turnover. They hope to increase this share since it offers better profit margins. However, they have no plans to increase their annual production of 1500 hats. Instead, they wish to make their hats even more exclusive. They are located in a village with about a hundred inhabitants. It takes half an hour to get to a city by car.

3. INNOVATION PATHWAYS

3.1 MOTIVATORS FOR INNOVATION

All of the respondents in this study expressed a desire to realize an idea, whether it be a new product, service, or organisational form. In most cases, the idea was closely related to their previous educational or professional experience. They all faced problems and setbacks in setting up their businesses but continued despite these obstacles. We understand that the strong passion for and belief in their particular idea carried them through the adversities they encountered. Another observation is that most of the respondents wanted to realize their idea *in a particular place*, that is, where they lived or wanted to live.

Other motivational aspects were then added to their reasoning. For example, the woman behind the Horsecloth Company was keen to make her product environmentally and socially sustainable in addition to being horse-friendly. Similarly, the prime motivation for the founder of the Eco Centre was to showcase a model for sustainable living that was not built on the premise of economic growth. Similarly, the Upcyclers wanted to inspire and teach people to do things themselves, reduce consumption, and prevent climate change. Their workshops also became socially rewarding.



The social innovations included here are all concerned with rural revival. The Art Gallery was established to bring culture and new prospects for young people to the community. The Library was saved from permanent closure, thus keeping it in the community so everyone could easily access reading materials. The woman behind the Revival Company was motivated to make her village thrive again.

The motivations behind the economic innovations described above centred on doing business but reflected a considered career choice. The innovation advisor aims to help rural businesses thrive for their own benefit as well as for the benefit of 'rural economic sustainability' as a concept. She has made a career out of this. The founder of MedTex wanted to change her career and build a successful business, which was unrelated to her rural location. She only happens to live there. The Driving School owner was keen to do things her own way, which she could not do as an employee. She has succeeded in building a successful business and also provides local services and job opportunities. Finally, the hat company also fits into this category because she wanted to pursue a particular career and establishing and running a business was the natural expression of this ambition. In addition, the hatmaker was highly motivated to maintain and develop an old handicraft, thus keeping a specific cultural heritage alive.

Seven out of ten of the innovations we examined thus pursue their innovation as their career. Two of the innovations are entirely built on voluntary work – the Library and the Upcyclers. These two operations were started by senior citizens who have alternative sources of income. The founder of the Revival Company performs a great deal of voluntary work in addition to her paid part-time position at the organisation. She, too, enjoys additional sources of income to sustain herself.

3.2 CONSTRAINTS AND FAVOURABLE CONDITIONS

In our data, we identified *favourable conditions* for the innovations as the following: (i) a woman with an idea, with the necessary skills, interest, and drive; (ii) the availability of financial resources, either through banks, through private foundations, or through public support. In some cases, facilities were provided by the municipality; (iii) access to technical and business support systems that are available through organisations like Vinnova, Almi, incubators, universities, the Regions, or municipalities are also important favourable conditions. Some of the innovations included in this report also rely heavily on volunteer work. Finally, (iv) while networks were instrumental to the success of the businesses, we note that the innovators created their own networks, tailor-made to their needs.

Emotional and sometimes practical support from partners was mentioned, but apart from this, the innovators' family situation had little impact on the innovations, perhaps because Sweden has such a well-developed welfare system and comparatively high levels of gender equality. These circumstances allow for both men and women to combine work and family. Every child over the age of one has the statutory right to public, subsidized, full-time, high-quality daycare. Parental leave is shared and is for a total of 18 months. In Sweden, workforce participation is high for men and women.



Regarding physical infrastructure and the running of the businesses described in this report, only two things stood out as essential: (i) access to broadband internet and (ii) access to a car. All of the innovators enjoyed access to both of these infrastructure resources. These factors are commented on in detail in the following sections.

3.3 THE IDEA AND PREPARATIONS/DECISIONS AND PREPARATORY ACTIVITIES

Preparatory steps taken by the female innovators were primarily related to the type of innovation. All of them needed knowledge, facilities, money, networks, and skills, but the nature and scope of these parameters varied widely. Note that they are not related to the type of sustainability we categorized them as representing, nor are they related to one particular rural type.

Two of the innovations we report on are technical in nature and are protected by patents. These innovations required a long time in development. The inventor of the horsecloth, for example, had a background in working with horses, identified a need in the market, had a great idea, and made a prototype herself. She contacted Almi for seed financing and joined a business incubator to develop her product and business further. It took her over three years to get the product into production, and she is just now beginning to sell the horsecloth.

The other technical innovation can be found in MedTex. The founder of this company has a master's degree in textile engineering, joined a research project concerned with medical compression materials and developed her invention into a product. The product was seven years in development. She received development money from a business incubator, Vinnova, research funds, and from the regional innovation office for a total of SEK 7 million.

Two organizations were started by seniors who did not need much financing since the operations are built on voluntary work, namely the Upcyclers and the Library. These seniors possessed all the necessary knowledge and skills but had to negotiate with their municipalities for the necessary facilities. They also needed some small-scale social mobilisation, but that was not too much of a challenge since they were already involved in local senior associations and other associations.

Concerning the Driving School, finding suitable facilities was a big step for the business. The founder was already a driving instructor and came from an entrepreneurial family where business ownership was seen as something natural. She searched for business premises for quite some time before she found a suitable, centrally located facility with parking outside. She then took out a bank loan to buy furniture, cars, and other equipment.

The Hat Maker had all the skills she needed. She initially started her business on a small scale, as a side business to her working in a hat shop in Stockholm. However, she outgrew her then premises and needed a more extensive facility. The family bought a



large farmhouse in the countryside in the area in which she was born and moved her home and her hat production there. The business was entirely self-financed.

The founder of the Eco Centre had a clear vision of what she wanted to build and possessed the necessary skills to realise her vision. She left a long, successful career as an organisation development consultant, bought a farm in 2006, and spent the next six years building guest houses on the property. It was a long, uphill struggle since the municipality initially did not grant her a building permit. She intentionally avoids all financial and other support systems since she wants to model 'a de-growth society'.

The Revival Company, on the other hand, uses whatever project money is available. One might say that this company vacuums the market for project money. The founder of this company says she could never have achieved what she has done without these forms of support. Her first step was to establish an organisation that could buy the store. She has received project support from the County, the Region, the EU, the Swedish Agency for Regional and Economic Growth, and Vinnova for a total of SEK 32 million thus far. This money has primarily been used to fund the construction of buildings. She has an academic teaching degree and 15 years of management experience with a multinational company.

The Innovation Advisor, who is an experienced business consultant, first had to secure project money from municipalities, Leader, and the Region. She then built business networks in order to reach her clients. Vinnova and the municipal and regional trade offices were instrumental in this goal. As an innovation advisor, she is employed by the project owner, i.e., a municipality. In this role, she acts as an entrepreneur, or an 'intrapreneur', if you will.

The Art Gallery was started by a visionary artist in 1998 and the first steps consisted of mobilizing the local community and finding project money, primarily from the EU. The second step included the construction of a new building for the art gallery, as the old buildings were too big and expensive to run. The construction process was primarily done by volunteers. The current director of the business has a degree in cultural studies and a background as a performing musician. She was hired by the non-profit organisation that owns the gallery in 2022 and was promoted to director only a year ago. She is keen to develop the art gallery further and has organised several cultural events.

3.4 THE CONCRETISATION OF INNOVATIONS

All the innovators whom we interviewed have achieved their goals, even if many aim to achieve additional goals. Starting with the environmental innovations, we note that after a long time in technical development, the horsecloth is now on the market, providing comfort for horses, employment opportunities in sustainable production in Europe (but not in Sweden), and (hopefully) a good living for the business owner. The Upcyclers have enjoyed a great deal of publicity and continue their regular workshops in their community and at their upmarket flea markets and other events. The Eco Centre does what it says; namely, it provides a model for all aspects of sustainable living, including the domains of



energy and water management, construction, agriculture, and more. The Eco Centre's courses are well-attended, and the business sustains the owner and her adult son.

The social innovations we report on were also successful. The Library is open twice a week and has become a meeting place for other associations. They also arrange events for children. The Art Gallery arranges many well-attended exhibitions and events, makes culture locally available, employs three people full-time, and is the pride of the town. These two businesses thus address both social- and cultural sustainability. As mentioned previously, the Revival Company has successfully revived the village's prospects with a multitude of facilities and meeting places and has managed to reverse the village's depopulation trend. Young families are now moving to the village. In addition, the Revival Company employs three people. The business's finances are not particularly robust, however. This is, not least, due to the pandemic, which caused the number of visitors to the village to decrease radically.

Moving on to the economic innovations, the Innovation Advisor achieves her goals in terms of number of participants or clients, new companies she comes into contact with and the number of new jobs in rural areas she secures (we were not provided further details on how many jobs have been created). MedTex was recently sold to a Swiss company which will produce and market the product. The Swiss company now employs the innovator. The product line (within the Swiss company) employs two more people: a CEO and a marketer. The Driving School continues to grow. The school now employs thirteen people, including the innovator's husband.

The Hat Company's owner has built a self-sufficient, successful business using sustainable production methods. The company employs herself, her husband, and one full-time employee. The company also uses seasonal labour. She also takes in apprentices, and children can come to her workshop for study visits.

3.5 IMPACTS OF INNOVATIONS

All the innovations we report on have had a positive impact, in most cases incremental, but an impact that is not always related to rural development or gender. We identified the following:

Personal livelihood & a change of an industry standard: The Horsecloth Company claims to have changed an industry standard by making a product that is much better for the health and well-being of horses. MedTex promises to do the same for patients who need compression products. In addition to the benefits of the products they produce (which clearly transcend the geographical dimension), the Horsecloth Company and MedTex provide a living for their owners, which makes residing in a rural area possible for these entrepreneurs.

Rural development: Some of the innovations were designed to reverse rural decline. Most notable was the Revival Company, which managed to provide services, amenities, and new meeting places for the village's inhabitants and thus turned the fortunes of the village around. The village went from being a village with fewer and fewer inhabitants to



a village now experiencing population growth. The Revival Company has also created three jobs. The Art Gallery has managed to create a well-known destination which draws in many visitors. The gallery also acts as a social and cultural meeting place for the local inhabitants in addition to employing three people and engaging several volunteers. A small-scale version of the same success can be found in the results produced by the Library. They have managed to maintain book-lending in the community and created a social meeting place for locals. The Upcyclers have been similarly successful in creating weekly workshops and meeting places that, in addition to their beneficial social aspects, mitigate climate change by reducing consumption, however small-scale this may be. These three innovations are all located in a small village or town. Note that social projects of this nature require an already existing community.

Economic development: The Innovation Advisor has helped start many rural businesses on farms and in other locations. She has also helped existing businesses to develop and grow. The Driving School is by now the largest driving school in the area. The school employs thirteen people and provides driving lessons to people living in the area. The Hat Maker sustains three people, attracts visitors to their shop, and welcomes students and apprentices from the local area.

The Eco Centre is a unique case since it has become a model for sustainable living. Notwithstanding that, we know very little of its impact on the specific area where it is located. The Eco Centre is a self-sufficient and self-contained operation that specifically questions and challenges the idea of economic growth. Guests stay on the Eco Centre's premises, so there are few spill-over effects from this particular business. However, if the business model were to spread across the country, for example, its effects would be quite radical. In co-operation with nearby farmers, the owner has been successful in halting municipal plans to remove a bus stop, build a solar park, and commission a mine. The latter two developments risk reducing the groundwater and biodiversity to the detriment of farming activities.

Gender effects: Our interviewees repeatedly stated that they have become local role models. They have demonstrated that a woman can establish and run a successful business operation, even in male-dominated areas. In so doing, they have received increased visibility in their respective fields. These entrepreneurs contribute to gender equality by simply being *female* entrepreneurs. The owner of the driving school credits her pleasant work environment to her democratic, supposedly 'feminine' leadership style. Similarly, the Innovation Advisor thinks she listens to her clients better than men.

The Art Gallery has as a mission to challenge gender stereotypes and often arranges events and exhibitions on this theme. On the other hand, the Library and the Upcyclers would like to see men engage in their activities, but this wish has not been realised so far. In these cases, gender stereotypes seem firmly entrenched.



4. INNOVATION ECOSYSTEMS

4.1 POLITICAL

The most common concern about policy that governs establishing and running a business is that the rules for large and small companies are the same. Consequently, complying with all the regulations and reporting requirements takes too much time and resources for small businesses. For example, the fee for various permits may be insignificant for a large company but very onerous for a small one. A large company can hire legal- and economic experts to help them navigate government requirements, but an upstart has neither the necessary skills nor the resources to do so. These circumstances hamper business growth prospects. Our interviewees reported that they wished that small and large companies could play in different leagues, with fewer, less complicated rules and lower fees for small businesses. They also wished that it were easier and cheaper to hire labour, for example. They stated that paying for sick leave is particularly challenging for a company that operates on small margins.

Some organisations enjoy a tight-knit cooperative relationship with regional or municipal officers but complain about variance in degrees of interest from these officers. Whether an officer is interested in rural development or not depends on the specific officer. When a new set of politicians takes office or new officials are hired, innovators may find themselves marginalized or neglected by these authorities. For example, the Eco Centre experienced a great deal of trouble with the municipality and did not receive a building permit until the owner found an officer who understood what she was trying to achieve. While the Revival Company receives study visits from politicians from other municipalities from all over Sweden, the owner says that her own municipality currently seems less engaged in what her organization does.

Navigating the regulatory system or available support systems is difficult for an upstart. A user-friendly, web-based entryway with links to everything an upstart must consider, including links to organisations that can help them in starting their business, is called for. The Swedish tax authority is exemplary in this regard, but its website only provides information about tax regulations. However, since every new organisation must register with the tax authorities, this authority is well-positioned to point new organisations to relevant webpages, including webpages that provide information directly relevant to upstart support, for example, Almi, Jobs and Society, local incubators, and regional or municipal trade offices.

Sweden currently has no government-sponsored support system for women innovators or entrepreneurs. While the government has advertised one project for women entrepreneurs that will start in 2024, the money that is available is very limited at a total of SEK 8 million. This sum appears relatively modest when compared to the billions of SEK that the government allocates in support for the STEM fields through Vinnova, for example. In the cases where the women innovators are involved in female networks, these networks result from bottom-up initiatives.



Since support systems often provide both knowledge and financial resources, these will be further commented on in the following section.

4.2 ECONOMIC

There are numerous support systems available in Sweden. However, they are all rather specialized in nature so that a particular support measure might fit one organisation but not another. In some cases, support is designed for one stage in the development of the business but is not applicable to other stages.

For example, the tech companies we have reported on, MedTex and the Horsecloth Company, enjoyed plenty of support in terms of assistance and funding in the business development phase from several different sources, including Vinnova, business incubators, regional development funds, industry organisations, and research institutes. However, when the business development phase was complete, finding financing for the production and marketing phase of the business proved to be much more difficult. The Horsecloth Company is currently looking for an investor. The owner does not know how to find investors. She wishes there were a web-based meeting place for innovators and investors. MedTex could not find an investor who would let her keep majority ownership of her company without putting more of her own money into the company, so she ended up selling the company. She wishes that money for scaling up existing businesses be more readily available without the need for co-financing.

The Innovation Advisor is, of course, particularly well-versed in the world of support systems since it is her business idea. In fact, these systems pay for her own business operations. Nevertheless, she reported that the language used by these systems is challenging to understand for entrepreneurs who do not possess a business education. Hence the need for her services. Moreover, she notes that her clients do not see rural development as a separate domain of business development; it is just development. In her mind, there is no need for special funds for rural development; it is more a question of making existing resources accessible and available in rural areas.

The Upcyclers constitute a unique case. First, they did not need any resources apart from the free facilities offered to them by the local library. Second, they did not envisage how any existing support organisation would be able to help them. Note that these factors are concerned with economic development, whereas the Upcyclers' *raison d'être* addresses economic de-growth. For this reason, they have entered into cooperative relationships with climate activists and Extinction Rebellion.

The Eco Centre entertains a similar philosophy, although this female entrepreneur could have made good use of support had she been willing to use it. However, she has made a conscious decision not to use it, remarking that such business support systems require the business to adopt the rules of these systems, for example, the duty to report specific evaluation criteria which stand at odds with her vision of a sustainable society, i.e., a society that does not pursue constant economic growth. This entrepreneur wants to remain independent and true to her vision. The owner of the Hat company also wanted to maintain her independence and financed her company's growth with revenues that



she made from sales. The farm they relocated to cost a lot less than what they received from selling their house outside Stockholm. Consequently, she was debt-free when she started her business in the new location.

From the interviews we conducted with the women innovators, we observe that the support systems that are available in Sweden are often perceived to be built on silo mentality, i.e. one system does not communicate with another, which makes it difficult to overview these systems and their impact. Furthermore, such systems do not always correspond to the needs of innovators. Those entrepreneurs who produced technical innovations invested in buildings or started a for-profit company with a predictable future revenue stream. Consequently, these entrepreneurs faced fewer challenges in finding money compared to those who produced social or cultural innovations.

4.3 SOCIAL

Concerning the entrepreneurs' network participation, we found that this varied a great deal for the different entrepreneurs. Some are quite self-sufficient in this regard, and their networks are limited to include only individuals and organisations that are deemed necessary for the innovation itself. These entrepreneurs network with participants, suppliers, resource providers, trade organisations, clients, and so on but do not frequently network with broader or more general networks. Not one of the female entrepreneurs has received any support from AKIS, even though AKIS paid a study visit to the Revival Company.

Community support was crucial for the success of The Library, the Revival Company, and the Art Gallery. These are located in villages or small towns. These businesses are closely involved with local associations and the local 'association of associations', perhaps best labelled 'the association co-operation'. In the case of the Revival Company, the association co-operation owns the company, and in the case of the Library, the association co-operation took the initiative, along with the interviewed innovator, to persuade the municipality to allow them to take over the Library. The success of Art Gallery is an accomplishment of the local community, and the people who work there are well-connected with networks in their field, regionally, nationally, and internationally. That being said, all of these businesses request more engagement from their local communities. In particular, the Revival Company needs the villagers to shop at their store instead of at the supermarket in the nearest city. The female entrepreneur responsible for the Revival Company reports that it is easier to get the villagers to buy shares in the company than to change their shopping preferences.

The Eco Centre, on the other hand, is not involved in local networks but seeks and maintains contacts in the wider world. This entrepreneur has found unexpected allies among two local farmers and a convent in her resistance to the municipality's plans to remove a bus stop, install a solar park, and commission a mine.

Concerning gender norms, being a woman innovator has its pros and cons. The women included in this report were sometimes regarded with suspicion (by men), particularly in male-dominated fields. However, once they had proved themselves, being a woman



innovator entailed visibility and respect. During our interview with the innovator from the Revival Company, she reported that she 'stood out' and received a great deal of attention when she led construction projects.

The owner of the Horsecloth Company says that she received significant help from support organisations because she is a woman. These organisations were very happy to tick the 'woman box' in their performance reports and other statistics. Being successful, these entrepreneurs became role models for other women in their areas. However, problems remain. For example, the director of the Art Gallery claimed that men steal her ideas all the time. She was also shocked by some of the sexist attitudes that are evident in some of the rural youth. The Hat Maker remarked that her customers think that her husband is the boss of the business.

The Innovation Advisor stands out as a special case since she represents the support systems that are available to Swedish entrepreneurs. She argued that being a woman is an advantage for her since she feels that her clients more readily welcome and listen to her. She is also keen to establish networks among her clients when this is possible. She is also one of the few entrepreneurs who commented on rural culture by claiming that conservative norms can hold people back. Similarly, the woman who started the Revival Company informed us that coming from the outside (from outside the village) helped her identify opportunities where others did not. Otherwise, the interviewees stated that they were happy about living in a community where everyone knows each other and helps each other. They also acknowledged the dark side of social control in a small village context – one must behave oneself.

In addition to gender, some entrepreneurs commented on age as a factor relevant to entrepreneurship. The social innovations, in particular, were started by senior citizens or by volunteers who have now come of age. They expressed concern that it is difficult to engage with young people and are thus worried about the long-term survival of their operations.

4.4 TECHNOLOGICAL

As mentioned earlier, two of the female entrepreneurs produced technical innovations, namely MedTex and the Horsecloth Company. Their products were technically advanced, and both entrepreneurs enjoyed support from technical experts during the development of their products. Once the products were ready, their production was outsourced. The Art gallery, the Revival company, and the Eco Centre constructed buildings and did not report any problems in doing so in a rural area (besides problems in getting building permits).

Every one of the entrepreneurs included in this report uses broadband internet. Fortunately, this was available in all ten locations where the businesses are run. However, the woman behind the Revival Company spent seven years getting broadband in place before she opened the store. The innovators all have a presence on the web, and most use social media. In particular, the social innovators use social media to announce events and meetings and to garner the interest of more visitors and



participants. For some of the entrepreneurs, social media is viewed as a necessary evil, going so far as to say that they have no genuine interest in developing the skills necessary to use social media effectively, nor do they wish to devote any time to it. Some entrepreneurs wished that someone else would shoulder that responsibility. Other business owners represent the opposite. The owner of the Hat Company, for example, has created a beautiful, technically advanced website. This website has become part of her artistic expression. Two of the innovators regularly use Zoom for work meetings.

As with every other Swedish person, these entrepreneurs have digital access to the authorities and all kinds of information. The Bank-ID system is well-developed in Sweden. Users have secure digital access to the tax authority, the social security system, medical journals and primary care, banks, shopping, the transportation authority, the traffic authority, and so on. In fact, the country is so digitalized that the postal system cannot cover its costs and banknotes have become something of a rarity, creating problems for the elderly.

MedTex needed access to an airport, but shuttle services were available. No one else needed an airport for their business operations. None of the entrepreneurs was located near a train station, but most were within a short driving distance from one. Bus services varied considerably. Except for the Revival company and the Driving School, a lack of a bus service did not seem to be of great importance since all of the female entrepreneurs conceded that one must have a car if one lives in a rural area. Postal services and means for the transportation of goods were available in all of the entrepreneurs' locations. Half of the entrepreneurs had small or school-age children, while the rest had grown children. Consequently, the presence of a pre-school and a school were crucial. They stated that they would not have lived where they did if there was no pre-school or school nearby.

4.5 ENVIRONMENTAL

One innovation that appears in this report was occasioned by and addresses climate change and environmental sustainability, namely the Eco Centre. This organisation is built as a model for sustainable living, including housing, food, energy and water systems, agriculture, and biodiversity. It offers courses in all of these fields and more.

Similarly, the Revival Company has plans for further diversification in terms of growing vegetables, land-based fish farming, biochar production, and installation of a local solar energy system and a solar park. On a somewhat smaller scale, the mission of the Upcyclers is to encourage people to upgrade their clothes and thus reduce consumption, ostensibly for the benefit of the climate.

The other innovations we report on do not tackle environmental issues directly, nor are they directly dependent on natural resources. Nevertheless, they are well aware of climate and environmental issues and make minor considerations to these issues, for example, by installing solar panels, driving an electric car, or using sustainable materials.



5. MAINSTREAMING ACTIONS

5.1 SCALING UP

No one in our sample has influenced legislation. However, the Revival Company has garnered a great deal of attention from policymakers, and hope that their operations will be used as an example for others and as a learning case for policymakers. Perhaps the Revival Company will inspire changes, such as developing a business support system that is less informed by silo mentality.

MedTex and the Horsecloth Company have influenced industry standards in their respective fields.

Most of the interviewees claimed that they have influenced gender norms on a small scale by way of their example. They have demonstrated that women can play an essential role in rural businesses and associations. The Art Gallery consistently challenges gender norms through its exhibitions and activities, and it also contributes to normalising art and culture in its rural area. The Driving School changed local gender norms when it hired women driving instructors. This strategy was successful and inspired other driving schools to hire women, too. In addition to addressing gender issues, some of the innovators also pointed out that they are role models for young people. This sentiment was expressed by the owners of the Hat Maker, the Art Gallery, and the Revival Company.

The Eco Centre has changed institutional norms *within* its operations. The owner has created a model for sustainable living with a 20-hour work week and hopes to spread awareness of this model through courses and study visits.

5.2 SCALING OUT

Regarding the tech companies, Medtex and the Horsecloth Company are the best examples of geographical scaling. The Horsecloth Company expects 10% of the horsecloth market in five years and is looking to expand into Norway and Germany, provided that the company owner can find an investor. Her products are manufactured in another European country.

MedTex already has production and sales in Europe through its Swiss owner and is looking to develop its product range further. The Driving School is about to franchise its business model but has thus far not been able to raise the necessary capital to do so. Meanwhile, the owner has started a coaching business for other traffic school entrepreneurs.

The Hat Company wants to solidify its business, not scale it up. They wish to make more exclusive and expensive hats. They aim to sell more of their total production and other exclusive products directly to the end customer through their webshop. They also plan to develop more resource-effective packaging for their products. For this project, they are seeking assistance from the Region.



The Innovation Advisor wants to spread her business model but not her own operation. For this to happen, she needs local partners so that she can 'train the trainers'. In essence, other municipalities and support organisations must see the value of her business model and finance a local advisor.

The Eco Centre has no plans for expansion. However, the owner would eventually like a small group of committed individuals to live on the farm and run the operation together. Through the courses the centre offers, she inspires others to do similar things, which, one might argue, constitutes a version of scaling the business.

As mentioned earlier, the Revival Company has no plans for geographical expansion (besides the company's model inspiring other villages). Notwithstanding this, the woman behind the Revival Company has grand plans for further local diversification in terms of growing vegetables, land-based fish farming, biochar production, a local solar energy system, and a solar park. For these projects to be realised, she needs financial support and more engagement and support from the local villagers. At present, the responsibility rests on her alone, a circumstance which renders her various projects untenable in the long term.

The Art Gallery has no expansion plans but is happy to maintain and develop its current operations. The female senior citizens behind the Library are worried about the (inevitable) generation shift, especially since it is difficult to engage young volunteers. However, many young families are moving to the area, which gives them hope. The Upcyclers have similar concerns. They, too, find it difficult to attract young volunteers. Furthermore, spreading the Upcyclers model to other communities has proved to be challenging. The model demands a committed local enthusiast who is willing to do a great deal of voluntary work.

5.3 SCALING DOWN

As detailed in Section 4.2, most of the innovators have had support from one source or another, be it financial or technical support. A general observation is that business support systems are more readily available for organisations that are engaged in economic activities with growth potential. Innovation funding, business incubators, and rural development funding essentially bypass social or cultural innovations or environmental innovations that do not pursue economic growth. Instead, such businesses must look to other sources, such as money from the municipal and regional culture budgets or private foundations. These budgets are considerably smaller than the budgets for innovation support. In addition, some of these business models call for a great deal of voluntary work. Some of these businesses have learnt to tweak the system, like the Revival Company, which has engaged in construction projects, thereby making the company eligible for rural development support. It should come as no surprise that it takes expertise and ingenuity to navigate the complexities of the current business support system successfully.



Regarding future plans, the Horsecloth Company does not foresee any use of public support. The owner observes that her product is too much of a niche product to be eligible for public support, but she is still looking for a private investor.

MedTex and the Driving School have also turned to the private market for financing. The owner of the Driving School, however, anticipates that two new EU regulations will create business opportunities for her. The first is that learners will be allowed to obtain a driver's licence with an automatic car. The second regulation concerns new rules for mopeds and the Swedish 'A-traktor' licence, both occasioning the need for new courses.

The Revival Company will continue to seek development money from any source it can find. Nevertheless, as noted above, money that can sustain a village rather than create a new company can be difficult to come by. The Art Gallery plans to continue its business development by using the same sources that it has used in the past, namely, sponsors and public money for the arts and culture.

The Eco Centre has, thus far, shunned all kinds of publicly-funded business support. So has the Hat Company. Both businesses are self-sufficient. The Library and the Upcyclers do not see the need for public funding either, given the exception of the municipal facilities that they use. The Innovation Advisor will continue to use current sources.

5.4 SCALING IN

In addition to financial help, some of the innovators have benefitted from people and institutions who possess technical and business expertise, most notably the two tech companies that received help from experts from a university which does research in 'smart textiles'. These companies have benefitted from business incubators and, in the case of the Horsecloth Company, from a different university for access to business expertise. Some of the innovators have also used regional 'consultancy checks', which are used to pay for external business or technical expertise.

The Upcyclers, the Eco Centre, the Art Gallery, the Library, and the Driving School are quite self-sufficient, although the Library foresees a need for web marketing training. The Driving School anticipates that it engage in local business networks for continued learning opportunities and establishing contacts.

The innovators discussed in this report are not only on the receiving end of funding and expertise but also on the giving end. The Innovation Advisor is a clear example of the giving end. She possesses a great deal of business expertise and disseminates this expertise among entrepreneurs in rural areas. The Revival Company has been the object of research in two research projects at two different universities. The owner of the Hat Maker is on the board of a vocational school for hatmakers and wants to contribute to training a new generation of hatmakers.

5.5 SCALING DEEP

The innovators we interviewed are all relatively modest women and do not think they have changed any prevailing norms or values, except perhaps marginally and, if so, only



locally. As mentioned previously, these individuals are role models as women innovators and thus make such an entrepreneurial career a possibility for other women. Furthermore, these individuals also demonstrate to men that women can be successful entrepreneurs. Some of these women have changed rural attitudes towards culture by way of their activities, for example, the Art gallery and the Hat Company, which arranges study visits for young people.

The Eco Centre inspires and educates others about sustainable living, encouraging them to copy their model. The teachers the centre engages run study circles in other locations, thereby spreading the the word about sustainable living.



SECTION FOUR

FACT SHEETS



Funded by
the European Union

FACT SHEETS ON WOMEN-LED INNOVATION IN FARMING

THE INNOVATION JOURNEY

The museum is situated in the heart of southern Bohemia, near the Temelín nuclear power plant, which is one of the museum's sponsors.

The company operates in a renovated farmhouse. It preserves agricultural production (beef and vegetable products), combined with knowledge sharing and entertainment, especially for children. Visitors can try old agricultural machines in operation and craft courses are also held. The museum is supported by European, national and regional grants.



Figure 1. The museum in operation

M.Sc. Netíková, one of the founders of the museum, was born and lives in the countryside. Her father was a veterinarian. After secondary horticulture school, she graduated from the Czech University of Life Sciences in Prague (majoring in applied ecology). She has three children, and she feels like a country girl.

In 2023, the museum received a European grant aimed at promoting its activities to increase the number of visitors. The rating on Google is 4.7.

THE INNOVATION IMPACT

The museum represents a link between agriculture and culture. It is one of the ways multifunctional agriculture works because agricultural production is connected, on the one hand, with direct sales and, on the other hand, with educational and entertainment events. Unlike large agricultural museums, the visitor is drawn into history. These activities can hardly be implemented without financial support and sponsors.



Figure 2. The museum is located in a typical South Bohemian farmhouse, which had to be reconstructed from ruins

USEFUL LINKS

<https://www.zemedelske-muzeum.cz/muzeum/>;

https://www.facebook.com/JZM.cz/?locale=cs_CZ;

<https://www.youtube.com/watch?v=ZYlkOxLzCQg>;

<https://www.vyletnik.cz/clanky/lo/jihocesky-kraj/>

THE INNOVATION JOURNEY

Bezdínek Ltd. farm is situated in the Ostrava-Karviná coal mine basin. The basic philosophy is to create a favourable food environment for healthy and sustainable diet. They grow tomatoes, cucumbers and other vegetables on 11 hectares of greenhouses. Additional products are dried tomatoes and flower honey, widely used in the Chřiby Mts. region. The tomatoes are planted on an organic substrate made of crushed coconut husks, which are composted after the season. About 15 litres of water are used for 1 kg of tomatoes compared to hundreds of litres in field production. Rainwater is used for watering. Waste heat from a nearby power plant is used for heating.



Figure 1. RNDr. Alžběta Nagyová, Ph.D., chief agronomist

Alžběta Nagyová (39 years old, Slovak ethnicity) graduated from Comenius University in Bratislava (microbiology and virology, Ph.D. degree). After her studies, she worked at the Slovak Academy of Sciences, focusing on plant virology. Later, she moved to Czechia helping to establish hi-tech greenhouses for growing vegetables for other suppliers. In 2017, the Bezdínek company established

its large-capacity greenhouses in Dolní Lutyně (approx. 5,300 inhabitants). The assistance of her husband was essential. Currently, both are employees of the Bezdínek farm. Shortly after the establishment of the farm, Dr. Nagyová became the chief agronomist.

The demonstration greenhouse allows visitors to understand the broader context of greenhouse operations. An interactive exhibition will soon present the principles of a healthy plate and shed light on the values of the carbon and water footprints. The company employs about 200 people, it participates in food festivals and has a visitor centre. The innovation is promoted through TED talks. The farm participates in the campaign of the Vegetable Union of Bohemia and Moravia to support the consumption of local vegetables. The company received the Global Czech Society for Quality certificate (2023), and the ZERYA certificate for cultivation without pesticides in 2023. Tomatoes were awarded as a regional product of the Moravian-Silesian Region in the year 2020.

THE INNOVATION IMPACT

The operation of the farm is valuable from at least three points of view: it is an ecological farm, focused on healthy nutrition and it provides job opportunities in a region where a demanding structural restructuring of the economy is underway. Therefore, it should serve as an example for other regions as well.

USEFUL LINKS

<https://www.farmabezidinek.cz/>;

<https://www.facebook.com/groups/3275892226072120/>

THE INNOVATION JOURNEY

The family business farms 412 hectares. 116 ha is arable land on which they grow fodder. Livestock production includes 300 to 400 beef cattle, 100 pigs of the Mangalica breed, 1000–1200 poultry, 70 laying hens, goats, sheep, and rabbits.



Figure 1. The Bošina family

The company is located in a protected landscape area, so it must be managed with a focus on environmental sustainability. Since 2012, they have certified slaughter houses which are also used by the surrounding farmers. They have been running a children's farm since 2015 and in 2017 they opened a farm shop to sell meat directly.

Mrs. Bošinová is in charge of meat processing from slaughter to sale and for educational activities, while her husband takes care of the running of the farm, the production of wheat and the animals. Work on the farm is conducted almost exclusively by family members with seasonal help from friends and acquaintances. They only have one Ukrainian employee.

Bošina Organic Farm won the first place in the young farmer category in the Farmer of the Year 2012 competition. In 2013, they received the Broumov regional food certificate. In 2016, they received the Award for contribution to the development of environmental education and awareness.

THE INNOVATION IMPACT

The benefit of this type of farm can be seen on several levels. The full cycle of meat eco-production, including direct sales, makes it possible to maintain normal prices even for high-quality bio-meat. Educational activities aimed at kindergarten and primary school pupils increase awareness about agriculture among children and their parents. This is extremely necessary given the detachment of the majority of the rural population from agriculture.

USEFUL LINKS

<http://www.masozfarmy.cz/index-1.html>;

https://www.facebook.com/profile.php?id=1885972585054817&paipv=0&eav=Afbz7BKzcNZ4HUM1s7AB6XPHuciMWE9KF080k19NT0NQs0aGMPzU0EuF4D7Yo3Qrxwc&_rdrc;

<https://www.youtube.com/watch?v=6sf6gh3xtyU&t=54s>

Ekochov - Ecological cattle breeding



THE INNOVATION JOURNEY

Ekochov, s.r.o. is a small family company located in South Bohemia in the Bohemian Forest region. In terms of business, the company focuses on the breeding of beef cattle and the subsequent sale of beef in organic quality. The second direction is agritourism in the form of horse stables and rider training, as well as in the form of goat and sheep breeding.

The ranch was created from the area of the former agricultural cooperative. Since 1994, they have been gradually trying to rebuild it to meet the needs of modern cattle and horse breeding. A big advantage is enough space for cattle, horses, stables, feeding, outdoor stables, and parking for cars and trailers, whether for people or horses.

Currently, the company is run by Mrs. Terezie Daňková (50 years, divorced). Her goal is not only to stabilize the company and expand it in the future but mainly to do business in such a way that a person is proud of what he leaves behind. She is currently studying regional development at the University of South Bohemia.



Figure 1. The work on the ranch

The farm sells meat from the yard mainly based on personal contacts. With its business plans, the family builds both cultural and social life in the village and contributes to its overall development, e.g. by repairing local buildings and building grazing areas with a carefully thought-out plan in conjunction with the preservation and protection of the local landscape.

THE INNOVATION IMPACT

Small agricultural enterprises can maintain their competitiveness only if they come up with an original innovation and are based on the work of people who understand it as their mission. Currently, small entrepreneurs are burdened with the same bureaucracy and controls as large ones, which dispose with a special division for these activities. However, the main problem is the land ownership. The ranch operates on the pieces of land of 120 owners. It means that it is hardly possible to plan future activities. Property relations to land should be urgently resolved by law. Business is also limited by the danger of wolf packs. The balance between nature conservation and livestock farming should be addressed. Financial compensation is insufficient.

USEFUL LINKS

Web:

<https://www.impulsprokarieru.cz/firma/ekochovs-r-o>

YouTube:

<https://www.youtube.com/watch?v=T2fUFMaciD0>

THE INNOVATION JOURNEY

Ms. Hudská is the founder of the community garden. She originally operated an organic farm on a small piece of the Bohemian Paradise in the Jizera river valley, ensuring a balanced ratio of fields, meadows and pastures. She grew vegetables and fruit along with breeding goats, sheep, pigs, chickens, rabbits and keeping bees. The farm was shut down due to drought.



Figure 1. Planting trees

After the farm closure, Ms. Hudská founded the Zázemí Association. This operates under the “Community Supported Agriculture”. The project includes a community garden, community chicken farming, planting high-stemmed fruit trees, composting services, and an open forest. Community life is an integral part of these activities.

The association farms on 16 ha of forest and 1 ha of orchards. Its members plant trees on both public and private land. The community garden serves to grow vegetables for its own members and to develop community life. Ms. Hudská is the national coordinator of community chicken farming and her task is to expand and share knowledge about this

type of work. The work involves 5 female workers and around 300 occasional helpers. Three families with disabled children also work in the community. In one of the housing estates of the small town of Turnov, the community members have organized three composters that process organic waste. They plan to expand this activity to schools and gradually to the regional metropolis of Liberec. They also organize lectures and workshops for the public, and record podcasts.

They are supported by the Liberec Region. They cooperate with associations, especially with volunteer fire brigades, but also with ecologically focused NGOs: the Center for Ecological Education in Sedmihorky and the Institute of Experimental Botany of the Czech Academy of Sciences. Cooperation with municipalities is rather sporadic as well as with most farmers, who tend to not support such environmentally sustainable activities in the countryside.

THE INNOVATION IMPACT

A project of this sort important to increase biodiversity, retain water in the landscape, improve aesthetics and thereby increase sustainable tourism and ecological awareness. It also creates a sense of community and fosters care for disabled children. Unfortunately, these activities run into resistance from farmers who tend to think in the short term and under the influence of subsidies.

USEFUL LINKS

<https://www.ceskatelevize.cz/porady/109591355/0-nedej-se/421235100161005/>



THE INNOVATION JOURNEY

The farm raises lambs (Suffolk breed), calves and young cattle on 65 ha of land. It also produces bee honey, grains, spices and herbs, which can be picked during the period June – September. Among the herbs are chamomile, mint, lemon balm, plantain. Three horses also live in the farm.

The owner, MSc. Iva Zdražilová, Ph.D. is 45 years old. She graduated from the Mendel University in Brno, majoring in general agriculture and in applied and landscape ecology. Originally, the family did not want to go into agriculture, but her father got land in restitution and she started to enjoy it. She currently lives alone with three children and works with her 12-year-old son.

Since 2017, they have been operating a boarding house with a capacity of 14 apartments (60 beds) and 3 employees, including two from Ukraine.



Figure 1. M.Sc. Iva Zdražilová Ph.D., the farmer

Dr. Zdražilová is also the director of the branch of the German company ABC for the certification of organic agriculture since 2011. She has three permanent inspectors and several externs.

The condition is that they must be active farmers. Continuous education, especially in legislative issues, is a prerequisite. She organizes numerous trainings for farmers.

Farmers admire her because she has built her own business and her work has an important meaning. Moreover, working in a certification company represents a certainty of income with a profitable pension. It is also a source of inspiration for different agricultural activities and innovations, which are her interests and hobbies. Shortly, she wants to test natural preparations against weeds. She also wants to restore the former mill and transform it into as a small hydroelectric power station with a Francis turbine.

THE INNOVATION IMPACT

The organic farm Kyprůvmlýn is an example of a modern agricultural activity that farms ecologically with the use of scientific knowledge and innovation. It also shows the importance to diversify activities related to agriculture. It represents an alternative to conventional agriculture that should be supported concerning the sustainability of agriculture in the landscape.



Figure 2. Kyprůvmlýn

USEFUL LINKS

<https://www.kypruvmlyn.cz/?lang=en>



THE INNOVATION JOURNEY

The farm Na soutoku (On the confluence) is situated in Terezín – ČeskéKopisty in Northern Bohemia.

A Camphill-type community, it brings together local citizens and people with disabilities who are engaged in biodynamic agriculture, crafts and artistic activities in a family atmosphere. It operates as a system of community-supported agriculture. The organization association was founded in 2012.

Its aims are promotion and practice of bio-dynamic agriculture, support of self-sufficiency for social businesses and care for disabled people, development of handicraft and artwork. The business is run in an eco-friendly and sustainable way, prioritizing cooperation rather than competition, organizing educational and practical seminars for children, youth and adults. In the farm also live several animals including a cow and a horse.

Žaneta Lenhartová became interested in organic farming already in her years in high school, and while studying at university. She came to České Kopisty with her husband and son in 2009. She is now taking care of three more children. In the community house, she worked in the role of "parents of the house". She takes care of the bees and runs the camphill candle making workshop. She is responsible for the daily work of roommates with special needs.

The farm supplies about 350 member families in three regions. The store operates on the principle of regular deliveries of pre-ordered goods. Producers are assured of sales, customers are assured of delivery.

Currently, the farm employs 15 people. In the farm house, 5 adults, 4 children and 7 disabled people who are users of sheltered housing live. Part of the estate is a Bio-processing plant and a candle-making workshop with a registered product, the Camphill candle.

The estate organizes excursions and short-term internships. It is a practical workplace for the Higher Vocational School of Organic Agriculture in Prague.



Figure 1. The farm in ČeskéKopisty

THE INNOVATION IMPACT

The operation of the farm appropriately connects agriculture with the community and offers a dignified life to several disabled people. It ensures the direct purchase of organically grown products and eliminates unnecessary intermediary links so that its products can be competitive. Due to its social orientation, it needs support from municipalities and regions, which should mainly consist of political and financial support.

USEFUL LINKS

<https://www.svobodny-statek.cz/bio-dynamicke-zemedelstvi/information-in-english>

www.facebook.com/svobodnystateknasoutoku/

THE INNOVATION JOURNEY

The farm is situated in an attractive location in the village of Holičky, a part of the municipality of Morašice. It is a family managed agro-tourism farm located in a 300-year-old deer park at the foothills of the Iron Mountains, near the Seč water reservoir. The farm was established in 1993 in the area of the former racehorses training centre. It is also an ideal place for cyclists, families with children and tourists in general.

The farm offers accommodation with 18 beds in 8 rooms with private bathrooms, a common living room with a fireplace and an equipped kitchen. The rooms are decorated in Feng Shui style. The farm has its own bistro Slamák using local raw products mainly in bio-quality. The area includes a children's playground, a riding stable and other amenities.



Figure 1. The farm Slunečnýdvůr in Holičky

The farm is owned by M.Sc. Naďa Jandová, who created the business. She always dreamed of managing such place with her family and her main ambition is guest satisfaction. She places great emphasis on hygiene which includes treating spaces, surfaces and raw materials with ozone. Optimum wa-

ter management is ensured by a shower timer and by a giant tank for rainwater harvesting and treated wastewater used for irrigation.

The enterprise represents a specific type of agritourism, where the main activity is tourism, not agriculture. The business is a popular tourist attraction. The farm's rating on Google is 4.6.



Figure 2. A stable where guests can sleep in tents with undercoats (so-called glamping) represents an additional 20 beds.

THE INNOVATION IMPACT

Tourism represents an important alternative to agriculture, especially in areas on the inner periphery. In this case, the business offers a connection between agriculture and tourism, symbolizing the shift of activities from cultivating crops to offering different types of services.

Support from the state should not go directly to large enterprises, which should remain market-based, but to create favourable conditions for SMEs, including improving infrastructures and reducing bureaucratic duties.

USEFUL LINKS

<https://www.sunnyfarm.cz/>;

<https://www.facebook.com/farmaslunecnnydvur>

THE INNOVATION JOURNEY

Toulcůvdvůr is a multifunctional company. It focuses on ecological education for schools and teachers, besides including an organic shop. It organizes professional events, family-focused activities and interest groups. It has a pet farm designed to save the gene pool (Noah's Ark Project). It is also the training center of the Czech Hiporehabilitation Society. It employs disabled people, who are responsible for management and maintenance of its own premises, a healthy dining room, a ceramic workshop and gardening. The campus has been leased from the Capital City of Prague for 50 years.



Figure 1. The yard of Toulcůvdvůr

The president of the association is M.Sc. Lenka Skoupá since 2009. She is 52 and comes from the Bohemian-Moravian Highlands. She studied zoo-technics at the Czech University of Life Sciences. She is divorced and has two children. She has always been interested in small animals (rabbits, poultry, pigeons), to which she devotes her publishing and lecturing activities. So far, she has published three popular scientific books among others. The center consists of a complex of heritage-protected buildings and a 10-hectare natural area, including an orchard,

fields, meadows, a floodplain forest and a wetland. The activities are provided by the non-profit organization SRAZ, Botič, social enterprise ENVIRA (which meets the condition of substitute performance), and the ecological Kindergarten Semínko.

THE INNOVATION IMPACT

Toulcůvdvůr is a core part of ecological education. Even though it is located on the outskirts of Prague, it is oriented towards agricultural issues. Its Facebook page has 10,000 followers and its Google rating is 4.5.



Figure 2. M.Sc. Lenka Skoupá

The existence of an ecological education center that presents a real picture of the Czech countryside on the outskirts of the capital is extremely important. Residents of big cities and especially children have distorted ideas about the countryside and agriculture. The engagement of women in these activities is effective. It would be worth considering building similar facilities in other big cities.

USEFUL LINKS

<https://toulcuvdvur.cz>

YouTube: <https://www.youtube.com/watch?v=B5IN728O8ZU>

THE INNOVATION JOURNEY

ZD Unčovice is an agricultural cooperative situated in the fertile Upper-Morava lowland. It manages 6,100 ha of agricultural land. It focuses on cattle breeding and plant production, selling its own products. It also includes a real estate rental service, and a biogas station. It is also the school farm of the High School of Agriculture and Horticulture in Olomouc. The cooperative has 262 members and employs 178 workers (60 women, 118 men).

The cooperative focuses on innovative practices as it believes that agriculture ceased to be the bearer of the wealth of fertile regions and requires restructuring. The vision is to pass on the land in good condition to the descendants, thanks to the use of modern technology, GIS, the restriction of chemistry, and attention to animal welfare.



Figure 1. Agricultural cooperative Unčovice

Chairwoman of the board of directors M.Sc. Milada Měsíková-Rašková graduated from the Faculty of Business and Entrepreneurship of the University of Silesia in Opava, majoring in marketing and management. She is the president of the Olomouc Agrarian Chamber and the president of the Sugarcane Association of Moravia and Silesia. She is 45, married with two children. Her husband is the chief agronomist of the cooperative.

Several projects in the sphere of modernization of animal production, energy or the purchase of machinery are co-financed by the European Union. The cooperative keeps 7,000 pigs, and 840 dairy cows with a production of 8.5 million liters of milk per year. The electricity supplied to the network represents almost 8,000 MWh. Since the cooperative is economically stronger than the municipalities in which it operates, it also provides some services for the residents. It operates two gas stations, heats buildings in the village of Příkazy, and opened a meat shop.



Figure 2. Harvest in Unčovice

THE INNOVATION IMPACT

At the moment, in Czechia, there is a discussion about capping European subsidies for agriculture, with the idea that small farmers in particular behave favorably towards the land and participate in community life. However, in reality, the dividing line is not a question of the size of the company, but of whether the management of the company is anchored in the locality and region. In such a case, large enterprises can work based on precision agriculture and also positively influence the lives of local communities.

USEFUL LINKS

<https://www.zduncovice.cz/>

THE INNOVATION JOURNEY

Satu Kumpulainen runs the organic sheep farm family business Isokummunluomu Ltd. that also offers nature and animal assisted wellbeing services for people with learning disabilities and mental health rehabilitators.

She is a fifth-generation farmer on a farm that has exceptionally been passed on from mother to mother. Satu bought the farm from her parents in 2006, after they had expressed a will to pass on the farm, she was thinking what to do next in her life. Since then, there have been organic sheep on the farm, inspired by Satu's interest in handicrafts.



By chance, Satu heard a lecture about Green Care activities. She was immediately inspired to do the same on her farm, having experienced the healing power of nature and animals herself.

She has been offering Green Care work activities since 2013 in collaboration with a psychiatrist and psychologist, under the trade name Isokummun shee p farm. Aparamount part of the care is the presence and work with the farm animals in a rural environment. Isokummun Sheep Farm is the first company in Finland to receive the nature care quality label.

THE INNOVATION IMPACT

Satu has been actively involved in developing and promoting Green Care activities in Finland. In 2020, Satu's farm participated in a youth camp activities pilot funded by the Centre for Economic Development, Transport and the Environment, with great experiences.

Since then, Satu has continued to cooperate with one school class in Sievi municipality. In addition to offering wellbeing services, Satu's farm is a pioneer in organic farming. They produce organic meat and wool, offer services to maintain traditional rural biotopes and are passionate about preserving Indigenous Finnish sheep breeds. The farm was rewarded the Organic Entrepreneur of the Year and the Sievi Municipality's Agricultural Producer of the Year award in 2018.

USEFUL LINKS

[https://en.isokummun.com/;](https://en.isokummun.com/)
[https://www.facebook.com/people/Isokummun-Luomu-Oy/100064055651101/;](https://www.facebook.com/people/Isokummun-Luomu-Oy/100064055651101/)
<https://www.instagram.com/isokummun/>

THE INNOVATION JOURNEY

Yrttiaika (Herb Time) is a co-operative of five women, Soila Nyman, Aira Kurikka, Kati Haipus, Eija Marjomaa and Lea Keränen, who collaborate with the selling and marketing of herb products made of Finnish herbs. All the women and their individual enterprises are in rural Northern Ostrobothnia. Brought together through a shared passion in Finnish herbs and natural remedies, the women met while participating in an herb related training course, organized by Nouseva Rannikkoseutu development organization. After the women got to know each other, it was clear that something more would come out of the meeting.



They all recognized the potential in domestic herbs and wanted to spread herb knowledge. Each woman already had their own herb enterprise, and the benefits of collaboration were clear to all. Making herb products requires a lot of manual labor that takes time away from everything else, such as marketing of products. Forming a co-operation would help to share the workload and offer much needed support for everyone and five people would bring a diverse skillset into operations. The women participated in a competition for new

innovative rural practices and won. The co-operative was established in 2012. Each woman has kept their individual enterprise, where they either grow or pick wild herbs and make by hand various herb products (food products, natural cosmetics, animal products). Besides the online store, the products are sold through various retailers. In building a joint brand out of individual enterprises, trust and open communication between the members is key, and it has been one of Yrttiaika's strengths from the start.

THE INNOVATION IMPACT

Finding a new way of collaborating has made it possible for small herb enterprises to have a bigger selection of products with lower costs, and to share the workload and time spent, for example, on marketing their products. As a result, the women have a wider reach to spread the awareness regarding the possibilities of domestic herbs.



USEFUL LINKS

<https://www.yrttiaika.fi/en/>;
<https://ms-my.facebook.com/people/Osuuskunta-Yrttiaika/100051784010735/>;
<https://www.instagram.com/yrttiaika/>

THE INNOVATION JOURNEY

Noora Pakonen and Laura Huusko are two friends running the Palkintila (Palkki Farm) programme service company that offers a variety of novel farm experiences with real farm animals. Having always wanted a place where she would have space to keep animals, Noora's dream finally came true when she with her husband bought a historical farm from rural Tyrvävä in 2018. The Palkki farm was built in the 17th century and is protected as a built cultural heritage site.



While renovating the farm, Noora and her husband decided to put the empty buildings into use and start offering accommodation through Airbnb. Soon after, they got to know Laura, one of their neighbors. She and Noora clicked immediately. Both women were feeling unhappy with their daywork, and Laura was attracted by the idea of challenging herself with entrepreneurship again. An idea for having an escape room on the farm emerged, which later expanded to arranging children's birthday parties. As a mother herself, Noora knew how much work organizing birthdays could be and she wanted to offer children the same farm experiences she herself had as a child. Within six months after the initial idea, they established the Palkin

programme service company Ltd., in 2021. They were surprised by the huge amount of interest they were met with. Currently, the farm offers children's animal themed birthdays, pony and animal camps, hobby horse events, an escape room, as well as events organizing and accommodation. Noora and Laura run the business during the summer season, alongside children and their day jobs.

THE INNOVATION IMPACT

The two friends have come up with new ways of utilizing the historical farm buildings. Their activities employ one person during summer and offer summer jobs for youth, and they collaborate actively with other local businesses. In 2024, they will open a new escape room in Tyrvävä centre, in partnership with a local restaurant. The different activities and events organized by Noora and Laura also invigorate local social life.



USEFUL LINKS

<https://www.palkintila.fi/>;
<https://www.facebook.com/palkintila/>;
<https://www.instagram.com/palkintila/>

Palosaari reindeer and fishing farm



THE INNOVATION JOURNEY

Satu Palosaari is the CEO of the Palosaari reindeer and fishing farm Ltd., a family-run farm that offers experience tourism and nature wellbeing for small groups. Satu is a sixth-generation reindeer herder, living in the small Meskusvaara village, in Kuusamo.



Her father has had tourism as a subsidiary trade for agriculture since 1998. Satu has been involved in developing it from the beginning. Initially hesitant to take over the family farm, her opinion changed with the addition of tourism, in which she saw the potential to earn additional income. From the beginning, it was clear to her that she wanted to have only a small group of tourists at a time and be able to educate people about reindeer herding culture. A forward thinker, Satu was one of the first female herders and the first female to have reindeer tourism in her area. Even the training of her sleigh reindeer required new modes of action, since as a woman she couldn't rely on physical strength with reindeer like men.

As a result, anyone can now drive the reindeer sleighs. Satu has been a full-time entrepreneur after establishing the company in 2007. She develops the

tourism activities together with her husband, whose interest in fishing led them to include that in their services. Currently, they offer programs related to experiencing various activities on the reindeer farm, guided fishing tours, harvesting of berries, herbs, and mushrooms, as well as drum mediation and forest energy walks. As their newest addition, they offer accommodation on the reindeer farm.

THE INNOVATION IMPACT

Satu has developed new ways of earning income with reindeer husbandry, which supports the continuation of a traditional lifestyle and culture and spreads awareness of it. Environmental and cultural sustainability are driving values in her activities, which stem from a nature-based way of life. The farm offers internships and seasonal employment and promotes local products by selling them.



USEFUL LINKS

<https://palosaarenporotila.fi/>;
https://www.facebook.com/porotilareindeerfarm/?locale=fi_FL;
<https://www.instagram.com/reindeerandfishingranch/>



THE INNOVATION JOURNEY

Taimi Oinas-Panuma is an innovator behind the Poro-Panuma Reindeer Farm that offers tourism services based on reindeer herding culture, run by a seventh-generation reindeer herding family, in the village of Panuma, in Pudasjärvi.

Taimi moved to Panuma with her husband after he took over the family farm in the 1980s. At that time, the idea of having farm tourism was first joked about, but only after a house next to their estate land was left empty around 20 years ago, they started to offer it for accommodation. After that, an idea to combine reindeer activities with tourism emerged.



Being a social person, the idea of tourism appealed to Taimi, and it seemed like an opportunity to sell her handiwork, as well as to share knowledge of reindeer herding culture. Taimi took a course on female entrepreneurship organized by Oulu University of Applied Sciences in 2002, which helped her to develop the idea further.

Since 2002 the family has offered intimate visits to their farm, that consist of sleigh rides, feeding reindeer, home-made cooking, and stories about reindeer herding culture. While reindeer herding activities are the responsibility of the family's men, the whole family participates in the tourism business. Taimi is the main organizer, who develops new ideas with her husband, all the while keeping her job as a kindergarten teacher till retirement. Their son took over the family's reindeer husbandry in 2016, ensuring that the tradition continues to live on.

THE INNOVATION IMPACT

Through her endeavours, Taimi has developed new ways to keep a traditional way of life viable and to spread awareness about reindeer herding culture.

The family activities have influenced local attitudes towards reindeer tourism to become more positive. Some local herders have trained their own sleigh reindeer, and one has started to have farm visitors as well.

USEFUL LINKS

<https://www.poropanuma.com/>;
https://www.facebook.com/poropanuma/?locale=fi_FI;
<https://www.youtube.com/channel/UCwZXRNJ7QU-cSMObnNRXQw>;
<https://www.instagram.com/explore/locations/607399492792598/poro-panuma-reindeer-farm/>

THE INNOVATION JOURNEY

Sanna Kallunki is the founder of Ruska Laukka, a horse farm that offers finnhorse experiences, animal assisted therapy, and animal assisted social work and activities. Originally from Kuusamo, she moved back with her husband after buying the Ronivaara farm in 2006. During maternity leave, Sanna decided to leave her previous work in the IT field. She had a will to help people and from the beginning it was clear that it would be based on the wellbeing brought by horses and by a connectedness to a community. Sanna decided to turn her horse farm into an empowering community.



She established Ruska Laukka LP in 2006, while still working in her day job. She began by offering tourism services, after noticing a demand for riding experiences. Since 2013, Ruska Laukka has been offering solution-oriented neuropsychiatric coaching, rehabilitation services, and equine-assisted social education. Now a full-time entrepreneur, Sanna also does family social work, for which she has a separate space at the Kuusamo center.



Sanna is a pioneer in animal-assisted welfare services and in socially sustainable horse entrepreneurship. Ruska Laukka has become a nationally well-known business that has contributed to putting Kuusamo on the map. Ruska Laukka is generating permanent employment opportunities for the local people, as well as internships, work try-outs, and work rehabilitation. Sanna was among the first horse entrepreneurs to obtain various quality labels for her operations, such as the Sustainable Travel Finland label. In addition, Sanna is participating in the preservation of the indigenous Finnish horse breed, finnhorse, and of biodiversity. The farm estate has field and forest pastures, wetlands, and traditional biotope meadows that are managed by animal grazing.

USEFUL LINKS

<https://www.ruskalaukka.fi/en/>;
https://www.facebook.com/ruskalaukka/?locale=fi_FI;
<https://www.youtube.com/@RuskalaukkaFi>;
<https://www.ruskalaukka.fi/blogi/>;
<https://www.linkedin.com/company/ruskalaukka/>;
<https://www.instagram.com/ruskalaukka>

THE INNOVATION IMPACT

THE INNOVATION JOURNEY

Nina Bergström is the founder of Taikun Tähdet (Taikku's Stars) that offers empowering and rehabilitating animal assisted wellbeing services for both children and adults. Nina moved to Urjala with her husband almost 10 years ago after buying a horse farm there. By chance, Nina heard a lecture on MinD (empowering equine assisted activities) during a horse fair. Unsatisfied with her job at that time and being on maternity leave, she immediately knew this was what she wanted to do, as it would allow her to combine her will to help people with her passion for horses and animals in general. Nina took a year-long MinD training course and trained her horses for therapeutic work. She established her trade name in 2020. Behind her business name is her profound experience with a late mare horse, Tähti-Taikku, who, Nina feels, taught her the true power of having a strong connection with an animal.



Nina started by offering forest trips with horses for children with neuropsychiatric challenges. This led her to train in neuropsychiatric coaching. Over the years, both the number of different

animals on the farm and the variety of offered services grew. At present, Taikun Tähdet offers group activities aimed at "tired moms" and youth, neuropsychiatric coaching, as well as pony clubs, forest trips, horse camps, and mindful riding. All activities are based on being mindfully present with the farm's animals. Every now and then, she visits Tallipiha (Stable Yards), an outside shopping center in Tampere, with some of her horses and other animals, and offers activities to advertise her business.



THE INNOVATION IMPACT

Nina is offering new therapeutic and wellbeing services with encouraging results. She was the first to target tired mothers for empowering group activities. She has two people working as helpers and she cooperates with various horse wellbeing and mindful riding experts. In addition, Nina has established a Walking with horses -group, where local people can come spend time with her horses in exchange of occasional voluntary help.

USEFUL LINKS

<https://www.taikuntahdet.fi/>;
<https://m.facebook.com/people/Taikun-T%C3%A4hdet/100063692732880/>;
<https://www.instagram.com/taikuntahdet/?igshid=YmMyMTA2M2Y%3D>

THE INNOVATION JOURNEY

Mrs. Anu Turu was working in a salaried job for 20 years. She noticed that the image of animal husbandry in public media was biased and negative. Also, stereotypical thinking about only big business being good business was frustrating.



So, in 2012 she started as a sheep farmer in Mieheikkälä, Finland. Now she runs a farm with 100 ewes and 35 hectares of farmland. Sheep rearing is the main activity contributing to many other products and services: meat products, skins, wool, yarn, farm restaurant, knit garments and tourism.

All the activities are carried out by the farm family except for harvesting, slaughter and meat cutting. She has successfully created a transparent, sustainable and small-scale business.

THE INNOVATION IMPACT

Thanks to this business, many local sheep-based products and services are now available. This generates also some additional income for subcontractors. Transparency of the good care of animals is important and several groups of school children visit the farm to see the practice.

The dominant view that only big business can survive and flourish is problematic. To overcome this bias, more visibility should be given to small-scale businesses and activities in the countryside. Promotion of female entrepreneurship and innovation could be done through projects, education, field trips and learning networking.



USEFUL LINKS

<https://www.seppalanlammastila.fi>;
<https://www.facebook.com/seppalanlammastila>

THE INNOVATION JOURNEY

In 2015, Mrs. Sonja Jokiranta made a big move, bought a farm and moved into the countryside, which had been her long-term dream. She now lives in Tiistenjoki village in the municipality of Lapua, Finland. She has an artistic background (dance, music) and a master's degree in communications. She also has a vast background in social services, including speech therapy, dance therapy, clinical supervision, family psychotherapy and nursing. When she moved to the farm, she still gave dance lessons and only had a few horses. In 2017 she bought sheep. During the 2021-2022 period, she started to offer social services to have the public sector as a customer. The resources and facilities include an office and activity building (old warehouse), 8 horses, 26 sheep, 3 rabbits, 4 dogs, 1 tortoise and 2.5 hectares farmland.



With her team, she provides two types of services: recreation and welfare services, music and experiences ('Satumaa') as well as animal assisted therapy, music therapy, family therapy and psychotherapy ('Sarastus'). Her business has the status of a social enterprise.

THE INNOVATION IMPACT

Customers come mainly from the own province South Ostrobothnia. Both jobs and incomes have been created for the region. Dozens of families have also received aid and solutions for their problems through these activities. Sonja's courage and way of doing things have inspired many people, including colleagues. She was a forerunner in this kind of business and thus she is well known within the sector. FIDA gave her a reward as a 'benefactor of the year'.



Rural green care businesses are not supported as much as traditional farming businesses and should be given more attention. Private and public organisations dealing with rural businesses and service providers should have a more positive attitude toward female entrepreneurs and small businesses. Meeting other innovative people and peers is important to get new ideas and should be encouraged. Also, to become heard and seen is important for women innovators.

USEFUL LINKS

<https://www.luovuudenlakeus.com>,
<https://www.facebook.com/luovuudenlakeus.com1>



THE INNOVATION JOURNEY

In 2006, Mrs. Tiina Korhonen moved into Vesanto, Finland, and took over the farm and seed production business with her spouse upon succession. She soon started expanding and diversifying the seed production business.

A major investment was a new seed dryer running on local wood chips. Also, no-tillage farming technique was adopted. These supported the aim to reduce oil consumption and safeguard the environment.

Currently the business covers more than 300 hectares in seed production by the family and subcontractors. Further growth of the business is still an objective.



THE INNOVATION IMPACT

The business provides full livelihood for the family, one salaried worker and two seasonal workers. It also provides a profitable outlet for local farms that give up animal husbandry and start crop farming (otherwise they might have afforested farmland and given up

farming or produced bulk products). The business contributes to the local economy and vitality in many ways.

To promote female entrepreneurship, more education and extension could be targeted to women who are responsive to it. A move away from fossil economy should be promoted to save the environment – such is possible by supporting bioenergy investments and sustainable cultivation techniques.



USEFUL LINKS

<https://www.tilasiemen.fi/fi/pakkaamot/vesannon-siemen-oy-korhonen-erkki-ja-tiina>;
<https://www.facebook.com/vesannonsiemen>

Hohenlohe brother calf initiative



THE INNOVATION JOURNEY

Cow-fed calf rearing is a particular form of calf husbandry on dairy farms. The calves stay with the cows for three months and drink from the udder. They have space to move around and have social contact within the herd. Some calves remain on the farm after the cow-fed rearing period and become dairy cows themselves, the other calves go to slaughter. The meat of these calves is sold under a premium label.



The high animal welfare standard of cow-fed rearing as well as the short transportation time to the slaughterhouse are additional values of the product. Several farms associated with the 'Geifertshofen Village Dairy' apply this system. The additional costs for the farmers and the dairy are significant. To ensure economic viability is a major challenge for everyone involved in the value chain. The Geifertshofen cheese dairy has therefore set up a coordination office together with the Hohenlohe Bruderkalb Initiative and organic associations and the Schwäbisch Hall Producers' Association. Anja Frey is the value chain manager. She advises the farms on all issues related to cow-fed calf rearing,

organises training events, takes care of marketing and informs customers. Anja applied this system years ago when she was a farmer. She adjusted the management steadily during her own learning-by-doing period.

THE IMPACTS OF INNOVATION

Anja's approach was new in the area. She inspired other farmers, in particular female farmers. She became a multiplier for many years, even before the foundation of the regional marketing initiative.



She engaged in the alignment of forces of the different organisations and pushed forward for the development of the joint label. This label and the associated marketing activities ensure cost-covering market prices of male and female calves from organic dairy farming. Anja and her colleagues also engage with policymakers, and already provided advice for the development of a new support measure.

USEFUL LINKS

<https://dorfkaeserei.de/heumilch/bruderkalb>

<https://www.demeter-bw.de/bruderkalb-initiative-gewinnt>

Nature conservation with donkeys



THE INNOVATION JOURNEY

Biology graduate Astrid Fölling was frustrated with her previous job and has therefore been running a nature conservation farm with her husband in the area 'Mainz Sand' in south-west Germany for 12 years. The farm covers 80 hectares and is managed with 30 - 40 donkeys in four herds. Astrid does not own the land herself but is commissioned by the state of Rhineland-Palatinate to manage the land in a nature conservation-friendly manner. The use of donkeys to graze rough grassland is an innovative method for Germany, as grazing with small ruminants or extensive cattle is normally used.



However, scientific studies have shown that the grazing of woody plants, the keeping clear of sandy areas at rolling places and a number of other donkey behaviours have a positive effect on the establishment of rare plants and insects.

THE IMPACTS OF INNOVATION

Astrid is passionate about nature conservation with donkeys. She keeps registered '*German Donkeys*' of various sizes. Some of the donkeys come from France and belong to the '*Provence Donkey*' breed. These animals are robust, require less feed than cattle and are also better at keeping the sandy soil open than sheep. This has been of great service to nature conservation in the region and the preservation of this breed. The transfer of this method of extensive grassland utilisation from central and southern France to Germany was carried out together with a few other friendly nature conservation initiatives and represents pioneering work.



USEFUL LINKS

<https://www.bingen.de/stadt/news/alle-pressemitteilungen/d-treue-blicke-in-der-landschaftspflege-1290542772>;
[https://www.researchgate.net/publication/279530000_Esel_in_der_Landschaftspflege - Erfahrungen und Hinweise für die Beweidungspraxis](https://www.researchgate.net/publication/279530000_Esel_in_der_Landschaftspflege_-_Erfahrungen_und_Hinweise_fur_die_Beweidungspraxis)

THE INNOVATION JOURNEY

Belinda Schwarz-Wittigschlager from Hechelhof in the district of Neustadt/Aisch-Bad Windsheim set up a cheese dairy to make her farm economically viable and “fit for the next generation”, but the farm budget did not allow for an investment in a new branch. When searching for solutions, Belinda found a grant for small projects, which was not known by the farming community yet. She applied for funding and convinced the donors of her investment in artisanal cheese making. With this financial support from the Aurach Zenn Municipal Alliance, Belinda was able to set up a small farm cheese dairy in former slaughter rooms and an old vaulted cellar.



Years ago, Belinda and her husband had taken over the farm from her parents. When she was young, it was not common for girls to become farmers. It was a compromise to register for a traineeship in rural housekeeping. However, this education was advantageous for the

establishment of the cheese factory. Nowadays, the couple runs two farm businesses. Belinda oversees the artisan cheese making while her husband runs the arable farm.

THE IMPACTS OF INNOVATION

Since the farm has a farm shop with short opening hours, neighbours and other customers note the day and time to visit the Hechelhof. The Hechelhof cheese is an artisanal speciality and sells well as a present. Moreover, Belinda’s cheese shop developed quickly into a village meeting place. Furthermore, the storytelling about farming and food production is Belinda’s mission: “The consumers have very little knowledge about and recognition for local food production.” School and kindergarten teachers come with their groups to the farm. Belinda’s concept is not new. However, in this relatively remote rural area, no other farm had started to open its doors to sell premium products and at the same time, welcome customers to trigger dialogues and raise awareness for farmers’ challenges.

USEFUL LINKS

<https://hechelhof.de/KAeSEREI/>
<https://asg-goe.de/Preistraeger-2023.shtml#Hechelhof>

<https://www.frankens-mehrregion.de/kulinarik-genuss/lust-auf-regionales/direktvermarkter/hechelhof-schwarz-wittigschlag>



Agroinfluencer Maria Hoffmann



THE INNOVATION JOURNEY

Marie Hoffmann holds an MSc in Agricultural Economics and works as a manager on an arable and speciality crop farm in North Rhine-Westphalia in western Germany. This farm is currently being reorganised for regenerative agriculture and serves as a model farm for sustainable and innovative cultivation concepts, such as agroforestry and technology such as robotics. She is working with Soest University of Applied Sciences to develop recommendations for agri solar panels on the farm as part of a research project. Marie has also been a professional agricultural blogger and entrepreneur since 2021.



Marie organises panel discussions, facilitation, and workshops and makes

explanatory videos about agriculture and nature conservation.

THE IMPACTS OF INNOVATION

Marie is passionate about agriculture and loves to talk about it. She asked herself why the image of agriculture in Germany is so poor and came to the conclusion that many people no longer know enough about where their food comes from and what other opportunities agriculture offers for protecting species and the environment. She has one goal: she wants to make agriculture accessible to people. She therefore not only works with various image partners from the agricultural sector to make people curious about innovative production methods such as drone sowing or monitoring animal health data, but also engages in discussions with critics of agriculture. The original idea was to make explanatory videos for people without an agricultural background. Her opportunity lay in the possibilities and reach of social media. This enabled her to reach young people in particular and show the potential of agriculture.

USEFUL LINK

[https://www.marie-hoffmann-landwirtschaft.de/;](https://www.marie-hoffmann-landwirtschaft.de/)

https://www.instagram.com/marie_hfmn97/?hl=de



Oberfeld Farming Stock Corporation



THE INNOVATION JOURNEY

Dr Kathrin Goebel is co-founder and member of the Board of Directors of the Oberfeld Farming Stock Corporation (AG). The legal setup including linkages between different units owning and managing the Oberfeld estate represents an extraordinary (innovative) company structure in the farming context. Kathrin is a veterinary by training. Due to her knowledge, expertise and her close cooperation with veterinary scientists. She has introduced, tested and adjusted several new techniques to the dairy system.



Oberfeld Farming AG is a Demeter-certified organic farm. Houses and traditional farm facilities are owned by the Oberfeld Foundation, a civil society initiative founded in 2006. When the foundation and Kathrin and her partners took over the Oberfeld estate, they

transferred it into a certified Demeter organic farm with a bakery, milk processing and farm shop. Demeter farming includes social, animal welfare and ecological commitments. Oberfeld estate has a 'Learning Place Farm' (Lernort Bauernhof), which local schools and kindergartens visit regularly. Another branch is the socio-therapeutical 'Workhouse Oberfeld' for citizens with and without disabilities.

THE IMPACTS OF INNOVATION

Nowadays, as many people as a hundred years ago are working on Oberfeld Estate. The Oberfeld team does not only produce excellent organic food sold in the farm shop and its café, it also provides an idyllic place in the periphery of the Darmstadt Science City. Hofgut Oberfeld is a part of Darmstadt's identity. Citizens as well as politicians of all colours feel attached to it and visit the farm with visitors. Since the Oberfeld farming team is a frontrunner in applying innovative solutions in animal husbandry and cropping, other farmers, farm advisors and other private or public services benefit from such novelties piloted and maintained for several years in practice.

USEFUL LINKS

<https://www.landwirtschaft-oberfeld.de/>;
<https://www.stiftung-oberfeld.de/die-stiftung.html>;
<https://www.bio-mit-gesicht.de/b1912.html>



Bio Watzkendorf plant nursery



THE INNOVATION JOURNEY

Sabine Kabath is a pioneer of organic farming and a person of conviction. She is an excellent networker with strong connections within and beyond the region. She is vice president of the organic growers' association "Bioland e.V.".



Her outstanding career pathway and personal engagement represents a series of organizational and social innovations. Sabine grew up in East Berlin in the Eastern part of Germany (German Democratic Republic, GDR). Since she was young, she was determined to work with plants and grow vegetables but she was not able to realise her dream. In the early 1990s, the system changed (German reunification). "I haven't given it much thought, I took the opportunity". With partners, she took over Watzkendorf plant nursery in Blankensee, Mecklenburg-Western Pomerania. The transition from a socialist type of farm embedded in the associated village to a competitive vegetable producer was challenging. Since the 1990s, Sabine is the managing partner of the Bioland farm Watzkendorf. She has been a

member of the Bioland Presidium since 2011, as well as a board member of the Bioland Regional Association East since 2009.

THE IMPACTS OF INNOVATION

The innovative way of leading the farm through an encompassing transition process since the 1990s had in impact on not only the farm itself but also the village around it. The German reunification and the very fast transition from a planned economy to a market economy within one country were unique compared to other transition countries in Middle and Eastern Europe. Western European societies often overlook the substantial effect the system change had on rural and urban areas. Sabine's positive attitude, skills and competencies, as well as her inspiring way of problem-solving, have affected not only individuals and the local community but also organizational structures and organic farming-related politics.



USEFUL LINKS

<https://bio-watzkendorf.de/>;
<https://www.bio-gemuese-brandenburg.de/portraits/sabine-kabath/>

THE INNOVATION JOURNEY

Linda Kelly runs an organic farm with her husband and parents in Baden-Württemberg in southern Germany. They keep beef cattle, cultivate around 300 hectares of grassland and arable land with 16 different crops and produce renewable energy. Linda's innovation is the production and direct marketing of sweet lupins. As a legume, sweet lupins fit very well into crop rotation and are also known as "domestic soya". Linda processes them into dry products such as lupin coffee, seasoning, flour, meal and flakes. Sweet lupins are also used to make spirits and cosmetic products from lupin oil. She markets her products in her own small farm shop, via her online shop and other resellers and processors. As far as possible, all by-products are utilised on the farm.



THE IMPACTS OF INNOVATION

Linda runs the farm according to Bioland standard and is therefore ecologically sustainable. She is committed to the

circular economy. Her initiative has enabled her to create two jobs on the farm and her project contributes to biodiversity and nature conservation. Farm nutrient cycles have been closed. In times of declining meat consumption, the demand for pulses to cover protein requirements is increasing. This contributes to a healthy diet for people. She was honoured for her achievements with the "Entrepreneur of the Year 2018" award from the German Rural Women's Association, the CERES Award 2019, and received various other awards.



USEFUL LINKS

[https://www.biolandhof-kelly.de/;](https://www.biolandhof-kelly.de/)

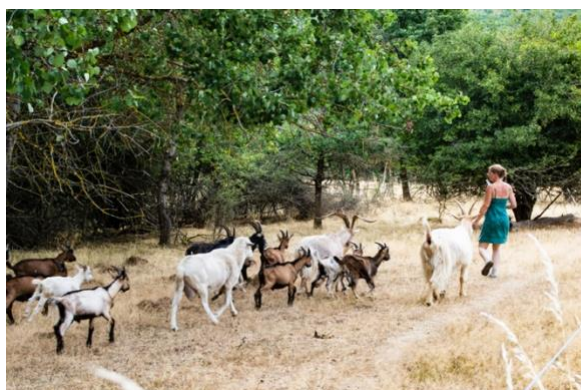
<https://www.rapunzel.de/warenkunde-suesslupine.html;>

<https://www.aok.de/pk/magazin/ernaehrung/gesunde-ernaehrung/lupinen-so-gesund-ist-der-pflanzliche-eiweisslieferant/>



THE INNOVATION JOURNEY

Together with her husband, Claudia Smolka runs a dairy goat farm with 45 dairy goats and a small cheese dairy in Hesse in the centre of Germany. She not only rears and markets the female lambs, but also the males. In addition to the goats there is a small arable farm with various crops and 10 hectares of grassland in the nature reserve, where the goat offspring are kept with a few sheep and 2 suckler cows and their offspring.



ready for slaughter and markets the meat instead of selling them to specialised fatteners like other goat farmers. As a small milk producer, she also has the opportunity to market male animals. She does not receive any institutional support but has joined forces with other small milk producers and is supported by the regional food council. She creates transparency in production, understanding among consumers and influences purchasing decisions. In this way, she also takes responsibility for the consumer.



THE IMPACTS OF INNOVATION

Sustainable farming is very important to Claudia, that is why she runs her farm according to Bioland guidelines. The young animals are reared with their mothers, which means that they drink milk from their mothers until they are old enough to feed themselves. Only the surplus milk goes to the cheese dairy. What is unusual is that she not only rears the female offspring, but also fattens the male lambs until they are

USEFUL LINKS

<https://ernaehrungsrat-marburg.de/milch-und-fleisch-gehoeren-zusammen/>;

<https://ernaehrungsrat-frankfurt.de/fuer-einen-wuerdigen-umgang-mit-bruderhahn-und-boecklein/>;

<https://landservice.hessen.de/angebote-auf-dem-land/seelbacher-ziegenkaeserei>



Dairy sheep farm Pimpinelle



THE INNOVATION JOURNEY

Amelie and Franziska Wetzlar run a dairy sheep farm with their own cheese making and direct marketing in a small village near Berlin in Brandenburg in eastern Germany. Although neither of them has a farming background, they have long wanted to run their own farm with dairy sheep and their own processing facilities. They currently keep 60 dairy sheep of the very robust breed Krainer Steinschaf that originally come from Slovenia on 16 hectares of grassland, as well as rams and offspring,. In 2010, they bought a small farm, which they expanded in 2019 to include a sheep barn.



THE IMPACTS OF INNOVATION

The farm is managed by the two women according to the standards of organic farming. As livestock farmers, ecological understanding and species-appropriate husbandry are particularly important to them. The sheep spend most of the year grazing day and night. In addition, the lambs are reared with their mothers, that means the lambs

receive milk from their mothers until they are old enough to eat themselves. They aim to keep transport routes as short as possible and to operate a circular system. In addition to their delicious cheese, yoghurt and quark, which are very popular in the region, they also market lamb, sausages and wool from their own production. Their extensive grassland management has attracted storks back to the region. With their idea of setting up this business in a village of 80 people in a very rural area, they are considered pioneers in the region and encourage other women.



USEFUL LINKS

<https://milchschaafhof-pimpinelle.uripress.de/>;

<https://www.milchhandwerk.info/>;

<https://www.g-e-h.de/rassebeschreibungen/72-rassebeschreibungen-schafe/99-krainer-steinschaf>

THE INNOVATION JOURNEY

Dörte Wolfgramm-Stühmeyer has a degree in agroecology and runs a 330-hectare farm on 4 sites near Greifswald in Mecklenburg-Western Pomerania in north-east Germany. She keeps 50 suckler cows with offspring, 90 ewes, 12 fattening pigs and 70 laying hens on 280 ha of grassland. The animals are slaughtered by a local butcher, then processed on the farm and sold in the farm shop. She also trained as a farm educator and uses this to explain to people where the products they eat come from. She took over the farm in 2016 from her father, who founded it in 1990.



THE IMPACTS OF INNOVATION

Dörte's farm is versatile. She manages her farm organically in accordance with Biopark standards. Cattle and sheep are kept on pasture in a species-appropriate manner almost all year round, while the pigs are kept as straw pigs. In addition to animal husbandry and direct

marketing, she undertakes many voluntary measures to promote biodiversity on her land. She does this in particular with a WWF programme.

She has planted a meadow orchard and offers flower sponsorships. At the same time, she wants to bring people closer to agriculture by linking her products to stories. It is not only important to her to farm sustainably, but also to raise awareness of agricultural production and the amount of labour involved. Minimising food waste is an important concern for her. Dörte brings added value to her structurally weak region: she has created two jobs and markets the products of 10 small farms from her region. She was honoured with the "Best Organic from Mecklenburg-Vorpommern" award for her production.



USEFUL LINKS

<https://lwb-wolfgramm.de/>;
<https://www.biopark.de/>;
<https://www.landwirtschaft-artenvielfalt.de/>



Highbank Orchards

THE INNOVATION JOURNEY



Located in County Kilkenny, Julie Calder Potts works alongside her husband and

family to run Highbank Orchards. Here they produce apple juice, apple syrup, apple cider vinegars and much more. Steeped in history, Highbank Farm is an organic farm, which prides itself on creating an enterprise that is ecologically and economically viable. Although a family farm with a long tradition of high-quality food production, it was not until the mid-1990s that Julie and her husband embraced an organic farming system, which included environmental husbandry.

Over several years, Julie and her family have invested their efforts in restoring the farm's timeless elements, such as the enchanting arched stone courtyard, the historic mill, and the rustic stables. In addition to these meticulous renovations, Julie has crafted two serene lakes, enveloped the farm in lush forestry, and meticulously planted pollinator-friendly flowers, fostering an environment that welcomes solitary bees and various other beneficial insects.

THE INNOVATION IMPACT

Over the course of several years, Julie has expanded her line of Apple Juice

products to include a diverse range, now featuring non-alcoholic Driver's Cider, alongside Highbank Proper Cider and Medieval Cider. All these refined offerings, and many more, are meticulously crafted on-site in their quaint distillery. Julie and her family are fervently committed to championing small-scale Irish farmers and producers. Throughout the year, they orchestrate an array of engaging activities including farm walks, insightful talks, vibrant events, and enriching workshops, inviting everyone to experience the beauty and vitality of agricultural life firsthand.

Julie and her family have received numerous awards and accolades for their produce, environmental work and sustainability ethos. These include a Farming for Nature Award, National Organics Chefs Choice Award, Euro-toques Ireland Food Award and Food Producer of the Year Award, to name but some.

USEFUL LINKS

<https://highbankorchards.com/>



Galway Wool



THE INNOVATION JOURNEY



Blátnaid Gallagher, an Organic Wool, Lamb Producer, and Ambassador for Farming for Nature, runs several enterprises at 'Murray Meadows', a farm she inherited in 2016. At

the centre of her enterprise is the burning desire to tell the true story of Native Irish Galway Wool and its benefits to sustainable lifestyle. Blátnaid runs a flock of Pure Bred Registered Native Irish Galway Sheep. The Galway Sheep is an endangered species farm animal with less than 1500 breeding females left in the world. In 2019, after achieving an MSc in Agricultural Innovation and Entrepreneurship, Blátnaid became increasingly aware of the lack of appreciation for Native Irish Wool and set up www.galwaywool.ie as a (first of its kind) virtual wool producers Co-op.

The primary objectives of this Co-op are to: counteract the declining population of the Galway purebred sheep; re-establish the cultural integrity of Irish Wool; and restore consistent routes to market for native Irish Galway wool. This is achieved by exchanging knowledge and best practices of what can be created with wool (rugs, clothes etc.) and providing educational and peer support for wool growers who are new or existing owners of Galway Sheep.

THE INNOVATION IMPACT

Operated through its LEADER-funded website, this pioneering cooperative has evolved into a collective of 70 pedigree-registered Galway Sheep flocks across Ireland, encompassing a range of sizes from five to 80 sheep. The cooperative's strategic focus is on establishing unique market opportunities for Galway Wool both domestically and internationally, with a commitment to promoting Galway Wool as a sustainable and locally grown bio-fibre.



Working with fleece from Pure Bred registered Galway ensures that partners are creating products with a fibre grown on Irish Soil and traceability right back to Irish family farms. This strong white bio-fibre is a suitable base material for an array of home interiors and lifestyle products. The Galway has recently been included in both EU Agri Environmental Schemes issued in the last decade (GLAS and ACRES) which has encouraged farmers once again to value this Native Breed and her valuable dual-purpose contribution to the Irish Agriculture Landscape.

USEFUL LINKS

<https://galwaywool.ie/blatnaid-gallagher/>

THE INNOVATION JOURNEY

Eadaoin O'Connell is a qualified social care worker, Equine Assisted Learning facilitator and life coach. From her own personal experiences and the comfort and peace she felt in the presence of horses on her family farm, she was inspired to establish Siúl Liom to support other people with big emotions. She founded Siúl Liom Equine Learning Centre located in Mungret, County Limerick and offers Equine Assisted Learning sessions to people of all ages.



Equine Assisted Learning involves

spending time with horses in various exploratory activities to promote self-discovery and self-awareness. This practice aims to enhance social and emotional skills. It does not include horse riding and requires no prior horse experience. A safe environment for learning and development is established through the partnership between the client, the horse, and the facilitator.

THE INNOVATION IMPACT



Since 2023, the centre has supported individuals within the homeless sector, disability sector, children, and young people from various communities.

Sessions are tailored to the needs of participants. Specialised support is offered in the following areas: Self-management, Self-awareness, Problem solving skills, Communication skills, Personal and Professional goal setting, Stress management, Relationship skills, Self-confidence, Teamwork and Leadership skills.

In addition to running the centre, Eadaoin attends different events to build awareness of this practice and the centre. Eadaoin believes that:

"Siúl Liom is about offering people a space to find their voice. A space for those voices to be nurtured and a space for our incredible equine partners to walk with them through those big emotions" (Eadaoin O'Connell, cited in equitas.ie, 2024).

USEFUL LINKS:

<https://www.equitas.ie/follow-your-fire/>



THE INNOVATION JOURNEY



The goal of Cloughan Farm Cookery School is to give people the opportunity to reconnect with food and the land. Growing

up, Fiona baked and cooked out on the farm with her parents learning the value of locally sourced homegrown produce, a connection she feels is lost in current society. Influenced by her upbringing and family practices, Fiona has turned this tradition into a career with her cookery school.

Fiona and her husband, Michael, have a working farm and the cookery school is located beside their home, where Fiona provides classes and hands-on demonstrations. The farm, the garden and orchard provide fresh seasonal vegetables, meat and eggs to be used in the school. Fiona's mission is:

"To focus on seasonality and reconnecting people with where the food is coming from, and how it's produced and of course, sustainability is our key mission" (Fiona Egan, Longford Leader).

THE INNOVATION IMPACT

Fiona's passion for the slow-food movement and seasonal produce led her

to develop the Cookery School working directly from the farm's kitchen. Fiona has developed classes and workshops and is invited to provide cookery demonstrations at different events across the country. Classes are tailored to group or private sessions.

Recipes and ingredients are provided and alongside cooking skills, Fiona educates



on food seasonality and connection to local sustainability. The classes finish with the group coming together to enjoy the finished dishes. Fiona connects with other related entrepreneurs to provide combined workshops. Participants engage in other practices such as fruit and vegetable growing and then engage in hands-on cookery demonstrations. To make the connection between land and food Fiona has developed farm tours on their farm.

Cloughan Cookery School has been awarded several awards. At local level it was awarded Local Food Champion Award and at national level it received the Best Cookery School Award from the Irish Restaurants Association. These awards serve to spotlight the Cookery School but also showcases and raises the profile of the local area.

USEFUL LINKS

<https://fionaegan.com/>

THE INNOVATION JOURNEY



After 15 years of working as a nurse abroad, Teresa returned home with a vision to establish her own business on

her family farm in Kylemore Abbey, Loughrea, Co. Galway. The Roche family had been dairy farming since the 1960s, gradually expanding their herd to 100 Pedigree Holstein British Friesians.

Teresa saw an opportunity to add value to their dairy enterprise by creating her own farmhouse cheese. To gain the necessary knowledge and expertise, she pursued various business and cheese-making courses in the UK and Switzerland. In 2017, she realised her dream by constructing a cheese manufacturing unit on the farm. To support the setup of the on-farm cheese manufacturing facility, Teresa successfully applied for LEADER funding under the Rural Development Programme (RDP) 2014-2020, which is co-funded by the EU. The funds were utilised to acquire essential items for the cheese production process.

THE INNOVATION IMPACT

The farm has diversified by developing a cheese manufacturing facility to create alternative income on the farm. The dairy herd is comprised of all pedigree Holstein

Friesians that are grass-fed and considered a “closed herd.” That closed herd produces Kylemore Farmhouse Cheese, a unique, premium Irish farmhouse cheese produced directly on the farm. The whole process from milk production to the maturing, cutting, packaging and delivery of the product all starts and finishes on the farm.

The cheeses are handmade, fully traceable and sustainable from farm to fork and is Bord Bia – Origin Green approved. An onsite farm shop and an online store sells the farm products alongside other local products. To capitalise further on this diversification and to spread awareness of sustainable food production, educational farm and cheese tours are provided. Kylemore farmhouse cheese has won numerous awards including the national Sustainable Rural Innovation Award 2022. Teresa is working towards implementing new tools and technology to increase her farm's efficiency and sustainability measures.

USEFUL LINKS

www.kylemorefarmhousecheese.com



Elly Bay Farm

THE INNOVATION JOURNEY



Angela Healy Irwin, a native of Erris, County Mayo, has a passion for sustainable food production and environmental regeneration. Over the past decade, Angela has focused intensely on organic agriculture and aquaculture and has become a certified organic farmer. She now runs Elly Bay Organic Farm from Clogher Co. Mayo. This passion has resulted in an organic farm that produces organic eggs, seasonal vegetables and meat. She, alongside her husband, also harvest seaweed and have established the brand 'Dúlra Seaweed'.

THE INNOVATION IMPACT

A sustainable seaweed harvesting method is employed to grow, harvest and process the seaweed into seaweed flakes. They produce Winged Kelp and Sugar Kelp flakes. The seaweed is line-grown in Blacksod Bay, Mayo, a special area of conservation and the ropes are lined with locally sourced species to ensure no negative impact on sensitive habitats. Seaweed has an amazing carbon dioxide uptake and storage

capacity; kelp takes in 5 times more carbon than most land-based plants.



Angela established a farm shop, to sell their farm produce along with offerings of tea and coffee and homemade baked treats. An online store allows a wider market reach. Dúlra Seaweed is also stocked in other local shops. Through the Farm Shop, Angela collaborates with other local food producers including fishers and bakers. She uses the Farm's Facebook page to publish stock availability and upcoming butchery plans of lamb and beef boxes. Through this, she engages with the wider public, generates orders and promotes the values of organic farming. When the farm shop is not open, Angela offers produce through an 'honesty box' system - making sustainable and organic produce accessible to all. Angela believes:

"Small farms and nature are in a symbiotic relationship. Not farming for nature or against it, just with it" (Angela Healy Irwin).

USEFUL LINKS

<https://www.dulra.ie/>

Wexford Lavender Farm

THE INNOVATION JOURNEY



Moira Hart is the owner and operator of Wexford Lavender Farm, located near Gorey in County Wexford, Ireland.

A family dairy farm since 1950, in 2013 the focus for Wexford Lavender Farm changed to mostly arable with lavender, beet and barley being grown.

The farm developed from Moira's interest in flowers and gardening and the realisation that there were no commercial lavender farms in Ireland. She started out with two acres and now not only is it Ireland's first dedicated lavender farm but also a bustling tourist attraction boasting a coffee shop, maze, woodland walk, quad barrel train ride, outdoor snakes and ladders, artists attic, as well as four acres of purple hued lavender fields.

THE INNOVATION IMPACT

The farm consists of four acres of several varieties and colours of lavender. It is registered with the Organic Trust Ireland and is committed to sustainability. No artificial fertilisers, herbicides or

pesticides are used on the lavender and, as well over 7,000 lavender plants, thousands of bees and insect-friendly flowers, herbs, shrubs and trees have been planted around the farm. A local beekeeper keeps hives on the farm. To respond to the impact of climate change old tyres are used to replant lavender plants which aids drainage.



Moira distils lavender oils and converts them into a unique product range of oils,

soaps and candles. These are sold in the farm gift shop as well as supplying other local shops. Several varieties of lavender plants are also available for purchase. Moira has instigated collaboration with local artisans for art and crafts that reflect Ireland's rich crafting heritage. By diversifying activities on the farm, Moira has increased sales, tourism visitor numbers and has generated additional income streams and local employment opportunities.

Moira also holds age friendly workshops for adults and children on the farm to further engage them in the values of sustainable organic farming and the uses of lavender in everyday life.

USEFUL LINKS

<https://wexfordlavenderfarm.com/>

Honestly Farm Kitchens

THE INNOVATION JOURNEY



Justina Gavin, alongside her husband Justin, are the proud owners and operators of Honestly Farm Kitchen and are also

the proprietors of Drumanilra Organic Farm. This allows a farm to fork process which is core to the ethos of the Honestly Farm Kitchen. In 2012, the family relocated to Ireland from the UK to their ancestral farm, which has a rich history spanning over 200 years. The return was motivated from a desire to sustain their family on home grown produce and to establish a self-reliant and environmentally responsible source of income for the farm by directly supplying produce to their customers.

The overall mission is to reconnect people with local, organic, and sustainable foods. Since 2012, the business has grown and diversified into a thriving business with three Honestly Farm Kitchens across the Western Region.

THE INNOVATION IMPACT

As a first step to selling direct to customers, a “Shepherd’s Hut” style catering trailer was purchased and Justina toured shows and festivals around Ireland, selling Drumanilra Farm

Dexter Burgers. Their innovation won a McKenna Food Guide Award. In 2015, a couple of months subsequent to achieving their full organic status from the Organic Trust, the Sheperd’s Hut became the first Drumanilra Farm Kitchen. Over the following fifteen months, an old house in the garden plot was renovated which added an in-door dining room, and a small farm shop. To expand the business, two further premises were purchased in prime locations and Honestly Farm Kitchens were established. All premises sell produce from Drumanilra Organic Farm, along with produce from other local and organic producers. The Honestly Farm Kitchen in Carrick-on-Shannon offers the first ever organic drive-through. An online shop offers a diversity of produce and extends the customer base of the business.

The Honestly Kitchen has received many awards including, Restaurant Association of Ireland Awards for Customer Services; Best “Free-From Menu; Best Emerging Irish Cuisine and Local Food Heroes for the Connacht region; and the Georgina Campbell’s Natural Food Award. The future plan is to develop a microbrewery and teaching kitchen while striving to *“reconnect people with wholesome, organic, sustainable food, rooted in place”*.

USEFUL LINKS

<https://honestlykitchen.ie/>

THE INNOVATION JOURNEY



Margaret Farrelly began selling free range eggs in the early 1980's to supplement income from her husband's farm on the Cavan-Meath border. After the arrival of the first 150 hens, Margaret developed a deep affection for them and drew great satisfaction from caring for them and caring for the land.

Margaret's Eggs grew into a family company and fifteen generations of family have produced eggs on their farm, supplying firstly neighbours and later local shops. The company is a passionate family of farmers who live and breathe what they do. Margaret says: *"It is the joy and satisfaction we feel from looking after our hens and caring for the land is what inspires us"*.

THE INNOVATION IMPACT

Margaret started with 150 hens and supplied a nearby buyer who took care of the grading and packaging of the eggs. After a few months of selling eggs through the buyer, Margaret discovered that it would be more lucrative to handle the grading, packaging, and selling of the eggs themselves on their own farm. From

an initial 150 hens the flock grew to 160,000 hens, working with several dozen farmers across the region and packaging close to 50 million eggs a year. To grow the customer base, Margaret engaged in building a wholesome branding model around eggs as she felt that "Eggs had no personality". From this process she launched a new brand, **Margaret's**, and added new products to the market, including an innovative product, pasteurised liquid egg products, for cooking and baking. The business now employs 32 people. The fresh eggs are sold straight from the family farm and through major national retailers and is one of the most easily identifiable trademarks on the Irish shop shelf.



Over 34 years in business, Margaret is proud of how the business has grown and evolved over the years, after capitalising on an opportunity to grow the free-range business after battery cages were banned by the EU from January 2012, forcing egg producers to instead switch to an enriched colony system.

USEFUL LINKS

<https://www.facebook.com/margaretsfree/>

Hastings Influencers

THE INNOVATION JOURNEY



Miriam and Rachel Hastings have been assisting on their family farm since their childhood and continue to

do so to this day. The sisters, who both work in education, were born and raised on a sheep and suckler farm in Ballyforan on the Galway/ Roscommon border. During the Covid-19 pandemic they witnessed their own parents and every other farmer continue with their work despite other professions ceasing to operate. To raise awareness of the foundational need of farming to sustain society and to spotlight the positives of farming as a career, the Hastings sisters established their Instagram account on March 26th, 2020. Despite their full-time teaching commitments, the two sisters aim to create awareness of farming life and impart knowledge and inspire others about various aspects of farming through their social media platform. Miriam and Rachel Hastings' Instagram account has 17,600 as of March 2024.

THE INNOVATION IMPACT

'Keeping up with the Hastings' showcases the diverse aspects of farming life. As influencers in the farming community, they share their experiences and insights on agricultural life. They

create content for their Instagram account to provide insight into daily farm operations, provide tips on sustainable farming practices, showcase new innovations and new technologies and highlight the challenges and rewards of farming. This activity has turned their platform into a hub for building networks, knowledge exchange, and facilitating mutual learning opportunities for the Hastings sisters and their followers. Their platform also sees interaction from people outside traditional agricultural sectors and across a range of age groups helping to bridge the gap between consumers and producers.



The sisters consciously use their platform to promote women in agriculture

and have been guest speakers at numerous events. They are aware that their social media presence (and as working farmers) generates greater acceptance of women in agricultural practices.

USEFUL LINKS

https://www.instagram.com/keeping_up_with_the_hastings?utm_source=ig_web_button_share_sheet&igsh=ZDNlZDc0MzIxNw==

THE INNOVATION JOURNEY



Located in county Cavan, in 2016 Sandra Coote established

'Crafts of Ireland' on the family farm. Both farming and crafting were at the centre of Sandra's childhood. Growing up on a farm, her parents and grandparents used crafting and wider skilled techniques in a pragmatic way as part of their way of life. After being offered a severance package from her job, Sandra chose to follow her ambition and start her own business.

'Crafts of Ireland' brings farming, crafting, education and tourism together. The business harnesses Sandra's creative skills in crafts and cooking and focuses on preserving Ireland's traditional heritage crafts. This ranges from wool spinning to butter churning, but also brings modern crafts such as needle felting into the workshops held on the farm. The farm now has a purpose-built studio where Sandra delivers a growing list of workshops. Heritage, tradition and culture also extends to the equipment used by Crafts of Ireland where antique

spinning wheels and knitting machines are also found in Sandra's studio.

THE INNOVATION IMPACT



'Crafts of Ireland' is a diverse business that brings farm and cultural innovation together. This is about tangible craft products made with farm

products as raw materials, but also intangible knowledge and passing skills on to others through workshops and books. The business plays an important part in preserving Ireland's rich craft heritage.

Crafts of Ireland also demonstrates how a small farm can become not only a thriving rural business, but be a place linked to cultural value and preservation. Being small and diverse is also a key part of the 'Crafts of Ireland' innovation. Sandra's small flock of rare breed sheep provide wool, a small patch of flax is used to produce linen thread and plant dyes sourcing local raw materials are used to dye the wool.

USEFUL LINKS

<https://www.craftsofireland.ie/>



Achill Mountain Lamb

THE INNOVATION JOURNEY



Born on Achill Island, Martina Calvey has stayed close to her roots and has

always been involved in the family farm and business 'Achill Mountain Lamb'. The farm has existed for generations and produces lamb on commons land from the Mayo Blackface Mountain Sheep breed. The business was originally established in 1962 by Martina's father, Martin. He spotted a market opportunity to provide lamb to visitors to Achill looking for a local, quality, authentic product. Today, the business operates a farm shop as well as farm tours and supplies lamb to the Irish and UK market.

Martina returned to devote her career to Achill Mountain Lamb after moving away from her work in the teaching profession. She comes from an enterprising family and has gained inspiration and empowerment from role models in her family. Martina's role in the business focuses on marketing. With growing competition in the market, it was



important to build the strength of the brand.

THE INNOVATION IMPACT

Achill Mountain Lamb can be described as a cultural innovation. It is an important part of Ireland's food culture as an award-winning high quality, artisan product. It is embedded with terroir where the taste is influenced by local conditions. Lambs are free to roam in the common lands and graze the coastal environment that provides a diet including coastal grasses and mountain heather. Nature-based farming is also at the core of Achill Mountain Lamb. It is also a certified organic product.

Martina has successfully repositioned the Achill Mountain Lamb brand, built a strong national profile, networks and digital presence. This has upscaled the business and created a product that is in high demand. There is also spin-off value to the wider farming community. Achill Mountain Lamb also source lamb locally from other local producers. Achill Mountain Lamb also has its own local abattoir and uses traditional butchery methods. Local processing and packaging also ensure further economic value is captured for the local market.

USEFUL LINKS

<https://calveysachillmountainlamb.ie/>



Fable Tours



THE INNOVATION JOURNEY



Fable Tours is an award-winning food tourism business

providing small and bespoke tours from one to five days in length focused along the west coast of Ireland's Wild Atlantic Way. The business targets a mix of clients from broad group tours to those tailored to families, corporate clients, and solo travellers. Slow Food and sustainable farming inspire the business and are at the heart of its ethos.

Established by Margaret Leahy, she was herself an organic farmer and Fáilte Ireland approved Tour Guide. Margaret established Fable Tours inspired by the range and quality of small-scale, locally produced food and her desire to showcase this to visitors of the area. The business is built on her embeddedness in the Irish and international food scene, which has been informed by her previous role as Chairperson of the Irish Organic Farmers & Growers Assoc. and the Food Safety Authority of Ireland. She is currently a member of Slow Food International and involved in SLOWDOWN, an INTERREG project on Slow Tourism. Margaret has a long history of working in rural development and volunteering in rural communities.

THE INNOVATION IMPACT

Margaret recognises the positive economic impact food tourism can have on rural communities. Collaboration and working with Irish farmers and producers are at the heart of her innovative food tours. The authenticity and real Irish culture the tours harness is a key part of this innovation. The tours bring together the west coasts strong food culture where tours visit a diverse range of producers. From direct farm visits to bakers and chefs the tours deliver an authentic, unique experience.

Part of how Margaret also creates innovation impact is through her celebration of Irish food, farming and landscape. She is a true ambassador for Irish food culture, which can be under recognised and celebrated. She has a strong media presence where her commitment and passion for local and sustainable food is clear. Her vibrant social media demonstrates her passion for food and farming, as does her column in the Farmers Journal Irish Country Living section.

USEFUL LINKS

<https://www.fabletours.com/>

<https://www.facebook.com/profile.php?id=61558311586435>

THE INNOVATION JOURNEY

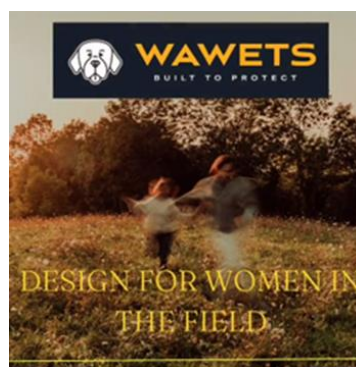


In 2019, Rita Maunsell and her family made the decision to sell their residence in North Kerry in order to fulfil a lifelong aspiration of owning a dairy farm. Relocating to Athlacca, County Limerick, they dedicated themselves to diligently building and expanding their dairy enterprise over the following year. However, in 2020, as the Covid-19 Pandemic gripped the nation, Rita was compelled to temporarily shut her hairdressing business back in County Kerry and began working on the farm instead.

During this time, Rita identified a gap in the market for female-specific waterproof protective clothing. She struggled to find apparel that not only fit her properly but also provided the desired comfort. Motivated by this realization, Rita commenced sketching out design concepts and sought the assistance of a professional designer and a manufacturer in London. With their guidance and collaboration, Rita successfully launched her company,

WAWETS, in August 2022. WAWETS specialises in offering high-quality, waterproof protective clothing tailored specifically for women in the agricultural sector.

THE INNOVATION IMPACT



Originally, Rita created a unique and welcoming space for females to shop for diverse waterproof clothing, such as milking bibs. However, since its inception, WAWETS has expanded its range to include waterproof raincoats, pants, hats and a variety of children's waterproof farm wear.

Rita is continuously looking for new and alternative ways to expand her business, meeting the needs of her customers. The WAWETS Company offer its products both locally, regionally and nationally. Therefore, highlighting the value of the product along with identifying a gap within the market.

USEFUL LINKS

<https://wawets.com/>



THE INNOVATION JOURNEY



Established by fibre artist Lorna McCormack, 'Wool in School' is an educational company centred

around wool. The company is not just focused on using wool as a craft and textile material, but also as a vehicle for education on sustainability. Part of the goals of 'Wool in School' is to increase awareness and use of this sustainable, biodegradable, and hypoallergenic product.

Before the establishment of Wool in School Lorna created books and educational materials for deaf children. She has a background in social care and is fluent in Irish Sign Language. She is a Heritage Specialist with the Heritage Schools programme and is currently studying a Masters in Ag Innovation at the University of Galway. She also runs 'Feirm VR' - introducing children to farming practices through VR and 360 experiences.



Initially, it was the question from her son 'What is Wool?' that started Lorna on this business journey. Quickly identifying a lack of educational materials on wool, the business was born. 'Wool in School'

runs interactive workshops and through its online shop, a range of products for schools and families are available. Lorna is embedded in the wool and sustainability business community. For example, she is a member of the Circular Bioeconomy Cluster South-West Wool Hub for Research and Innovation as well as the International Wool Textile Organisation.

THE INNOVATION IMPACT

In a time of great environmental challenges, from the biodiversity crisis to climate change, sustainability education has an important role to play in our society. 'Wool in School' takes a novel, interactive approach to sustainability education. Fast fashion is a big challenge for sustainability and increasing knowledge and use of materials such as wool provide an important part of more environmentally conscious clothes consumption.

Cross generational learning is also a focus of 'Wool in School' - helping link older and younger generations, preserving and passing on knowledge through large scale art projects and intergenerational learning. This is aligned with the Education for Sustainable Development Strategy 2030, addressing consumer and environmental issues.

USEFUL LINKS

<https://woolinschool.com/>

Burren Farm Experience

THE INNOVATION JOURNEY



In early 2019, Brónagh O'Rourke conceptualised the Burren Farm Experience. Located in Boston, county Clare, this is a distinctive, diverse farm enterprise offering farm guided tours. These tours not only spotlight traditional farming practices but also celebrate the rich biodiversity of the land. The farm is located in the Burren area of county Clare. The Burren is a UNESCO Special Conservation Area.

Originally from Cavan, Brónagh's background includes being a qualified fitness instructor and working in nutraceutical sales. The beauty of the west coast and Burren left a profound impact on Brónagh. It was a key inspiration in establishing the Burren Farm Experience venture on the family's beef farm alongside her husband, Cathal. Balancing family and work life also provided motivation for the business. Brónagh is also deeply enthusiastic about health, nutrition, and wellness and this is reflected in the Burren Farm Experience's diverse offering. Burren Premium Beef is also part of the Burren Farm Experience.

Collaborating with an artisan butcher allows the farm to offer top-quality beef boxes, bringing the farm's distinct flavours straight to the dining table.

THE INNOVATION IMPACT



The Burren Farm Experience is a cultural asset that capitalises and builds on the local natural

landscape, the O'Rourke's family farm assets, as well as the skills and backgrounds of its owners. Key to the Burren Farm Experience's innovation is how it offers novel practices tailored to the Burren region. For example, Brónagh introduced a special Wellbeing Program to the Burren Farm Experience that offers outdoor yoga amidst the serene ambiance of the farm. Other varied activities available to visitors include forest bathing, guided walks, food trails as well as art and craft classes. On site, there is also a farmhouse offering Farm-stays and private dining experiences.

USEFUL LINKS

<https://burrenfarmexperience.ie;>
[https://www.facebook.com/burrenfarmexperience/;](https://www.facebook.com/burrenfarmexperience/)
[https://www.instagram.com/burrenfarmexperience/;](https://www.instagram.com/burrenfarmexperience/)
<https://www.linkedin.com/company/burren-farm-experience/?originalSubdomain=ie->

THE INNOVATION JOURNEY



Ailbhe Gerrard is the farmer and beekeeper behind Brookfield Farm.

After working and living in Dublin and abroad for many years, she returned to Brookfield Farm beside her family home. Ailbhe studied Sustainable Development in University College London, and Organic Farming for three years in the renowned Scottish Agricultural College (SRUC). She was honoured with a Nuffield Agricultural Scholarship, and lectures at Gurteen Agricultural College. Driven by her vision of bringing agriculture back to its sustainable roots; producing good food for people. Ailbhe has farmed Brookfield Farm for over ten years, growing skills, developing new ideas and making collaborations with skilled farmers, apiarists and consumers.

THE INNOVATION IMPACT

Ailbhe's farming responsibilities now include managing: an organically certified sheep enterprise; a native woodland and a broadleaf plantation; beehives producing honey for farm diversification; tillage crops; GLAS agri-

environment measures including arable margins, bee boxes, bird boxes, bat boxes, and wild bird cover.

An important part of the success of the farm is sustainable agriculture research and planning.



In 2016 Ailbhe applied and was awarded the Nuffield Agricultural Scholar 2016. Her research report focused on adding value to farm produce and reaching customers directly. Locally she provides food via sustainable practices, research, teaching and does Field Exchanges. Field Exchange is funded by Creative Ireland + the inaugural Creative Climate Action Fund. The Exchanges provide opportunities for farmers, food producers, artists, experts and anyone interested, the public space, time and community to collaborate.

USEFUL LINKS

<https://www.brookfield.farm/pages/our-story>;
https://www.facebook.com/BrookfieldFarmProduce/?locale=it_IT;
<https://www.instagram.com/brookfieldfarm/>



THE INNOVATION JOURNEY



Elspeth Vaughan is a Registered General Nurse and Nurse Tutor. Her healthcare background marries well with the focus on

Social Farming at 'Campview Farm' - striving to create a nurturing environment and improve the lives of diverse individuals in the community. This varied farm enterprise has diversified into Agri-tourism, operating a Fáilte Ireland approved self-catering barn studio accommodation and a glamping site with two Shepherd Huts, overlooking the scenic Erne estuary. The core farm enterprise currently is a mixed operation with dairy cows, beef cattle and sheep.

The farm itself has been in the Vaughan family for five generations but the move to Social Farming and Agri-tourism are recent ventures. Building networks is key to supporting the range of activities 'Campview Farm' operates. For example, supporting Social Farming collaboration with various stakeholders (such as the HSE) through Social Farming Ireland is essential. Nurturing relationships also with nearby primary and secondary schools (as well as language schools), is also important. 'Campview Farm' promotes environmental awareness, fostering a

sense of appreciation for the rich natural heritage of the region.

THE INNOVATION IMPACT

Drawing on the holistic qualities of the farm and landscape, 'Campview Farm' acknowledges and promotes its natural assets in its Social Farming and Agri-tourism activities. One of the Dunmuckrum Turloughs, the most northern known Turlough in the country, is located on 'Campview Farm' and is a Special Area of Conservation. In addition, the farm is located on a European Protection Area of Donegal Bay, the most active area for wintering birds. This could be seen as a limitation on farming activities, but not for 'Campview Farm'. These natural assets provide a rich resource that attracts visitors to enjoy educational farm tours, birdwatching and also supports the Social Farming enterprise through a rich appreciation of nature and natural resources.

Underpinned by innovation and creativity, 'Campview Farm' offers unique farm tours. Activities include: Llama trekking to the beautiful Erne Estuary and the therapeutic 'Cuddle a Cow' experience. As well as tourists, residents of nursing homes, community hospitals and local schools also visit the farm.

USEFUL LINKS

www.campviewfarm.ie

THE INNOVATION JOURNEY



Originally from London and now living in Kinvara, county Galway, Mary Bermingham co-founded the Burren Nature Sanctuary along with her husband, Roy. Mary first visited Kinvara over 30 years ago, not planning it would become her professional and personal home. Always a nature lover, Mary is also an engineer by trade.

Opened in 2013, the Burren Nature Sanctuary aims to be an accessible place where all ages can engage with and learn about nature conservation. Originally a 50-acre certified organic suckler cow farm, the farm is now devoted to nature conservation. The organic farm was not a full-time occupation, as both Mary and Roy worked full-time. The cows still play a role on the farm, doing a conservation job in the wildflower meadow.

THE INNOVATION IMPACT

The Burren Nature Sanctuary is a sanctuary for biodiversity in a biodiversity crisis. It provides a local

cultural and environmental resource that builds on what exists already in the Burren, as a hugely diverse place for flora and fauna. It is a varied enterprise that includes a café, gift shop, visitor centre, 'slow cabin' visitor accommodation, while also delivering guided walks and courses. It provides employment, attracts people to the locality and delivers environmental education to visitors and the local community.

The Burren Nature Sanctuary is one part of a range of practices led by Mary, to engage people with nature. This is with the wider goal that nature engagement is a first step in tackling the climate and biodiversity crisis. Mary produces the 'Nature Magic podcast' and published 'the Nature Magic' book that documents years of experience on what works in environmental education and nature engagement. The impact also extends to collaborations where the Burren Nature Sanctuary also works with partners to understand their impact and new approaches to biodiversity conservation. Partners include the National Botanic Gardens and Botany and Plant science Department in the University of Galway.

USEFUL LINKS

<https://www.burrennaturesanctuary.ie/>

Feighery's Farm Beetroot Juice

THE INNOVATION JOURNEY



Raised on a tillage and vegetable farm located in Co. Offaly, Anne Marie

Feighery's close connection to agriculture stems from her upbringing. Despite pursuing a science degree at university and then venturing into the equine industry, she never lost touch with her family's farm. While her father and two brothers managed the Feighery Farm together, Anne Marie remained actively engaged, even as her education and career led her away from home.

During the 1990s, the Feighery farm shifted its focus towards vegetables, prompting Anne Marie's father and brothers to establish local farmers' markets as an additional source of income. Eager to contribute, Anne Marie played a key role in setting up one of these markets in Westmeath, allowing her to maintain a strong connection to the farm despite her other work commitments.

The concept for Anne Marie's business took root in 2018. Her father read an article discussing the potential benefits of beetroot juice in reducing blood pressure. This provided a key inspiration. When Anne Marie attempted to find some beetroot juice for her father,

she noticed a significant gap in the market. A lack of Irish-grown beetroot juice was available, most products were imported from countries like Germany and England. Anne Marie reached out to the Teagasc Food Research Centre to gain their insights about this gap in the market and its viability as a business idea. The beetroot crop on the farm was then increased. The farm enterprise expanded and developed to produce Irish Beetroot Juice.

THE INNOVATION IMPACT



Anne Marie is now fully employed in the farm business.

Feighery's Farm as a result has increased the volume of Beetroot grown on the farm and created an innovative new brand. The beetroot is grown and cultivated pesticide-free and taps into a gap in the health food market.

A range of sales outlets are used by the business. Feighery's Farm provides Irish beetroot juice to the local area and wider market by attending farmers' markets and selling through a range of retailers. Feighery's Farm now provides Irish Beetroot Juice nationwide through a range of retailers and also offers its juice for sale online.

USEFUL LINKS

<https://www.feigherysfarm.ie>

INNOVATION JOURNEY

Linda Montagna was born and raised in Switzerland, and she studied Sustainable Development in the Netherlands. However, she spent many summer of her life in Cilento, a rural area and national park, in Campania, the native region of her parents and grandparents.

In 2021, she decided to move in San Mango Cilento opening a small B&B while she was completing her MSc thesis on the ancient grains of Cilento and on the farmers who are still cultivating them.



Linda participated in the Empowering Women in Agrifood (EWA) programme – a training financed by the EU and the NGO EIT Food to support women to develop their project idea. Simultaneously, she looked for abandoned plots of land in the area, which she could rent and started cleaning and using them for farming.

Now she has about 20 hectares where she started growing olive groves and a local variety of mountain bean, *fagiolo a*

pisello, that was no longer being cultivated.

She also has a small herd of goats grazing in the fields, as well as chickens and geese. She learned how to produce a local traditional goat cheese, which she sells locally.



THE INNOVATION IMPACT

Linda is restoring local lands that have been abandoned for many years. She is focused on environmental sustainability and revaluing local products and traditional agricultural practices. She has a clear vision of the farming model to be implemented: processing products, selling through short supply chains, diversifying through tourist hospitality.

She is also one of the promoter of *Circe*, a local women's collective (now a non-profit association) that fosters female resilience, awareness and empowerment. Moreover, she also challenges gender stereotypes about how women should dress and behave, for example, by spending the day on the farm, having taken pruning classes, and walking alone in the mountains.

USEFUL LINKS

https://www.instagram.com/leco_della_terra

INNOVATION JOURNEY

Marta Fossati was born in Sambuco, a small village in Stura Valley, on the western Italian Alps. After different working experiences and trips abroad, she moved back to her native village and in 2016 she opened a goat and sheep farm. She started the activity from scratch. She received the first 70 goats as a gift from his father, also a farmer, and little by little the flock grew.

The business now entails raising about 200 goats and 65 sheep, selling lambs and baby goats, and producing and selling cheese at local markets and through other short food chains.

Living in Stura Valley is not easy because it is a remote rural area with few services. For this reason, in the last decades, many people moved to nearby towns and cities. Deciding to stay and to start a business in this area is a courageous choice that involves a lot of effort and determination. Marta lives close to her animals; she feeds them with local pasture, grazing them every day on the mountains and raising them with a lot of care. She produces different types of local cheeses by herself, using traditional techniques.

Moreover, every year, she hires young people who comes from nearby towns as well as from different Italian cities and from abroad. She also welcomes woofers. She teaches them how to raise

sheep and goats, how to produce cheese and how to run such a business.



THE INNOVATION IMPACT

Her activity shows that today, despite the difficulties of living in a remote rural area, it is possible for a young woman to make a conscious decision to become a shepherdess and to produce cheeses that are in great demand, using traditional techniques.

Marta works to maintain the economic sustainability of her farm; however, her actions also address the dimensions of environmental sustainability (e.g. grazing in the mountains) and cultural sustainability (preserving and promoting traditional breeding and dairy methods).

USEFUL LINKS

https://www.instagram.com/marta_fossati/
<https://www.facebook.com/profile.php?id=100010648307392>



INNOVATION JOURNEY

Maria Antonia Ceriani is the manager of Cascina Claudina, an agritourism located in a rural area close to Milan. She inherited the farm from her parents and started managing it in 2015. Before, she studied to become a teacher and worked in the school and after that for a local enterprise as a marketing expert.



When she took over the farm, she immediately decided to complement the agricultural activity with services related to tourism and educational activities. She continued the cultivation of cereals, as her father, but she also introduced other varieties.

Through a project, promoted by the local government, she began to grow a traditional type of wheat, which has the De.C.O. mark, an Italian recognition established and granted by a municipality to protect and enhance typical local products.

She also has a small mill for grains processing and collaborates with local farms to transform her products into pasta, crackers, and other products. She

decided to sell her products on farm and through local food networks. With the intention of teaching how to use the different cereals, there is a QR code on the product label that links to the farm's website, where one can find several recipes.

THE INNOVATION IMPACT

The quest for economic and social sustainability are intertwined in Maria Antonia's activity. In 2022 her farm was included in the regional register of educational farms and in 2023 in the register of social farms. In the same year, she received the "Friends of the Earth - Stories of Women Feeding the World" award sponsored by Coldiretti Donne Impresa.

The 33-hectare farm is not only a place where cereals are grown, but also a quiet and relaxed place where people can meet in a friendly environment and learn traditional and healthy food practices. She organizes cooking workshops, to show how to use the products she sells. She runs educational farm activities for both children and adults.

Monthly workshops specifically for women are also organized on the farm. They involve discussing women issues with a psychologist while working on sewing projects, given for charity.

USEFUL LINKS

<https://cascinaclaudina.it/>

<https://www.facebook.com/cascinaclaudina>



INNOVATION JOURNEY

Luigia and Simona Soffritti are two sisters who, together with their brother Edmondo, run La Petrosa, located in Ceraso (SA), in the Cilento National Park, Campania. They have a small herd of cattle and goats and grow local crops, mainly traditional grains, and olives. When they inherited the 60-hectare farm from their parents, driven mainly by their great sensitivity to environmental issues, they began to implement several changes. They became an organic farm and began using regenerative farming techniques. For example, they practice rational grazing which allows for greater coal uptake in the soil and better animal welfare.

While their brother is mainly in charge of the fields, Luigia and Simona are directly involved in processing and selling the products and oversee the agritourism activities. Accommodation on the farm is provided in both double rooms and small apartments. There is also a camper area. Products are used in the farm restaurant and are sold through short supply chains. Luigia and Simona also organize workshops and laboratories related to sustainable food production and consumption, teaching for instance how to make bread and cheese.

THE INNOVATION IMPACT

The activities and changes introduced are guided by a strong focus on

promoting local products and preserving the ecosystem. They try to avoid waste as much as possible. For example, they produce hummus from agricultural waste; they have introduced a fixed, seasonal menu (which varies daily) in the restaurant where reservations are required; they use dispensers with liquid soap made from their olive oil in the chambers, etc. La Petrosa received the national "Ambassadors of Agroecology" award in 2023 from Legambiente, the most widespread environmental association in Italy.



In addition, in 2020 they were among the promoters of the local *Rareche* Rural Market, which involves farms that practice organic and natural farming as well as local artisans. To increase environmental awareness at the market, customers are encouraged to bring their own shopping bags, no plastic bags are used, and there is a collection of glass jars that are then reused by the farms participating in the market.

USEFUL LINKS

<https://lapetrosa.it/>



INNOVATION JOURNEY

Since 2017, Rosa Ferro co-manages a farm in Ottati, a rural village in the Cilento National Park, Campania. She has a degree in environmental sciences and worked for several years in scientific labs before deciding to start the farming project *Il Dono dell'Erba*, together with her husband. As they are both from the Campania region, they bought a land there and started to farm from scratch.

They started cultivating garlic and now they also raise hens in open-air spaces, guaranteeing animal welfare, by feeding them only with locally produced crops, such as barley, maize, and field beans.

Rosa wanted to create a circular economy on her farm, so she came up with the idea of using an agricultural waste product, the garlic tunic, to make paper. She was successful and now also uses the garlic tunic that is left over from the neighbouring farms after the garlic is planted. Garlic paper is handmade only from garlic tunics and water. When it is ready, it can be decorated and dyed with natural colours.



The paper lends itself well to painting, but remains versatile for all kinds of uses such as cards, bookmarks, baskets and invitations. To sell them, she collaborates with several local businesses.

THE INNOVATION IMPACT

The research and focus on environmental sustainability are a hallmark of Rosa's activities.

For her innovative garlic paper she received, in 2021, the national award "Oscar green" from Coldiretti, Italy's largest farmers' organisation. Rosa also applied for and received a patent for her innovation.

Rosa, through her action, shows how reusing agricultural waste in innovative and creative ways can enable new products to be designed and manufactured in the view of a circular economy.



USEFUL LINKS

<https://ildonodellerba.com/>

https://www.facebook.com/ildonodellerba/?locale=it_IT

<https://www.instagram.com/ildonodellerba/>

Biula – Linfa di betulla

THE INNOVATION JOURNEY

Agnese Rostagno is the founder of Biula – Linfa di Betulla, an agricultural project to collect and sell birch sap. Agnese, who has worked in mountain refuge management in the past, during the lockdown of Covid-19, began to think about how to rearrange her life so that she can remain living in the small village of Melle in Val Varaita, in the Italian Western Alps. She recalled when she was little that her friend's mother had a birch tree in her garden from which she extracted sap. In Melle, there is a birch forest owned by the municipality.



Hence the idea of turning what was a childhood joyful memory into a job that would allow her to work in contact with nature. In 2020 Agnese leased 15 hectares of municipal birch forest. Sap is

extracted in small amounts from each tree making sure that the buds can grow regularly. At the same time, Agnese takes care of the communal forest, keeping it clean.

The birch sap is packaged and sold through local sustainable food networks and local herbalist shops. In 2022, Agnese obtained the organic certification. Initially the product was sold only frozen, but now part of the production is pasteurized at low temperatures with the addition of organic lemon juice, before being bottled.

THE INNOVATION IMPACT

Agnese's practice is characterized by a strong focus on environmental sustainability. In Italy, the production of birch sap is limited, and it comes mainly from Northern Europe. Agnese's activity, which has enhanced an existing environmental resource, has resulted in a certified organic product that has easily found a market, avoiding the importation of products from long distances. Her experience also shows how making public land and forests available for entrepreneurial activities can foster the development of sustainable enterprises led by women.

USEFUL LINKS

<https://biula.it>

https://www.instagram.com/biula_linfadibetulla/



Greta Moser Organic Farm

INNOVATION JOURNEY

Greta Moser inherited her father's farm in 2023, after moving back to her native village in a rural area close to the city of Trento, by the Italian Alps. Before, she studied arts at University of Venice and worked as a cook in Milan. As her father announced his retirement, she felt the desire to move back and take over the small family farm. Although she does most of the work by herself, her parents are still helping her with the management of the 2,5 hectares farm.

The entire production is done by sowing in a 'circular agriculture' perspective, and not by planting seedlings. She practices biodynamic and organic farming in the most careful and attentive way for the local ecosystem. She grows both local traditional crops such as grains and bitter roots as well as crops from other countries. Examples are different varieties of cucumbers, dill, Japanese squash, fresh coriander, trumpet courgettes.



She also produces local varieties of grapes, which she partly sells at the local wine consortium and partly uses to produce natural wine for family consumption. Eggs are also produced on the farm. She sells everything at local weekly markets, especially in the city of Trento, as well as in loco.

THE INNOVATION IMPACT

Greta's practice is characterized by a strong focus on environmental sustainability. Her activity also entails a cultural sustainability dimension. Indeed, she aims at preserving local farming practices, traditional crops, and rural lifestyles, which few young people in the region decide to embrace.

In relation to this, she is also in the process of opening a "rural space" in the family house where she lives, next to the farm. She would like this space to become a meeting point for local people, where ancient and traditional farming techniques can be learned and preserved. At the same time, she is also planning to open a food processing laboratory to produce jams, flour, etc.

USEFUL LINKS

<https://www.giornale trentino.it/cronaca/trento/la-tradizione-contadina-vive-ancora-con-greta-moser-1.3539166>



INNOVATION JOURNEY

Sofia De Matteis manages *Avamposto Agricolo Autonomo*, an ethological donkey farm and promote outdoor education with her partner in Santa Caterina dello Ionio, Calabria. Sofia grew up in Sicily and moved to Bologna (central Italy) where she got a degree in geography and spatial processes. During the same period, she took part in various movements for social and environmental justice. Together with her partner, who is from Santa Caterina dello Ionio, she developed the idea of starting a farming project. They moved to Calabria in 2020, during the Covid19 pandemic, and bought the land, that had been abandoned for over fifty years.

The farming project is based on the principle of learning from the territory and from its inhabitants, revaluing their rich cultural heritage with an anti-speciesist and feminist approach. They thus cultivate traditional crops such as wild artichokes and let donkeys and other animals live freely in a large land plot. They also organize outdoor education activities for tourists as well as for local children and marginalized people, such as migrants living in the area. Thanks to the funding received through a national programme, Sofia is also about to open a kindergarten for local children, which will focus on the principles of living in

harmony with the local environment and with animals.



THE INNOVATION IMPACT

Avamposto Agricolo Autonomo bridges environmental, social, and cultural sustainability, valorizing local traditional crops and farming practices, while also targeting local children as well as marginalized groups. Sofia has also been a promoter of the association We're South, a network of local operators and farmers celebrating the slowness uniqueness of rural villages in the region. She is also engaged in local movements fighting to have guaranteed basic services also in rural villages.

USEFUL LINKS

https://www.instagram.com/avamposto_agricolo_autonomo/

https://www.facebook.com/avampostoagricoloautonomo/?locale=it_IT



Germinale Agricultural Cooperative



INNOVATION JOURNEY

Giulia Jannelli is the co-founder of Germinale, an agricultural cooperative based in Demonte, a small village in Stura Valley, on the western Italian Alps. After graduating in political science in Milan, her hometown, Giulia lived and worked several years abroad. When she moved back to Italy with her partner, they no longer wanted to live in a big city. They decided to live in Demonte after a woofing experience there.

In May 2018, Giulia, together with other friends, started the agricultural cooperative. The cooperative understands agriculture as a tool for taking care of the land as well as for creating and strengthening bonds and relationships of solidarity in the area. They brought forward several agroecological projects. They cultivate chestnuts, vegetables, cereals and aromatic herbs, also working on abandoned land that has been brought back into production. They process their products that are sold locally.

In 2020 they took over the management of a small restaurant at the Shepherding Eco Museum in an Alpine hamlet located close to Demonte. This is not only a place where tourists can taste dishes cooked with local products (e.g. Sambucano lamb meat - a Slow Food presidium, cheeses, and cured meats as

well as products from the cooperative) but also a meeting place for local people. Since October 2023, the restaurant has become a “*Bottega dei servizi*” (funded by the Piedmont Region and FinPiemonte spa). This is a multi-functional shop where people can buy basic goods and access different services (e.g., home delivery, co-working space, renting sport gear etc.) They also organize debates, public meetings, and a film program.



THE INNOVATION IMPACT

The project is characterized by a strong focus on social sustainability. Since from the beginning Giulia and the Cooperative have worked to strengthen solidarity and community bonds. This is particularly remarkable in a remote rural area, where local institutions should support and provide space to develop these kinds of projects.

USEFUL LINKS

<https://www.facebook.com/germinalecooperativa>
<https://www.ecomuseopastorizia.it/la-pecora-nera-punto-degustazione/>

INNOVATION JOURNEY

Stefania Lusuardi is the manager of Maso Canova, an organic farm and a farm-based kindergarten located on the Italian Alps, in Vallelaghi, Trentino Alto Adige. She is a 43-year-old woman, has three children and started the project from scratch in 2016.

She grows fruits, vegetables, edible flowers, and herbs. She also breeds different animals that support the farm ecosystem. She sells vegetables and fruits on-site and through local food networks.

Since 2018, she also runs the area's first farm-based kindergarten for children aged 0-6. Children spend most of the time outdoors with animals and on the farm learning, among other things, how-to-live-in harmony with nature, how food is produced and processed as well as the role of different animals and insects within the farm. Various specialists are involved in the educational program: music therapists, art therapists, psychologists. This is to take care of the different physical and sensory abilities of children.

THE INNOVATION IMPACT

This practice bridges social and environmental sustainability connecting organic farming and education in a very innovative way.



The success of the kindergarten has led Stefania to work as a trainer with several regional educational institutions.

Networking is a distinguishing feature of her work. Stefania is a member of the Valle dei Laghi Biodistrict and she was among the promoters of a CSA in the municipality of Trento, involving 13 local farmers and 40 families. Products can be ordered weekly through an online platform. The CSA organizes also other activities such as showing cooking, oil tasting, meetings to raise awareness about the seasonality of products, and the value of the land.

USEFUL LINKS

https://www.facebook.com/aziendaagricolamasocanova/?locale=it_IT

<http://www.csanaturalmente.it/wordpress/>

Vajsova domačija

THE INNOVATION JOURNEY

Karmen Čarman, the Slovenian Young Farmer of the Year 2023, is a math teacher, farmer and miller who has been gradually building her innovation journey on a small farm with a 500-year tradition since 2018. Together with her family, she is developing the production and processing of agricultural products, tourism and educational activities, the production of various (innovative) artisanal products, etc.

She and her husband found and bought the farm with a mill by chance, but she was born with a love of cultural heritage, traditional knowledge, working on the farm and, above all, working with people. This is also why she chose to become a teacher.



Figure 1. Karmen's respect for cultural heritage and the people was instilled in her at home.

In addition to her regular work, Karmen manages the farm where she grows new crops each year (aronia, beans,

soybeans, corn, etc.). In the future, she would like to work as an independent farmer, although she loves teaching students. She would like to continue teaching on the farm itself (baking courses, pedagogy, handicrafts, milling). The Vajs Farmstead is still under development – there are plans to increase the agricultural area, restore the old sawmill, supplement existing tourism with accommodation facilities and more.

THE INNOVATION IMPACT

Karmen is particularly proud that she and her husband had the courage to go their own way and develop and create all the activities and tangible achievements as a family. In 2024, they will open their own store and visitor center.

Through various educational programs and activities, she preserves the traditional cultural heritage (traditional baking recipes, baking classes, millwork demonstrations, revival of old games, customs). Through various activities, it is strongly integrated into the natural environment, and through various forms of networking and independent development of activities, she has gained new communication skills, self-confidence and new ideas. The Young Farmer of the Year 2023 award has contributed to her recognition and expanded opportunities for further work.

USEFUL LINKS

<https://www.vajsovadomacija.com/> ,
<https://www.facebook.com/vajsovadomacija>

THE INNOVATION JOURNEY

Polona Virnik Karničar grew up on a farm that belonged to her family for five centuries. After studying tourism in Ljubljana and further at the Biotechnical Centre Naklo, in 2010, she and her husband officially took over the family farm in a hilly, touristy municipality.



Figure 1. Polona took over the farm in 2010.



Figure 2. The project was awarded the international prize "Constructive Alps".

Šenkova domačija is a cultural monument of national importance. After the takeover, Polona began a multi-stage revitalisation of the old farming heritage, which was completed in

2019. She and her husband converted production to certified organic and later (2010), they opened the farm to tourists. They have also obtained the Green Key certification, a leading standard for excellence in environmental responsibility in the tourism industry. Moreover, they have been included in the "ARK Farm" programme as they breed indigenous Slovenian breeds.

THE INNOVATION IMPACT

Transforming the farm into an organic and tourist destination has helped Polona and her family to preserve their cultural heritage while creating a new source of income. Their farm now attracts visitors who are looking for an authentic experience and want to learn about life in rural Slovenia. Under Polona's management, the farm has gradually created new jobs and strengthened the local community and its tourism offer. Their sustainable activities help to preserve fertile land, biodiversity and endangered species. The farm has become an example of good practise in the integration of organic farming and agritourism. It passes on its knowledge and experience to other (small) farms in the neighbourhood and is a model for tourist farms in Slovenia.

USEFUL LINKS

www.senkovadomacija.si/
www.facebook.com/SenkovaDomacija/?locale=sl_SI

THE INNOVATION JOURNEY

Nina Froggatt, a trained landscape architect, runs the Gramona organic farm in Slovenian Istria. During living abroad (Australia) for 8 years, Nina and her husband visited many farms. When they returned to Slovenia in 2012, they started to develop the part-time farm of Nina's mother. Today they grow 8.5 ha of olives, a hazelnut grove, figs, persimmons, vegetables, etc. The farm specialises in processing (e.g. olive oil), but has also developed into a rural tourism business. Although coastal tourism is highly developed in this region, they were initially faced with a lack of interest from local tourism stakeholders in their activities. Therefore, the first activities were designed for school children. Later, good co-operation was established with some hotels in the region. Today, they are known for their tastings for individual guests or groups, which they organise in their own olive grove or in the farmyard.



Figure 1. Tasting in the olive grove.

Access to agricultural land in the coastal zone where the farm operates is difficult due to high prices and urbanisation pressures, so most of the land is leased

from the Farmland and Forest Fund of the Republic of Slovenia. They decided to go organic because they wanted to bring the farm as close as possible to the natural cycle, believing that this is the only way to eat healthy while ensuring the wellbeing of nature.

THE INNOVATION IMPACT

Gramona Farm is a certified organic farm that also incorporates the principles of permaculture, biodynamics and regenerative agriculture, so that the main impact of their actions is visible in the environmental sphere. By focusing on guided tours and tastings, they have managed to stabilise the farm financially and make it independent. This way of working also allows them to sell most of their products at home. They are a recognised supplier of organic products and farm experiences in the region.

Another important achievement of Gramona Farm is the preservation of the agricultural landscape in the coastal zone, where there is a lot of development pressure, and the preservation of farmland for future generations. Through guided tours and tastings on the farm, they help to raise awareness of healthy food, environmental protection and the importance of short supply chains. They also target the younger generation by educating them about organic production and local self-sufficiency, helping to shape the future of our planet.

USEFUL LINKS

www.gramonafarm.com;
www.facebook.com/people/Gramona-Farm/100064772284337/

THE INNOVATION JOURNEY

The organic-biodynamic farm Majnika in Žiče near Slovenske Konjice is run by former professional basketball player Katja Temnik, who, after finishing her sporting career, became enthusiastic about Rudolf Steiner's anthroposophy, from which biodynamics is derived, and started farming.



Figure1. Katja Temnik (source: Slovenia.si).

Katja's mother, who grew biodynamic herbs and sprouts as an amateur, is her inspiration, source of knowledge and most important support in her work. Katja turned her mother's hobby into a successful business story. As a professional sportswoman, she was aware of the importance of healthy food, but she also believed that a holistic understanding of how nature works and the life processes that take place within it was necessary. Therefore, organic and then biodynamic farming was the only logical approach for her.

They started production on less than 1 ha of rented farmland. As demand grew,

they bought another 5 hectares of farmland nearby. The main products are herbal salt, sprouts and herbal teas. Hydrolates are also produced and there is a growing demand for products to support healing. They use 95% of their own raw materials for production.

THE INNOVATION IMPACT

The Majnika farm, where Katja, Katja's mother and her brother are joined by two employees and occasional seasonal workers, runs educational activities (herb garden tours, science days for schools, farm visits for children with special needs and other vulnerable groups). Katja has always publicly spoke about her environmentally and socially responsible farming practises. She has received numerous awards for her work (Prize for Innovative Young Women Farmers, Agrobiznis Prize from the Finance newspaper). As a newcomer in agriculture, she contributes to a different understanding of the role of agriculture in Slovenia and encourages many other women to develop their own small, non-traditional farming stories. Together with her mother, she passes on her extensive knowledge of herbs, sprouts and biodynamic agriculture in various lectures to hobby and professional farmers.

USEFUL LINKS

www.majnika.si

www.facebook.com/ZeliscniVrtMajnika

THE INNOVATION JOURNEY

Saša Kržič is a pioneer in the cultivation of microgreens in Slovenia. She has gradually built up two well-established brands. In 2014, Saša embarked on a completely new business path, as the work she was doing at the time was not satisfying and did not suit her lifestyle. So she developed a new business idea: growing micro vegetables. She got the idea from a Slovenian couple who were living in New Zealand at the time. What followed was a period of intensive research, reading and experimentation with the actual cultivation of microgreens.



Figure 1. Saša with microgreens.

After difficulties at the beginning, due to a lack of the right partners and financial support, the complexity of the new knowledge about the entire cultivation process (growing medium, cultivation, temperature, etc.) and unsuccessful attempts, the business gradually succeeded.

Today, they (Saša, her husband and employees) are an established company that is constantly developing and adding

new products. In the future they would like to own their own premises (currently they are renting), expand their online shop with new innovative products and focus on developing a wholesale edible dried flowers business known as Bloomy.

THE INNOVATION IMPACT

They founded the well-known and established brands Mikrozelenje Šebenik and Bloomy, where all four jobs are filled by locals (from Borovnica). The company survived the Covid-19 epidemic when it suffered a double loss of income and had to completely reorganise.

Microgreens have gained visibility and have been included in the strategies and tenders of the Ministry of Agriculture, Forestry and Food and in the protocols of the National Institute of Public Health. Saša advises and helps with the introduction of this activity: even established (mixed) farms have started to grow microgreens.

Saša has promoted the transfer of the practise abroad (e.g. Croatia, Bulgaria, Italy, etc.) through online courses (in English). Schools and kindergartens are an increasing consumer of microgreens, while children grow and eat them themselves, thus developing an attitude towards their own food production.

USEFUL LINKS

www.mikrozelenje.si , <https://reactgreens.com/>;
www.facebook.com/mikrozelenjesebenik;
www.instagram.com/mikrozelenje.sebenik/

THE INNOVATION JOURNEY

Lipnik farm is an organic mountain farm in the municipality of Podvelka, which invites visitors to take a look through a "linca" – a small window - into the world of Sara Berglez Zajec and her family. The tourist farm offers a variety of farm products and visitors can learn more about the farm and the mountain region through educational and tourist activities.



Figure 1. Linca Farm is located at an altitude of 864 meters (photo: Jerneja Golob).

Sara inherited the mountain farm from her grandmother. Since she officially took over the farm in 2012 and moved to the farm with her family from the city, she and her husband have bought two other small, abandoned neighbouring farms. Today, the farm covers around 40 hectares, mostly forest.

Sara has completely revitalized the activities on the formerly self-sufficient farm. By combining supplementary activities (processing and tourism) with forestry, she wanted to create a sustainable workplace on the mountain

farm. A severe storm that damaged the forests meant a major setback for the farm, which severely impacted its income.

The main challenges for the farm in the remote rural area are the poor accessibility and distance to major urban centers, the difficult logistics for their products, the lack of suitable support in the region and the high seasonality of tourist visits (individual guests and groups), primarily in the summer months.

THE INNOVATION IMPACT

The farm, which provides one employment, has newly planted 1 hectare of aronia, various high-stemmed fruit varieties and an herb garden. Sara processes the fruit into various juices, jams, teas, herbal syrups, etc. They have over 50 certified organic products.

With the help of projects, they have developed various tourist products and experiences, such as herb gardens, a tree educational trail, and offer accommodation on the farm.

The Linca farm serves to educate and raise awareness about organic farming, biodiversity conservation, agricultural traditions and survival on mountain farms in the high altitudes of Slovenia.

USEFUL LINKS

<https://linca.si/>

THE INNOVATION JOURNEY

Damjana Ostanek Herič took over the family farm after completing her degree in agronomy. At the time of the takeover, the farm, which is dedicated to the production and processing of vegetables, consisted of 2 ha of land and less than 30 acres of covered area. To date, the farm has grown to 7 ha, with a covered area of 80 acres.

Damjana, who runs the farm together with her husband, also an agronomist, and with the help of her retired parents, has achieved this through her decision to invest in the development of vegetable growing and through her entrepreneurial and well-thought-out investments. The farm is formally divided into two branches, one primary—growing vegetables and one complementary – pickling vegetables, but they work hand in hand. Around 30% of vegetables are processed into pickled products.



Figure 1. Damjana with pickled products.

In the beginning, the farm was met with suspicion as pickling was new and Damjana, as a young entrepreneur, faced additional doubts and challenges.

The economic and accounting knowledge she acquired during her secondary school education and her internship at her mother's accounting firm serve her well in managing the farm.

THE INNOVATION IMPACT

What began as an idea to provide the farm with an income during the wintertime has led to greater flexibility in the face of weather events and market fluctuations, the development of a private label and new jobs created (two full-time and several seasonal workers).

Today, the products are sold at over 100 locations in Slovenia in total (different farm markets, trade fairs, small shops, restaurants, retail outlets, schools, elderly houses, and wholesalers). It is a leading farm in the field of pickled products in Slovenia.

The company's most important achievements include own vegetable production and own recipes for pickled products, consumption of all raw materials on farm, with no waste, technological progress of the farm - computerised irrigation system, ventilation of greenhouses, semi-automatic bottling, cold stores, own solar energy, which has greatly reduced the cost of electricity consumption for cooling, etc. Finally, financial stability and independence of the farm where the whole family lives.

USEFUL LINKS

<https://kmetija-ostanek.si/www.facebook.com/kmetijaostanek/>

THE INNOVATION JOURNEY

Lenka Puh began her entrepreneurial journey at the age of 25. Since then, she has continuously developed innovations in various fields, focusing primarily on those that change the functioning of society.



Figure 1. Lenka Puh is a social innovator and mentor.

Founded in 2012, the Allium Cooperative and Institute, is a farm, an employment centre and a social enterprise. Three units (and practices) operate under its umbrella in different Slovenian regions (in the rural area near Ljubljana, in Metlika and Goričko). The cooperative employs people with disabilities whose work productivity is limited and who can only work with the help of a supervisor. Part of the innovation is carried out on land that Lenka inherited or purchased. As part of the expansion, further land has been leased supporters. Lenka is constantly developing innovations. In 2023, she opened an innovative Mini Factory concept in collaboration with Lidl, which addresses the need to process food

surpluses produced by farmers or small processors. Today, the cooperative connects various partners, farms, institutes, and the academic community, all striving to produce and process food according to the principles of sustainable agriculture. Lenka's contribution is important for both sustainable development and social innovation.

THE INNOVATION IMPACT

The Allium Institute has gradually created 12 new (green) jobs and regularly hosting around 10 volunteers. It employs severely disabled people and has developed educational programs for the less academically inclined individuals (e.g. biotechnology assistant). The institute successfully implements innovative practices and provides job and career opportunities by employing people from socially disadvantaged groups, which significantly contributes to the improving the quality of life. They produce organically certified food with a focus on herbalism, while the cooperative also educates people on healthy lifestyle at the work and at home. The cooperative also makes an important contribution to the circular economy and to reducing food surpluses, as it processes food into new products.

USEFUL LINKS

<https://dobro.si/>

THE INNOVATION JOURNEY

The Employment Center for the Disabled – Institute Kocljevina runs an organic and social farm in the northeastern Slovenia, near the Hungarian border.

They started organic farming in 2015 when they leased an old military building and its associated farmland from the state and the municipality. In 2023, the ownership and management of the farm changed due to retirements. The new manager of the eco-social farm Kocljevina is 23-year-old Lucija Kadiš, who decided to take this step with the support of her family, who have experience with this type of entrepreneurship.

On the Kocljevina farm, disabled people are involved in the rehabilitation and socialization process through agricultural work. On around 5 hectares of farmland, they grow fresh vegetables, which they process into various preserves, their main product. The farm also has a large herb garden and some animals are kept, which are mainly used for therapeutic and educational purposes.

THE INNOVATION IMPACT

The eco-social farm currently employs 12 people, of whom 10 are disabled and two are mentors. All crops and products are certified organic. Most of the produce is sold to local schools, especially fresh vegetables and preserves, while the rest

is marketed in local boutique stores and to selected restaurants.

Education and awareness-raising are becoming increasingly important at the Kocljevina eco-social Farm. This aspect has been further strengthened last year. The farm organizes various camps and workshops for children and youth and is involved in international and local projects. Lucija's long-term vision is to set up a hostel on the farm.

The Kocljevina Eco-Social Farm has established good cooperation with the municipality, local schools, associations, and others. Projects are also carried out with the Hungarian community, as the farm is located in a bilingual area.



Figure 1. The Kocljevina eco-social farm employs people with disabilities (source: Facebook Kocljevina).

USEFUL LINKS

www.kocljevina.com/

www.facebook.com/Kocljevina/

THE INNOVATION JOURNEY

Petra Jazbec, a qualified primary school teacher, runs the Veles farm together with her husband Janez. The farm serves as a sustainable learning platform and provides space for volunteering and soft skills training.



Figure 1. Petra promotes volunteering and demonstrates sustainable development.

Her story goes back to her school days when Petra was already active as a volunteer. During her studies, she developed a passion for traveling, and met her husband Janez there. Together they bought an older farm in Šentjanž na Dolenjskem.

The farm, which covers nine hectares (half of which is forest), was initially intended for a family life close to nature. However, both Petra and Janez soon gave up their regular jobs to focus on the alternative development of the farm. They are gradually renovating the farm according to the principles of natural building. Janez runs courses on natural building, while Petra works mainly with volunteers, runs trainings for youth

workers and teaches alternative project management.



Figure 2. Volunteers on the Veles farm.

THE INNOVATION IMPACT

In eight years of working with volunteers, they have introduced young people to food production and life on the farm through various European projects. Despite initial financial difficulties and obstacles at national level, they have persevered and found support for their ideas from some social innovators. Their efforts have earned them the respect of the local community and created good connections with supportive organizations internationally. Their work is also reflected in the introduction of the national professional qualification for natural building. Some have even started similar projects in their own countries, with followers especially in the Balkan countries.

USEFUL LINKS

www.kmetija-veles.si/;

www.facebook.com/kmetijaVeles/?locale=sr_RS



THE INNOVATION JOURNEY

The Ernaizu Cooperative is a company located in Basaburua, Navarra, Spain which works to improve the services available in the Basaburua valley and to promote its social cohesion, as well as its internal dynamics through the creation and distribution of new jobs. The latter, as well as promoting the environment, leisure, and care for the elderly, facilitate the necessary reconciliation between work and family. Ernaizu was founded by three women, who took over the only shop and bar in the valley. It is a workers' cooperative whose aim is to create new quality jobs for the local population. They aspire to become a driving force for sustainable economic development, balanced and respectful of the environment and the culture of the area in which they work.



Figure 1. The Ernaizu Cooperative

THE INNOVATION IMPACT

One of their successes has been to manage, as women, to reconcile their personal and professional lives, while

developing a spirit of solidarity with other women, trying to bring about a change in mentality regarding gender equality.

Of great value is the Cooperative's strong focus on gender equality and on trying to change mindsets even though political groups in the valley do not promote this.

It is important to promote what women have managed to achieve and the methods used to do so, to create stimuli for others in the future.

The concept of overcoming bureaucratic difficulties is also important, to highlight how every path has its obstacles, but these can always be overcome.

The major impact of the organization is on the elderly from the area, who are heavily involved in their activities, while it is more difficult to engage with younger generations that often prefer to move to the bigger cities of the region.

Their focus on gender equality does not refrain the engagement of the male community of the area as their 2 workers are male.

USEFUL LINKS

<https://www.apeztegiberri.eus/eu/>;
<https://www.instagram.com/apeztegiberri/?hl=it>;
<https://www.facebook.com/apeztegiberrikodenda.basaburua/>



THE INNOVATION JOURNEY

Santiago Sánchez Porcel's innovation extends to rural tourism with her initiative "La Ruta de Santiago". This business combines education about her ecological farm with the promotion of cultural and gastronomical local patrimony. She makes guided visits to her farmhouse located in Chirivel, Almería, Spain and shows visitors shepherds' way of living and the regional cultural and gastronomical patrimony of Los Vélez. In addition, her role as founder of "Ganaderas en Red" (women stock breeders' network) and "Pastores por el Monte Mediterráneo" (shepherds for the Mediterranean mountains) shows her advocate role to defend rural traditions and her commitment to women entrepreneurship in a sector dominated by men. Santiago was a pioneer in Spain when she started the sowing of ecological almond trees. Due to the high dependency of farmers to phytosanitary and chemicals, her objective is make her business ecological and to show that a traditional model can be changed.



THE INNOVATION IMPACT

La Ruta de Santiago has clear educational objectives: to show and educate people about what farming is, and how it is to live in such a region (she does not just show the farm to visitors, but starts with a breakfast at her house where she prepares bread in a traditional oven), to prove that a more ecological system is possible and to show that women are as capable as men in a very masculinized sector. Her recognition as part of the business women association of Almería is a testimony of her impact at the local level, highlighting her contribution to female entrepreneurship and rural development in Almería. Additionally, obtaining the Ecological Geographical Protected Indication for her Segureña lamb makes the quality and authenticity of her production stand out, reassuring her commitment to sustainability and ecological agriculture excellence.

Santiago has managed to change the antique model of harvesting and farming in the region with a much more sustainable one, while showing the importance of networking.

USEFUL LINKS

https://www.facebook.com/EcoAgroTurismoVelez/?locale=es_ES;
<http://www.ecoagroturismovelez.es/>

THE INNOVATION JOURNEY

Ecofinca Selva Doramas thrives as an eco-farm dedicated to fostering environmental awareness. Situated on the historic grounds of the expansive Selva Doramas in Gran Canaria, Canary Islands, this farm embodies a commitment to preserving natural heritage. Under Patricia's guidance, the farm's educational programme integrates dynamic permaculture initiatives into the curriculum, focusing on natural, social, and cultural knowledge of the Canary Islands. Here, a pressure-free environment allows children to learn at their own pace, emphasising collaborative learning methodologies and hands-on agricultural activities that utilise the farm's natural resources.



THE INNOVATION IMPACT

Under Patricia Robaina's stewardship, the educational programmes at Selva Doramas have achieved remarkable success. Through heightened community engagement and bolstered environmental awareness, the farm's initiatives have led to local economic stimulation.

By instilling a profound sense of environmental responsibility among students, Selva Doramas has catalysed behavioural shifts towards sustainable practices within the community. This impact extends beyond local boundaries, inspiring similar initiatives regionally and nationally and potentially influencing environmental policies and attitudes towards sustainable living on a broader scale.

Selva Doramas exemplifies how grassroots initiatives can spark transformative change at both local and national levels by nurturing a symbiotic relationship between education, environmental stewardship, and community involvement.

USEFUL LINKS

<https://www.facebook.com/selvadoramasecofinca/>;
https://www.instagram.com/ecofinca_selva_doramas/;
<https://www.selvadoramas.com/>

THE INNOVATION JOURNEY

Ganaderia Naroy is a cheese factory co-owned and managed by two young twin sisters who are farmers and entrepreneurs. They combine innovation with traditional systems, personifying the generational change in the subsector, the passion for work and the future of women in the primary sector.

They currently own around 400 goats and sheep, from which they obtain the raw milk that they use to produce artisanal cheeses that mature in a natural cave.

The whole process takes place in the heart of the island of Gran Canaria, in Tejeda, awarded as one of the most beautiful villages in Spain. The cheeses are handmade with raw goat's and sheep's milk from their own farm, matured in a natural cave.



THE INNOVATION IMPACT

The twins gained the Honorary Distinction for Gran Canaria. In fact,

Beatriz and Natalia Mayor Monzón were among the 8 women candidates for the Rural Canarian Women of the Year Award, in 2017. As the business is centered on a local business this has helped them to get known through the island and to encourage people to pursue a more ecological and sustainable way of eating.

Ganaderia Naroy has managed to take the traditional generational change of the cheese factory. Moreover, the two sisters were able to increment their sales and expand their business model.

They are part of "Quesos Artesanos de Gran Canaria". This collaboration has been of extreme usefulness for them to be known on the island and to network with other farmers.

USEFUL LINKS

<https://m.facebook.com/p/Ganader%C3%A1-Naroy-100057584734339/>;

<https://www.instagram.com/ganaderianaroy/>
www.ganaderianaroy.com

THE INNOVATION JOURNEY

Gescan is a company created to offer animal breeders' associations a complete service covering various fields, such as Integral Breeding Programme Management, technical-economic management, promotion and dissemination, as well as digitisation projects and processes. The initiative was born thanks to Eva Muñoz, who initially worked as an independent contractor supported by a public investigation centre, and later founded her company together with her partner Pablo Valera. Both are members of the research group on the preservation of native breeds (CORADES) and also collaborate with the group for the improvement of native and molecular genetic breeds (MERAGEM) of the University of Córdoba. Gescan is located in the Canary Islands, Spain within the Science and Technology Park of the University of Las Palmas de Gran Canaria.



THE INNOVATION IMPACT

Gescan makes a significant contribution in the field of animal genetics and the management of breeding programmes, particularly concerning the conservation

and promotion of indigenous breeds. As a qualified centre for animal genetics, Gescan carries out genetic evaluations, scientific advice, and analysis of genetic parameters of breeding programmes for breeding associations. It works nationwide with associations of various species: cattle, goats, sheep, birds, horses and domestic animals. This social and environmental commitment not only contributes to the genetic diversity of animal species but also promotes sustainability and respect for local cultural identity. Gescan's approach to digitizing processes and projects has set a precedent in the field of animal genetics, promoting more efficient and sustainable practices in Spain and emphasizing the importance of preserving native breeds throughout the country. Gescan offers an example of how a company can combine scientific research, social commitment and technological innovation to create a positive impact in the field of animal genetics and native breed conservation. Their practices can be adopted as a model for other similar companies seeking to improve their operations and contribute to the well-being of the environment and society. This approach can also be replicated in other sectors to improve working practices.

USEFUL LINKS

<https://gescansl.com/>;
<https://www.facebook.com/gescansl/>;
https://www.instagram.com/gescan_programasdecia/



THE INNOVATION JOURNEY

Ecoalpisa was created by Natalia Díaz in 2017 in the Canary Islands, Spain, with the production of eco-wrapping for home use. Later in 2020, La Abejera was created as part of Ecoalpisa: a place dedicated to eco-agrotourism and where care for bees and for the earth can be discovered. Taking care of bees is the main objective of this project: working with ecological apiculture that respects these insects to maintain the soil alive. La Abejera functions through 100% clean and renewable energy. A 100% wastewater purification system was also installed. In La Abejera, initiation courses to apiculture are offered, as well as internships for students from the University of La Laguna and the Institute of Occupational Training.

Furthermore, La Abejera works for the conservation of biodiversity in different projects in collaboration with the University of La Laguna and at the European level. The business was granted the National Award for Young Entrepreneurs 2020 from the Instituto de la Juventud (Injuve) of the Ministry of Social Rights and 2030 Agenda. Nowadays, La Abajera's products can be bought in 29 places in the Canary Islands, and they can be also found in mainland Spain.



THE INNOVATION IMPACT

Ecoalpisa is a foremost innovative and sustainable business that works at the local level but also collaborates with several universities and European entities. Ecoalpisa shows other businesses that there is a different way of doing things and that multifunctional agriculture has a great potential. It also demonstrates that collaboration with other businesses and entities is of great importance.

USEFUL LINK

[https://ecoalpisa.com/;](https://ecoalpisa.com/)
[https://www.facebook.com/ecoalpisa/;](https://www.facebook.com/ecoalpisa/)
[https://www.instagram.com/ecoalpisa/;](https://www.instagram.com/ecoalpisa/)



THE INNOVATION JOURNEY

Olivares is a Technological Innovation Project based on the combination of new devices and other technologies, aimed at combating water stress in olive groves. Started in early 2021, and under development, it is a project located in Alcaudete, Spain, and led by María José Serrano Arnau, a lawyer who decided to leave her job to cultivate the land she inherited from her father.

Her main aspiration was to improve the average environment and work the land, highlighting how worrying and real climate change is.



THE INNOVATION IMPACT

The basic idea of the project is to find a solution for the decreasing availability of water. Therefore, through the use of these technologies, María José Serrano wants to find a solution that can then be shared with other farmers. There are several indicators of success for this initiative, including receiving an award, The Ministry Agriculture Award in 2022.

Furthermore, the successes of the new innovative methods are evident, as the olive trees have significantly grown. Research on methods that help make the land more profitable is still developing, to push the economy forward while respecting nature and the environment. Another objective realised is the sharing of knowledge with other farmers, the members of the Alacudere cooperative, as well as implementing different techniques developed by the farmers who are members of the SCA Perpetuo Socorro de Alcaudete.

Initiatives like the Olivares Project are important in terms of spreading awareness about climate change. It is common to take it for granted that we possess water indefinitely, but this is not the case, and the Olivares Project is important to find a solution to the diminishing availability.

USEFUL LINKS

<https://es.linkedin.com/in/mar%C3%ADa-jos%C3%A9-serrano-arnau-8895648b>;
<https://www.scaperpetuosocorro.es/>

THE INNOVATION JOURNEY

La Casanova was established 22 years ago in Catalonia, Spain, thanks to the efforts of María Mercè Oms Molist. Initially focused on horse breeding and equestrian competitions, the project evolved 12 years ago with the creation of an equine residence, emphasising the importance and value of non-productive horses. Over time, the project expanded and diversified into a centre that prioritises not only horse welfare but also land regeneration through sustainable agricultural practices.



THE INNOVATION IMPACT

La Casanova has made significant strides in environmental restoration and sustainable tourism. The equine residence for elderly and non-productive horses prioritises their well-being across 300 hectares of an optimal environment. Additionally, La Casanova offers ecotourism experiences such as horseback riding and complementary activities like rural accommodations,

camping, and gastronomic tours, tailored to small groups to preserve the natural surroundings.

Furthermore, through regenerative farming and managed pastures, La Casanova facilitates CO2 absorption, reclaims abandoned areas, and promotes climate change mitigation and local biodiversity. Overall, the project strikes a remarkable balance among environmental conservation, animal welfare, and sustainable tourism in the region.

Taking a holistic approach like La Casanova's, integrating equine management, land regeneration, and sustainable tourism, is crucial and beneficial. This approach maximises positive impacts across various fronts, contributing to the overall enhancement of the region where it operates.



USEFUL LINKS

<https://www.mascasanova.org/es/>

THE INNOVATION JOURNEY

Itsas Gela is a non-profit organisation dedicated to the preservation, promotion, and respect of the marine and natural environment in Pasaia, Guipúzcoa, located in the Basque Country, Spain. Founded in 2001 by Izaskun Suberbiola, a young woman passionate about environmental conservation, Itsas Gela restored the last large Basque wooden bonitera, now known as MATER, transforming it into an eco-active museum ship. The goal was to engage society in environmental care and protection while fostering a deeper connection to the sea and its resources. Itsas Gela's initiatives and activities offer leisure, training, and research opportunities related to the sea, promoting respect, protection, study, and enjoyment of the marine environment.



THE INNOVATION IMPACT

Itsas Gela's impact extends beyond conservation efforts; it serves as a platform for families, schools, volunteers, and local stakeholders to actively

participate in safeguarding the sea and embracing a virtuous change. Through various activities like visits to the Museum Ship, educational workshops, guided tours, and boat trips, Itsas Gela facilitates hands-on learning and direct engagement with the marine ecosystem. Additionally, the organisation promotes ecological practices such as sewage recovery and collects data on intertidal fauna and flora, contributing valuable information for research purposes.

Recognised for their dedication, Itsas Gela received the first-place Excellence in Innovation for Rural Women Award in 2023, specifically for their promotion of fishery patrimony and ecological activities aboard the museum ship. As the European Union's 2030 Agenda prioritises marine environment safeguarding, Itsas Gela's role becomes even more critical. By raising awareness, fostering community engagement, promoting responsible tourism, and advocating for policy changes, Itsas Gela contributes significantly to marine conservation efforts and the pursuit of a sustainable future.

USEFUL LINKS

<https://mater.eus/>

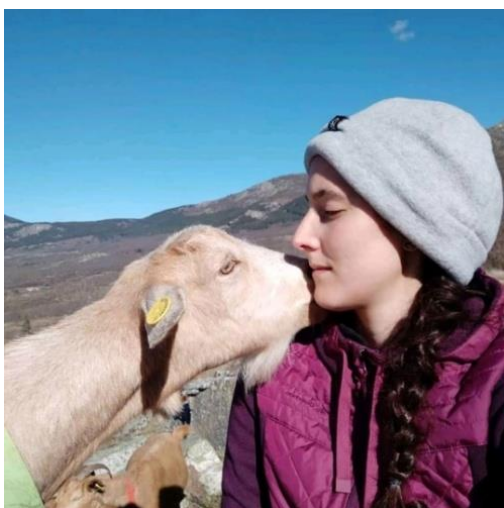
<https://www.instagram.com/matermuseum/>

<https://www.facebook.com/matermuseum/>



THE INNOVATION JOURNEY

La Caperuza is an initiative led by two women -Laura and Conchi- in Bustarviejo, Madrid, Spain. Their project integrates extensive or grazing livestock farming with artisanal cheese and yoghurt production, employing a modern, professional, and innovative approach that prioritises economic sustainability, animal welfare, and environmental stewardship.



Since 2019, they have managed a herd comprising 170 dairy goats and 60 Serrana cows that graze daily in the Bustarviejo Valley. Their farm spans over 200 hectares of oak and scrubland, part of the Natura 2000 Network, where they practice regenerative grazing management. Moreover, they have overseen firebreak management exceeding 30 hectares solely through their animals' grazing, contributing significantly to forest fire prevention. La

Caperuza's accolades include the 2022 Excellence Award for Rural Women.

THE INNOVATION IMPACT

La Caperuza is a shining example of blending economic viability with sustainable principles, prioritising animal welfare and environmental conservation. By embracing circular economy concepts and utilising advanced technologies like GPS-guided herd management, the project achieves a harmonious balance between profitability and ecological stewardship. Their dedication to natural parasite control methods and educational tours not only ensures livestock health but also fosters community engagement and awareness about rural life and sustainability. La Caperuza plays a pivotal role in fostering a vibrant and sustainable rural ecosystem.



USEFUL LINKS

<https://lacaperuza.com/>

THE INNOVATION JOURNEY

Camilla Logarn is a champion for gender equality in the Swedish forestry sector. She challenges gender issues because she wants women to dare to be active foresters - just like herself.



Camilla is very active in combining several activities involving forestry, thereby enabling people to live close to and with the forest. In the past, she has sold hay and other crops, raised animals, and spread manure for her neighbors. Nowadays, she is a public speaker, is building a car shop, owns a joiner's workshop, and owns a sawmill where people can have their logs cut up into boards. She also sells chopped wood to grocery stores.

Camilla organizes courses in chainsaw operation for women-only groups, as well as for groups with both women and men, thus preparing people for the examination needed to obtain a chainsaw license. Even though there is no requirement from the authorities to undergo training to use a chainsaw for

self-employed forest owners, people take the courses to be safe in the forest and for insurance purposes. Once the women obtain a chainsaw license, they feel more empowered to work in their own forests with a chainsaw or a clearing saw. Camilla has been also involved in a project in business development for women in forestry and has arranged study trips for women foresters. In addition, she runs a popular Facebook group that serves as a network for women foresters.

THE INNOVATION IMPACT

Through her chainsaw license training courses, Camilla provides women a safe space to practice their skills and prepare for the examination. Camilla still acknowledges that women want to meet other women forest owners in other formats than are usually provided by the forestry sector. Camilla hosts events that attract the participation of other women, including events related to business economics, cultural history, and succession of business ownership. Camilla's presence and hosting abilities enable other women to see that they too can join forestry events. Since 2008, about 200 women have passed through her training courses and earned their place in the Swedish forestry sector.

USEFUL LINKS

<https://www.youtube.com/watch?v=ghOKcoUnIXw>



THE INNOVATION JOURNEY

Eriksgården uses horses to transport timber and firewood from the forest and to perform various types of carriage work. Examples include the transportation of branches, manure, and fence materials with the help of horses as well as plowing, covering potatoes, sowing grain, mowing hay, and harvesting. A pair of horses are often used for carriage work.

Eriksgården aims to convey how horses were used in the past and how modernization took place. Horses can still be of great use in today's society. Some newer uses of horses include using them for mowing large public grass areas, collecting trash, raking gravel paths, and using them in care facilities, among others.



Annelies' vision is to get more people to realize that horses can be used for more than what they are used for today. Every animal, including humans, want to feel needed and have work to occupy their time. This vision is the basis for the horse and forestry days that Eriksgården organises and for the carriage driving courses that we offer. Eriksgården is also passionate about sharing knowledge about horse handling and the interaction and communication that takes place between horses and humans.

THE INNOVATION IMPACT

Since January 2010, Annelie has offered equestrian experiences here at Eriksgården, both for locals and tourists. Accommodation is also available on the farm, with the opportunity to take carriage driving courses with the farm's wonderful horses.

Other activities at Eriksgården include:

- Rural experiences
- Horse experiences and sleigh rides
- Forest services
- Courses
- Online courses

USEFUL LINKS:

<https://www.eriksgardenvimmerby.se>

THE INNOVATION JOURNEY

Emilia dreamed of growing berries and flowers and taking advantage of the place where she was born and raised, her great grandfather's farm. Her enterprise started on a small scale with a small berry farm for the family's three children.

Emilia started a social media platform to share the experience of berry picking with her children. People were then interested in buying berries from the farm. Emilia was able to sell surplus berries. At the same time, she also developed a series of chocolate recipes through a trial-and-error method based on a previous course she took in making chocolates.



Today, Emilia's efforts have resulted in a berry farm, a self-service farm shop, a chocolate factory, and an ice cream parlor that welcomes several thousand visitors every summer.

THE INNOVATION IMPACT

In July 2020, she opened a farm shop, where she collaborates with other local food artisans and craftsmen. At the opening, seven producers were involved in the shop. Today, the shop collaborates with over forty-five local food producers and artisans.

Her raspberry ice cream won a silver medal at the Mathantverk SM (national competition for food artisans) in 2020. The following summer she employed a group of young people from the village.



The farm's tourist activities attracts a large number of tourists throughout the year. She is regularly reported on in newspapers and has 8 000 followers on Instagram.

USEFUL LINKS

[https://www.farmorsgrimslov.se/;](https://www.farmorsgrimslov.se/)

<https://www.instagram.com/farmorsgrimslov>



THE INNOVATION JOURNEY

Nybrukarna aims to produce sustainable food in a system that is informed by relationships. The organisation is a cooperative that organizes the efforts of farmers who produce crops and vegetables. The organisation then sells units to customers who receive a bag of fresh produce weekly. Most of the cooperative's customers pay in advance before the harvest season starts. The cooperative is organised around three principles: (i) farmers enter into long-term relationships with their customer; (ii) the risks and rewards of farming are shared between the producer and consumer; and (iii) no intermediaries are involved in the transactions between the producer and consumer. As a unit owner, the consumer promises to buy the vegetables from the producer for a season.



In addition to arranging relationships between farmers and consumers, Nybrukarna aims to create and further develop knowledge about sustainable, small-scale food production. Maja Söderberg is one of the cooperative's initiators. Nybrukarna allows her to combine her passion for crop cultivation

with her commitment to sustainable food production. Maja has also published books on sustainable food production. In 2015, the cooperative's first year, they secured contracts with 20 unit owners. Only a few years later, the cooperative had 80 unit owners sharing 160 units. One unit is equivalent to one person's vegetable intake for twenty weeks.



THE INNOVATION IMPACT

The cooperative's system of food production, creates local participation and passes on knowledge about sustainable food to their customers. This approach builds a local community around local food, thereby promoting food security and sustainability. Nybrukarna's other projects contribute to sustainability in many dimensions. For example, community integration through farming is the result of one such project. The cooperative also advocates for more theory and practice in cultivation at primary school. Nybrukarna combines the rural community with food production to produce social sustainability.

USEFUL LINKS

<https://nybrukarna.se/>

THE INNOVATION JOURNEY

Nestled in the heart of the Småland forest lies Ödevata, a countryside hotel with a rich history. Initially a sprawling farm, the premises later served as a workhouse for neglected family fathers, a refugee camp during World War II, and even a state penitentiary before being left abandoned for a decade. The history of Ödevata Gårdshotell is filled with captivating tales.



In 2005, Malin Axelsson and her husband Magnus purchased the neglected farm with the vision of transforming it into a truly distinctive destination with modern small-scale agricultural systems.

Today, Ödevata Gårdshotell is a vibrant holiday destination where visitors can experience nature, go fishing, embark on hikes, learn about biocharproduction, or merely unwind in the comfy and innovative "Conservatory of the Future", a large glass house that hosts an aquaponic agricultural cultivation system.

Ödevata Gårdshotell offers hotel rooms, lodges, cabins, and camping, to approximately 4000 guests each year.

THE INNOVATION IMPACT

Ödevata Gårdshotell has high ambitions and wants to become Sweden's and, in

the long run, one of the world's most sustainable tourist ventures. The hotel aims to be climate-positive and uses solar cells and electric vehicles. The owners of the hotel engage in permaculture, grow ecological vegetables from their own garden, produce bokashi with biochar, and run an aquaponics system.

Ödevata Gårdshotell has initiated its own Eco-program, 2021-2026. The program is concerned with reducing waste, purchasing environmentally friendly products, preserving, and constructing buildings sustainably, managing its power consumption, and using environmentally friendly heating systems, transportation, and water usage. The hotel aims to raise environmental awareness among its guests, by sharing knowledge and serving as an exemplary model of sustainable practices.



Ödevata Gårdshotell is committed to sustainability and leading the way in creating sustainable tourism and lifestyles.

USEFUL LINKS

<https://www.odevatagardshotell.se/en/about>

THE INNOVATION JOURNEY

Pratensis AB was established in 2005 for the production and sale of Swedish meadow seed mixtures and seedlings. The company's ambition is to recreate meadows all over Sweden as they looked in Linnaeus' time. In March 2023, Cloé Lucas took over the company.



Cloé met the previous owner of the business for the first time in 2012 and started working for the business in 2015.

In 2022, Cloé and her husband built a new production facility that is adapted for the seed business, where the entire business is now located. Last year, Cloé took over the company. The previous owners will continue to work for the company, providing knowledge and manpower.

THE INNOVATION IMPACT

In a hundred years, 99 percent of all the Swedish meadows will have disappeared, thereby affecting plant pollination, insect life, and biodiversity enormously. Pratensis AB strives to

change this negative trend. The company provides seeds, knowledge, and counselling. Their customers include private citizens who wish to turn their lawn into a meadow, businesses that wish to cultivate the sides of their parking lots as a mini meadow, and authorities that turn large lawns, unused areas, roadsides, and roundabouts into meadows as a perfect natural habitat for bumblebees and butterflies. The company's goal is to establish as many flower meadows as possible across Sweden.



Pratensis AB has around 100 different species of meadow plants in cultivation and some plants that are collected from the wild. In addition to their own seed farms, the company has approximately ten contract growers in various parts of Sweden. These growers grow different species of local provenance.

In essence, the company is engaged in promoting biodiversity. It has developed special mixes of meadow seeds that can enhance local biodiversity.

USEFUL LINKS

<https://pratensis.se/>

THE INNOVATION JOURNEY

After navigating a winding country road, we arrive at Skarmansmåla Farm. Here, Frida Holmquist and her husband, Tobias, run an advanced bovine dairy and meat farm that is committed to environmental sustainability. Frida has been a co-owner of the farm since 2010 and is primarily responsible for caring for the herd and overseeing daily operations. Their farm consists of 180 hectares of forest, 160 hectares of arable land, and 120 hectares of natural pasture.



In its day-to-day operations, the farm feeds 180 cows with organic grass cultivated on-site. Milking robots are used on the farm, thus allowing the cows to be milked when they wish. Automatic feed dispensers and an app to monitor cow activity and health are also used on the farm. Currently, the farm has a staff of three.

THE INNOVATION IMPACT

In 2021, Skarmansmåla Gård was honoured with the local "Sparbanken Eken's award" for the owners' work in achieving a sustainable transition and green farming. Sustainability holds

significant importance for Frida and Tobias, and their journey towards sustainability began with a notable incident. In the summer of 2014, Frida discovered that their use of pesticide was harming the ladybugs in their fields and contaminating their two lakes. In response, they made the decision to discontinue the use of artificial fertilizers. When the tractor-mowers return to the farm's garage now after working on the grass fields, they are often accompanied by ladybugs.



Today, the farm holds an eco-certification from KRAV, signifying that the milk and meat produced on the farm meet organic standards. The farm also houses biogas facilities to produce energy and natural fertilizers, thereby positioning the farm's owners as local leaders in self-sufficiency and resilience. The farm's surplus energy is sold back to the grid, providing an additional source of income.

USEFUL LINKS

Not available.



THE INNOVATION JOURNEY

Naturbruksskolan Sötåsen is a public, upper-secondary school run by the VästraGötaland Region. The school is a boarding school with a focus on organic farming. The school offers programmes and courses in animal care, farming, agriculture, and gardening.

The school also runs a small-scale farm that includes a variety of resources, for example, research testbeds. Paula Bäckman, the area manager at the Natural Resources Administration, plays a key role regarding the development and status of the school's testbeds.

At the school, one can find testbeds of a biogas plant, a bio refinery plant, a biochar plant, solar panels, a variety of simulated vehicles, a biogas tractor, and an electric smart grid. The land and cattle at the school are available for cultivation trials and feed trials.



The design of the school's testbeds facilitates innovation and the development of new ideas and products. Paula showcases the school's testbed research findings to farmers who wish to

learn about new developments in agriculture and farm management.

THE INNOVATION IMPACT

The primary aim of the testbeds is to contribute to environmentally sustainable food production. According to Paula this can be achieved by reducing the use of fossil fuels and increasing biodiversity through sustainable farming and food consumption. The testbeds are promoted in cooperation with research and regional authorities, through open days where the sustainable solutions are demonstrated, and by including students and teachers in the testbed research projects. Teachers learn about new findings and use this information in their teaching. The school's students take part in various experiments and thus become carriers of knowledge in their work life. The school restaurant team develops new, sustainable recipes for the students and school staff.

The school is well-known in national, regional, and local newspapers. Its activities are often mentioned in the news with reports on its new areas of research. As such, the school is able to reach out to the public with its knowledge.

USEFUL LINKS

<https://www.vgregion.se/f/naturbruk/utveckling-och-innovation/>



THE INNOVATION JOURNEY

Wilma Martinsson has invented a heat isolator for water buckets used for watering horses. Without a heat isolator, water can otherwise turn to ice during the winter. Wilma's business, WarM Bucket, produces and sells buckets all over the Nordic countries.



Wilma started WarM Bucket in 2018 as a Young Enterprise Business (UF-företag), which is a course students can take in upper secondary school in Sweden. The course typically serves as a training scenario where the student runs a business.

The course promotes entrepreneurial behaviour in teenagers. Wilma's business success was instant and she had to pause her studies to focus on her business and satisfy the growing demand for the product. After high school, she turned her Young Enterprise Business into an actual business, where she now works part-time.

THE INNOVATION IMPACT

Keeping water for horses ice-free during the coldest times of the year can be a serious challenge in the Nordic countries. There are several solutions

on the market that require electricity. However, installing cables or buying expensive battery-powered tubs is not always feasible. WarM Bucket is a simple solution. It consists of insulation for the water bucket that keeps the water ice-free for longer. This property of the product is time efficient for the owner and allows horses access to their water for longer periods of time during the winter. WarM Bucket won several awards during the company's first year of operations.

At a regional young entrepreneur exhibition, she won the categories for 'best innovation', 'best product', and 'best craftsmanship'. In the national round of the exhibition, she won the categories for 'best product', 'highest growth', and this year's 'creative young business'. In 2022, Wilma received the Anders Wall Stipend, a prestigious stipend that is awarded to young entrepreneurs.



USEFUL LINKS

<https://warmbucket.se/>

THE INNOVATION JOURNEY

Elisabeth Eliasson and her husband Albert bought RamshultsGård in 1987. Initially, they had just five beef cattle while working outside the farm. Over time, they decided to expand their enterprise, acquiring another nearby farm called Kärnebo and increasing their herd of cattle. Presently, Elisabeth cares for 43 cows and 20 sheep. She is engaged in additional endeavours, including sheepskin sales and collaboration with the local municipality in a green care initiative. Meanwhile, Albert manages the farm's forestry operations. A couple of years ago, the two of their three sons moved back to the farms with their families and help with some of farm's daily activities.



The two farms include a total of 765 hectares, of which 610 hectares are productive forest land, 58 hectares are arable land, and 50 hectares are pastureland. The family's main source of income is forestry, but they also rent out a small apartment.

THE INNOVATION IMPACT

RamshultsGård prioritizes the well-being of the natural and local environment in

its operations. The cattle are free to roam outdoors at their leisure. When the cattle are housed indoors in the barn they still have ample space. This balance between outdoor and indoor operations allows the farm to maintain its surrounding fields and thus satisfy the criteria for EU support aimed at preserving open landscapes.



RamshultsGård uses solar cells and intends to invest in wind power in the future. In 2019, RamshultsGård received a "Green Company-award". The award was awarded in recognition of the farm's cooperation with Mönsterås municipality. This partnership includes renting out a portion of the farm to the municipality, which organizes daily activities for individuals with disabilities or long-term unemployment. Elisabeth emphasizes that this collaboration holds value beyond financial terms, as it fosters personal growth for the participants and provides them with meaningful work experience involving animal care and farm maintenance. She finds this joint endeavour personally rewarding and beneficial, allowing her to engage in tasks that go beyond caring for her herd throughout the day.

USEFUL LINKS

<https://www.ramshult.se>

THE INNOVATION JOURNEY

After high school and agricultural studies, Agnes de Boer joined her mother as a farmer. Initially, they merged their 60-cow farm with a neighbour's and switched to organic farming in 2009. By 2011, Agnes and her mother resumed independent farming with 60 cows on 47 hectares.



Figure 1. Agnes (33) with the audience award for the Best Grassland Farmer (October, 2023)

In 2019, contractor Klaas Jan Mulder joined permanently. From 2021 to 2022, they transitioned from organic to regenerative farming, transforming their dairy farm in Leens, Groningen. The base is that grass is the only food for the cows. By introducing strip grazing and the New Zealand ABC system in 2021, they increased grass yield from 7,500 to 9,500 kilos of dry matter per hectare, eliminating concentrate feed and halving costs. Their cows, milked by a robot, graze day and night on the grass, improving health and milk production.

They now produce 400,000 kilos of milk annually from 75 cows on grass alone.

THE INNOVATION IMPACT

The farm is now self-sufficient in roughage, enhancing omega-3 fatty acids in the milk. Innovative cow walkways and underfloor drainage have minimized grass trampling, extending the grazing season and reducing indoor time from 7 months to 101 days. After two years of intensive learning and applying grazing management techniques, Agnes was awarded the "Best Grassland Farmer" audience award by Veeteelt in 2023.



Figure 2. Grazing cows

Agnes encourages other farmers to trust in the power of grass and cows. Transitioning to environmentally responsible, regenerative cow farming is feasible, financially profitable, and provides mental tranquility and scenic beauty, all of which she enjoys.

USEFUL LINKS

www.instagram.com/boerderij_edzemaheerd
<https://veeteelt.nl/beste-graslandboer/bgb-finalist-agnes-de-boer-kostprijs-gehalveerd-door-volledig-grasrantsoen>;
<https://puregraze.com/natuur-inclusieve-landbouw/pure-grazers-genomineerd-voor-beste-graslandboer-2023>

THE INNOVATION JOURNEY

Mariëlle Keijzer, owner of Keijzer Agro in Lelystad (Flevoland) advances sustainable agriculture by reducing chemical pesticide hazards and blending organic and conventional farming techniques. Her family moved to the Flevoland in 1996 and she took over her father's farm in her thirties. On her 54-hectare farm, she grows potatoes, seed onions, sugar beet, and winter wheat. Mariëlle and her father manage a 37-hectare organic farm, cultivating oats, barley, and alfalfa to boost biodiversity.



Figure 1. Bird's eye view of Keijzer Agro

In 2022, Mariëlle addressed farmyard emissions by installing a Phytobac system to organically break down pesticide-contaminated wastewater, a method praised by the Deltaplan Agrarisch Waterbeheer (DAW).

THE INNOVATION IMPACT

Mariëlle highlights the mutual benefits of combining organic and conventional farming. Facing challenges like wireworms and crop failures in her experimental organic farming, supported by provincial subsidies, she learns valuable insights for future practices.

She uses modern technologies like camera-controlled hoes and precise nitrogensampling to reduce chemical inputs and enhance efficiency.

She remains realistic about organic farming. She supports a balanced approach that integrates the best practices from organic and conventional farming to ensure resilient soil and sustainable production. Her forward-thinking and investments in environmentally beneficial infrastructure underscore her dedication to the future.



Figure 2. Mariëlle Keijzer in her farm barn

Mariëlle exemplifies a balanced approach to modern agriculture, merging innovative technologies with traditional practices to create a sustainable farming system. She serves on the board of Boeren voor Natuur Flevoland and the members' council of Cosun, an umbrella cooperative of the Dutch agribusiness sector.

USEFUL LINKS

www.linkedin.com/in/marielle-keijzer-965b21304/
<https://groeikracht.cosun.nl/verhalen/chemie-als-voedingsbodem/>;
www.akkervanhetnoorden.nl/laatste-nieuws/reportage/best-of-both-worlds-op-akkerbouwbedrijf-keijzer/

THE INNOVATION JOURNEY

The Warmonderhof Foundation has provided training in biodynamic agriculture (DB) in the Netherlands since 1947. The Foundation has been in Dronten, Flevoland since 1993, with 85 hectares of mixed farmland, student accommodation, lecture buildings, meeting rooms, and a shop. Since 2021, Annette Harberink has directed the Foundation, managing its cooperation with Aeres MBO Dronten Warmonderhof, a diploma-granting educational institution.

She believes every innovation starts with a good idea and that if economics, in a narrow sense, is the sole focus, it is hard to make a positive impact on the world. She embarked on her innovation journey at Keizersrande (Deventer) in 2010, where she transformed a natural landscape into a DB farm over twelve years, applying her knowledge and motivation for change to practical efforts.



Figure 1. Annette Harberink at the Warmonderhof

THE INNOVATION IMPACT

In 2024, DB farming celebrates its 100th anniversary in the Netherlands. Annette strives to change mindsets about DB farming by educating young people at

the start of their careers. Since 2019, she has co-initiated Caring Farmers, promoting circular agriculture and forming a broader transformative coalition. The Warmonderhof, where Annette serves as director and ambassador, is a key partner, providing training, education, teaching facilities, internships, and practical testing.



Figure 2. Students testing wetland management under changing conditions due to climate change

DB farming has introduced innovations such as ZuiverZuivel in Limmen, De Groene Weg slaughterhouses, and Community Supported Agriculture (CSA), promoting community-led management of goods and services. While pioneering can be challenging, it fuels her motivation. Annette is an inspiring activist and ambassador for many.

USEFUL LINKS

<https://stichtingwarmonderhof.nl/>;

www.ekoland.nl/artikel/971603-bd-geeft-energie-om-tegen-de-stroom-in-te-roeien;

<https://caringfarmers.nl/>

THE INNOVATION JOURNEY

Founded in 2013, the Herenboerderij movement aims to establish 350 grassroots farms serving 175,000 people by 2030, creating a sustainable food system driven by nature. Each Herenboerderij is a cooperative of 150 to 300 shareholders, with 15 to 20 hectare farms and 1-3 part-time professional farmers, sharing producing vegetables, fruit, eggs and optional meat throughout the year. They practice regenerative agriculture and aim for zero inputs.

Herenboeren Nederland, the national foundation, supports local Herenboerderijen. The entire network of local cooperatives works together to improve knowledge, legislation, and policies for sustainable agriculture, partnering with 'Caring Farmers', 'Groenboerenplan', 'Aardpeer', and the innovation hub 'Plaats De Kleine Aarde'.



Figure 1. Rianne Joolink (left) with Menno de Vos, professional farmers for Herenboerderij Groote Modderkolk in Loenen, Gelderland.

THE INNOVATION IMPACT

Nowadays, 21 farms feed over 9,000 people across the country, with

hundreds more in the pipeline. Growth is rapid and the learning curve is steep. The main impacts are:

- (1) Co-ownership and co-production: Transforming local people from passive consumers to active co-owners and co-producers;
- (2) Localised, sustainable food systems: Creating a localised food supply that reduces the ecological footprint.
- (3) Community hubs: Serving as a breeding ground for social connections and further local initiatives;
- (4) Efficient governance structure: Strengthening local cooperative farms with centralised support for land acquisition, member recruitment and farmer recruitment.



Figure 1. Philomeen Duiniveld (right), Chair of Herenboerderij Landmeerse Loop at its official opening in Boekel, Noord-Brabant (April 2023).

USEFUL LINKS

<https://herenboeren.nl>;
<https://grootemodderkolk.herenboeren.nl>;
<https://landmeerseloop.herenboeren.nl>

THE INNOVATION JOURNEY

Since January 2024, Merel Gerritse and Irma Brassinga have been running Boerderij Eetmeerbosch, a 2-hectare CSA farm dedicated to regenerative and agroecological agriculture. Merel, a former HR-manager, and Irma, an anthropologist, moved into professional farming after training at institutions such as the Warmonderhof Foundation. Designed by Wouter van Eck in 2017, Eetmeerbosch is located near the industrial area of Nijmegen and is supported by volunteers and hundreds of self-harvest pass subscribers.



Figure 1. Irma (left) and Merel (right), co-directors of Eetmeerbosch (2023)

The food forest serves as a biologically diverse wildlife sanctuary and community space. Local schools and care institutions including Huis van Compassie Nijmegen, collaborate with Eetmeerbosch to provide safe spaces for young and vulnerable people to experience self-harvesting. Each week, Eetmeerbosch supplies ingredients for communal meals for around 60 people, fostering a compassionate social environment. Children and young people

learn about vegetables, seasonal rhythms, and growing food.

In April, Irma and Merel successfully completed their expansion crowdfunding campaign, surpassing their €20,000 target with 164 backers, demonstrating strong community support.

THE INNOVATION IMPACT

Eetmeerbosch introduced an innovative solidarity payment system for the self-harvest pass from April to December. Subscribers pay fees based on the farmer's wage, farming costs, and their financial capacity, ensuring income certainty for the farmer and accommodating different economic situations of self-harvesters. The solidarity payment encourages rethinking socio-economic equality and mutual support, aligning with Eetmeerbosch's mission to create a healthy, resilient, biodiverse landscape and an engaged community that strengthens social sustainability.



Figure 2. Open day visitors (2024)

USEFUL LINKS

<https://eetmeerbosch.nl/>;
www.instagram.com/boerderij_eetmeerbosch/;
<https://eetbaarnijmegen.nl/>

THE INNOVATION JOURNEY

Tuin de Es is a multifunctional agroecological care farm of ca. 2 hectares with a biological grocery shop. It organizes a food festival annually. Since 1981, the farm has been a vegetable farm in the province of Noord-Brabant. After the acquisition in 2012 by Daniëlla de Winter and Bart Pijnenburg, using a novel financing method through a cooperative membership with more than 250 shareholders (portiehouders), the farm has gained a new layer of broader social engagement and expanded its local and regional influence in the care of people with mental health issues.



Figure 1. Daniëlla de Winter (left) and team Tuin de Es (right)

Daniëlla has a passion for biological farming as well as promoting a healthy lifestyle for holistic well-being. She has developed and expanded the grocery shop of Tuin de Es in cooperation with other local producers. She gives yoga lessons at the farm and is developing and supporting a consistent pool of volunteers for caregiving and farming and participants. Her approach is relational, bringing people together through meals, the yearly food festival and workshops.

The farm is part of the Dutch alliance Toekomstboeren (a member of Via Campesina), a network advocacy organization contributing to social, educational, and inspirational gatherings for agroecological farmers.



Figure 2. Food festival

THE INNOVATION IMPACT

Tuin de Es won the third prize for innovation (awarded by Ekoplaza and Biobeurs) at the annual organic farming fair in January 2024. Important keywords are the farmers' shop, local market, social food festival, communal meals and meetings and the promoting of agroecology.

For Tuin de Es, it is important to share knowledge about agroecological farming, which is not very common. Therefore, they organise workshops, interventions and excursions for educational purposes.

USEFUL LINKS

<https://tuindees.nl>;

<https://edu.nl/mf8tw>;

www.bioacademy.nl/tuin-de-es;

www.youtube.com/@tuinderijdees2613

THE INNOVATION JOURNEY

Alex van Hootegem was a farmer and changed into a biological farmer with a wide variety of crops, since 1983 in Kruiningen, Zeeland. In 2005, his wife Anneke van Hootegem quit her job and started the webshop Grote Verleiding to sell biological food to citizens, because of her burgundy way of eating.

Nowadays she is collaborating with almost 20 food producers in the South West part of the Netherlands, providing vegetables, fruit, dairy, meat, seaweed, samphire, chocolate, juices and jams.



Figure 1. Anneke van Hootgem, founder of the Grote Verleiding webshop and co-owner of their farm

In 2020, together with journalist Elian van 't Westeinde, she made a restart with Slow Food Zeeland. Slow Food is a worldwide organisation to create a good, sustainable and honest food system.

Slow Food Zeeland wants to connect citizens with the diverse, local food the

province has to offer from the sea and land. The diversity in products is something we should cherish and strengthen to enlarge biodiversity. Slow Food Zeeland wants to bridge local farmers with cooks, fishers, scientists, entrepreneurs and consumers.

Slow Food Zeeland offers a platform and organising activities.



Figure 2. International Catalogue of endangered culinary heritage

THE INNOVATION IMPACT

The food webshop with home delivery was in 2005 a logistical innovation. Recently, she used the platform Slow Food to enlarge this approach for a larger region and more stakeholders involved.

USEFUL LINKS

<https://bio.degroteverleiding.nl/nieuw/app/home>

THE INNOVATION JOURNEY

Marleen and Willeke van Rijn, third generation of the Van Rijn family, run their lively farm 't Geertje in the middle of the rural landscape Green Heart in the middle of the highly urbanised residential area of the province of Zuid-Holland in the village Zoeterwoude. For a long time, explaining where food and dairy come from has been important for 't Geertje, and to establish the connection between city and the rural landscape. Therefore, the farm is open to the public, showing a large variety of animals and how they live and organizing activities. The farm is situated in the preserved landscape of the Green Heart, along a canal.



Figure 1. Marleen, Richard, Willeke van Rijn and their parents, Ada and Wim on the farm (by Henriette Guest)

THE INNOVATION IMPACT

This farm is a certified biological farm focusing on the cycle of nature and focus on the importance of soil and soil life in farming. They established the label

'natuurlijkboeren', focusing on soil, air and animal welfare.

"De Groene Ontmoeting" was established by 't Geertje and focuses on the preservation of the rural polder landscape in a broader coalition of public, private, and social partners. It works with hundreds of volunteers and has four main goals:

- (1) Sustainable food production;
- (2) Connecting agriculture to nature preservation;
- (3) Shorten the natural cycles;
- (4) Enlarge awareness on nature and food production.



Figure 2. Garden of the evolution of plants in 3.5 million years ago.

USEFUL LINKS

<https://hetgeertje.nl/informatie/over-ons-1/>;
<https://degroeneontmoeting.nl/over-ons/>

THE INNOVATION JOURNEY

Angelien Hertgens and Welmoet de Waard started TuinderijDe Stroom with 1 ha open land cultivation and they sold their products to 75 customers. The site was part of the care farm Philadelphia in Hemmen (Gelderland) as a small enterprise. In 2012, Linde Swart joined Tuinderij de Stroom and they moved to a new location close to Ecofarm Linge-hof. Their plot is part of a larger farm focusing on only a few types of crops. Angelien, Welmoet and Linde focus on more specific types of vegetables. Both farms work help each other in times of need.



Figure 1. The three vegetable girls Angelien, Welmoet, and Linde.

To grow healthier vegetables, the focus in this farm is on the biological use of the landscape, organic fertiliser, switching use of the landscape, and approximately 40 different types of crops. Volunteers and interns help, resulting in a community, coaching new farmers with volunteers and local owners. Recently, de Stroom invested in a high-stem apple orchard, an older race of apple trees and invited people to

adopt a tree with the right to pick the fruit.

THE INNOVATION IMPACT

The innovation is that the farm sells more than 450 bags of their vegetables and fruits called the *Hemmense vegetable bag*. Every Friday afternoon, the farm sells these vegetable bags with local and biological products like bread and cheese from other local farmers. The farm is now a local biological food hub in the area.

Their advice for everyone who wants to start an entrepreneurship like this is to ask local country estate/ landowners to rent a small parcel of land and make plans together to combine forces for the benefit of all. This can be the start of your farm.



Fig 2. The Stroom is a biological hub in the area selling local, biological food.

USEFUL LINKS

<https://www.tuinderijdestroom.nl/>;
<https://toekomstboeren.nl/de-stroom/>;
<https://www.groeienaarmorgen.nl/initiatieven-en-inspiratie/tuinderij-de-stroom>

THE INNOVATION JOURNEY

Froukje de Jong-Krap initiated and was the first director of the BildtseAardappelweken (BAW) Foundation, which organises a major cultural festival every five years to celebrate the cultivation of the potato and its heritage in an artistic way. Nannie Jensma-van Herwijnen is a member of the foundation's board and is expected to become its next director.



Figure 1. Potato fields in the Bildt

BAW is a unique cultural festival with visual arts, theatre, music, and exhibitions on various potato farms, involving local, regional, and international artists and performers. Visitors can follow a walking route to experience these arts both indoors and outdoors in the middle of a large potato area.

Each edition focuses on themes like sustainability, soil health, circular agriculture, and technology. The festival began in 2008, when the UN declared it the Year of the Potato. It has since become a regular event with sponsors including the Province of Fryslân, local

organisations, businesses and European funds.



Figure 2. Posters of the BAW



Figure 3. Entrance to an event of the BAW

THE INNOVATION IMPACT

The innovation impact lies in connecting art, theatre, film, and visual arts with modern potato farming, creating awareness and education about the agricultural industry and its heritage for a wider area (even in Germany).

USEFUL LINKS

www.bildtse aardappelweken.nl;

www.facebook.com/potatoesgowild/



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FACT SHEETS ON WOMEN-LED INNOVATION IN RURAL AREAS

Business Incubator at SSP in Kyjov



THE INNOVATION JOURNEY

A business incubator is being created at the Polytechnic Secondary School of Technology in Kyjov. The purpose of the activity is to keep high school graduates in the region through the development of the local business environment utilizing start-ups, a coworking centre, the involvement of companies from the region and the Chamber of Commerce.

The school supports the involvement of companies from the region in teaching. They try to work with their graduates. They also focus on adult education with the possible perspective of bachelor's education.

The founder of the whole project Mgr. Hana Bednaříková is the councillor of the city of Kyjov, a member of important city commissions and an entrepreneur, which enables her to connect activities.



Figure 1. The Polytechnic Secondary School of Technology in Kyjov

As a part of the innovative center, there should also be a Center for Innovative

Education with an electrical/mechanical workshop for the public, the region supported this activity with an 80 million CZK subsidies, but the costs will be higher.

The main goal is to retain high school-educated youth in the region. The project is in the nascent stage.

THE INNOVATION IMPACT

The future of every region lies in its active and educated people. Keeping educated people in the region is a key issue for the development of rural areas. In these regions, this should be an important ambition of secondary schools, which should also focus on lifelong learning and support for companies in the region in acquiring qualified labour. A business incubator can be a suitable form of this kind of activity. Support in creating networks of stakeholders in the region and mediating linkages with universities can be the key.



Figure 2. Mgr. Hana Bednaříková

USEFUL LINKS

<https://sspkyjov.cz/>

<https://www.facebook.com/sspkyjov>

South-Moravian Agency for Public Innovations



THE INNOVATION JOURNEY

The goal of the South Moravian Agency for Public Innovation is to bring innovations to the region, support successful solutions, and improve the quality of life in municipalities. The idea is to innovate public services to meet the highest standards while taking into account the environment and disadvantaged citizens. The main founder is the South Moravian Region. The agency cooperates with three Brno universities: Masaryk University, Mendel University in Brno and University of Technology.



Figure 1. Dita Tesařová M.Sc.

The agency focuses on innovations in the entire South Moravian region in the fields of energy, mobility, the environment, social and healthcare services and participation. It brings innovations from home and abroad and

cooperates with a platform that organizes the exchange of information and the sharing of experiences. It operates in both urban and rural municipalities. An interview was conducted with Dita Tesařová, M.Sc. who deals with innovations in climate change mitigation and adaptation.

THE INNOVATION IMPACT

In one year of existence, the agency managed to establish an Energy Managers Network (within the LIFE programme) that will advise municipalities in optimizing energy management and also how to avoid frivolous proposals from various private companies. The second success is the promotion of the Climatic Action Plan for the South-Moravian Region as the 1st in Czechia.

Organizing the exchange of experience is essential for the diffusion of innovation. This exchange not only brings new ideas, but it allows mistakes to be avoided based on the experience of other entities or can have an innovative benefit, as it shows that the innovation in question is successful elsewhere. It is very good that this activity is organized at the regional and professional level and therefore should be supported by the region.

USEFUL LINKS

<https://jinag.eu/>
<https://www.facebook.com/agentura.jinag>
<https://www.chytrelchychy.cz/>

THE INNOVATION JOURNEY

The company JVS is located in the small town of Třemošnice (population 3,250) in the Chrudim district. It has offered comprehensive cleaning services of non-residential premises and a supply of hygiene supplies since 1998. It has an ISO 9001 certificate.



Figure 1. Ing. Jaroslava Smutná, entrepreneur of the year 2022

By employing more than 50% of employees with reduced working capacity, their customers can apply the so-called substitute performance (as if they themselves employ disabled people). The company cooperates with the Good Angel Foundation which helps families with children who have fallen into financial difficulties due to cancer or other serious illnesses.

In addition to the family business, Mrs. Smutná works as a managing

director, financial and human relations manager at iProcess Technologies, Ltd., which is part of the German holding company Herbert Bauer GmbH+Co. iProcess Technologies has 43 employees and an annual turnover of EUR 3 million.

The company succeeds in fulfilling the main strategic goal, which is an individual approach to each customer, emphasizing quality, reliability, flexibility, operability, speed and seriousness. Another goal is to create excellent relations with the customer, based on mutual respect and trust. The owner of the company received the title Czech Entrepreneur of the Year 2022 in the category of small businesses.

THE INNOVATION IMPACT

The company fills a gap in the market. At the same time, its business has a significant social dimension in providing job opportunities to women and men with impaired health. In this respect, it represents an example worthy of following in other regions as well.

USEFUL LINKS

<http://www.jvsservice.cz/index.php?module=section&mode=text1&id=122&lang>

THE INNOVATION JOURNEY

LAG (founded in 2002) gradually professionalized until the establishment of a local development office, which, in addition to LEADER projects, also provides consultancy in the field of other subsidy programs. Besides, it also focuses on publishing activities, creating video documentaries, organizing educational events or lending community furniture.



Figure 1. Community planning for the municipality of Milotice. The proportion of women is obvious from the picture.

Since 2004, LAG has supported almost 250 projects for more than 3.5 million EUR. It implemented dozens of its projects, which include, for example, *Join Hands*, focused on the mapping and restoration of small sacred buildings. They were partners in the *Pathway project* – building a pilgrimage trail in Scotland and GASTRO rural art, implemented in Croatia. Among the applicants' interesting projects are, *the Butterfly Paradise* in Ždánice, *the Military cinema* in Vlkoš a project restoring cultural and historical elements in the villages in the Chřiby foothills. LAG has become a development element of the territory and a sought-after

place for advice for entrepreneurs, municipalities and non-profit organizations in the area of other European programs and subsidy policies. The Local Action Plan for Education Development project is underway. The activity *Energetic Society – Communities* to support community energy is a novelty. New partnerships were created, but also new skills – applicants learned to write projects, municipalities learned to lend money to associations, and entrepreneurs learned to pre-finance projects of non-profit organizations. Municipalities began to participate in the implementation of the Strategy and a large potential was initiated in many areas of the life of inhabitants. A unique informal structure "*Council of Microregions*" was created, which helps to increase the effectiveness of the program and its implementation.

THE INNOVATION IMPACT

Local action groups of the European LEADER program can be an effective tool for promoting bottom-up innovation through the methodology of community-led local development. However, the initiative must be understood as a way of managing local communities in cooperation with the public administration, entrepreneurs and non-governmental organizations.

USEFUL LINKS

<https://www.kyjovske-slovacko.com/cs/>

<https://www.youtube.com/watch?v=hj8Ba7-mq90>

THE INNOVATION JOURNEY

Patisserie Lucius specializes in the production and sale of cakes for all occasions. The additional assortment consists of desserts, Christmas cookies, and wine from nearby winemakers. The services include wholesale, e-shop and catering for events of municipalities, companies and associations, Wi-Fi free of charge, and children's corner. Innovative aspects are a quick response to needs and transport to the customer. The company is situated in a suburban village near Brno.



Figure 1. Sweet shop Lucius, Syrovice

The confectionery relies on the use of local ingredients and fresh products. It offers traditional sweets from the region but also develops its products. One of the innovations is the use of the tale of Lucius as a tale that makes the place attractive for children.

The company supplies confectioneries in the regional city of Brno. The confectionery has become a well-known business in the entire

neighbourhood. Its rating on Google is 4.7. The customers are satisfied and return. However, constant innovation and contact with customers via social networks is a prerequisite.



Figure 2. A cake for the hockey club Kometa Brno

THE INNOVATION IMPACT

Rural communities located near large cities do not have to be only dormitories but can function as subcontractors for companies in regional metropolises. It requires a good idea, a quality product, a quick response to changes in customer preferences and, above all, a good reputation and relationships with customers and suppliers. The support of political bodies should be aimed at minimizing the bureaucratic burden.

USEFUL LINKS

<https://www.cukramalucius.cz/>

<https://www.facebook.com/cukramalucius>

<https://www.instagram.com/cukramalucius/>

<https://www.coolbrnoblog.cz/predstavuji-cukrarnu-lucius-v-syrovicich-u-brna/>

THE INNOVATION JOURNEY

Mrs. Magda Sedlářová deals with traditional folk ornamental embroidery, which she applies also to civilian clothes, bags, tablecloths, towels, cashmere sweaters and the like, thereby significantly expanding her offer. She has three automatic embroidery machines. She does not employ anyone, but contracts with seamstresses, graphic artists, an IT expert, and a saleswoman.



Figure 1. Mrs. Magda Sedlářová

In a particular season, she offers her products at regional markets, at a stand in front of the chateau in Milotice, markets in Kyjov and other events and delivers her goods to Czech embassies. Mrs. Sedlářová tries to connect traditional embroidery with contemporary fashion. She sees an opportunity in tourism by offering a product that visitors do not

consume immediately but can take with them and enjoy.

She has an e-shop using social networks. She cooperates with make-up artists of some celebrities, for example, with Countess Eleonore Kinsky when embroidering a corner sail for the upcoming Antonín Dvořák museum in Nelahozevs.

The owner received 3rd place in the eManuel national competition of small and medium-sized entrepreneurs and self-employed people, she participates in the JUSTLOVE project to support older entrepreneurs. She is starting to be seen in the media. Currently, she can also sell know-how. She has a patent trademark for Magda's embroidery and a Regional Brand certification.

THE INNOVATION IMPACT

Small and medium-size enterprises in the field of craft services are very important in rural areas because they increase economic diversity, and develop entrepreneurship and independence of people. Focusing on the sphere of traditional culture supports tourism, and maintains and restores tradition. Mrs. Sedlářová considers the lack of reliable labour to be the main problem.

USEFUL LINKS

<https://www.magdinovysivani.cz/>

<https://www.facebook.com/Magdinovysivani/>



The Odra River Basin Protected Landscape Area



THE INNOVATION JOURNEY

The Odra River Basin Protected Landscape Area is situated in the north-eastern part of the Moravian Gate. It carries out state administration in the field of nature and landscape protection, ensuring the care of valuable localities and monitoring rare species. The territory is part of the recreational hinterland of the Ostrava industrial agglomeration. It is a lowland territory in which the landscape has been developed partly for agricultural use. The key ingredient is water. This is the ornithologically most valuable area in Czechia.



Figure 1. House of Nature Poodří - PLA information centre

Ivona Kneblová M.Sc. is the Head of the biodiversity monitoring department. She deals mainly with aquatic ecosystems. It is professional and administrative work while dealing with European subsidies. In the future, she wants to specialize mainly in zoo monitoring and create a new professional team.

The PLA is of European importance. The PLA area is classified as a Ramsar

site, a bio-corridor of the European ecological network EECNET, in categories A4, B2 and B3 of important bird areas and is proposed for the NATURA 2000 network. The PLA administration participates in the publication of the *Poodří* quarterly.

The northern part of the territory, adjacent to the city of Ostrava, is visited by tens of thousands of people every year. Since 2014, educational and cycle trails with information boards have been purposefully built here.

THE INNOVATION IMPACT

Nature conservation, especially in exposed areas, is very important. However, it is necessary to reconcile the interests of nature protection, tourists and entrepreneurs in the area. Otherwise, overtourism could occur, which could lead to the devastation of protected areas, including animal and plant species. Therefore, it is necessary to establish limits for the use of the territory and, on the other hand, compensation resulting from the limited possibility of use.

USEFUL LINKS

<https://poodri.nature.cz/web/chko-poodri>

<https://www.facebook.com/chkopoodri>

https://www.youtube.com/watch?v=rz_loZZ0jvc&list=PLDGulHo9o_p6Cc4dGTNnxRBTqF7OkT2Mw

The Forest Kindergarten Radováňky



THE INNOVATION JOURNEY

The Forest Kindergarten Radováňky was established in 2013 as part of the ESF project "Creating Tools for Improving Family Policy among employers in the Liberec and South Moravian Regions". Later, it was financed by parents' and sponsors' contributions. The kindergarten had 4 employees.

Children naturally learn to recognize values by staying and moving outside every day, learning that freedom does not mean "doing what I want", but also taking responsibility for one's actions and decisions. By moving in nature, children develop versatility and an interest in nature, they are provided with enough space for their energy and playfulness, and this greatly supports healthy physical and psychological development.

After ten successful years, the operation of the forest kindergarten terminated. Its activity was interrupted due to the anti-COVID measures and has not been resumed since the original children have grown up and their parents stopped engaging in this activity. Among other things, it turned out that the parents of rural children are not very interested in their stay in nature.

THE INNOVATION IMPACT

Preschool education is important not only for educational reasons, but it is also crucial for the socialization of children. Alternative forms are suitable for parents

who are not satisfied with the standard method or who are looking for other options for their children. It enriches the offer and, last but not least, teaches children a relationship with nature and basic environmental and ecological principles. Activities of this type cannot function without financial or non-financial support from municipalities and regions.



Figure 1. Visiting sheep

The sustainability of such facilities is always a big task and requires a constant supply of ideas, funds and interest from parents and politicians. If this interest vanishes, perhaps due to a smaller number of children, the project may be terminated, which is certainly a pity. However, within LAG, the *Education in Motion* initiative, aimed at improving regional education, continues. Some 40 kindergartens in the region are involved.

USEFUL LINKS

<https://radovanky8.webnode.cz/>

<https://www.facebook.com/people/Lesn%C3%AD-%C5%A1kolka-Radov%C3%A1nky-Kyjov/100064523116850/>

THE INNOVATION JOURNEY

The development of the village Tvarožná Lhota (950 inhabitants) is associated with a rich social life: INEX Bílé Karpaty (sorb trees museum), ceramics club, Lipinka (wild birds training), hunting association, fishing association, TJ Sokol (sports), pastoral centre. Emphasis is placed on working with children and for a good report card, children can spend the day with the mayoress.

The activities of associations are supported financially and also by creating conditions and providing spaces for club activities. The main idea is the preservation and restoration of traditional folk culture.

Land improvements and the construction of a street for 24 houses have started, from which they promise to keep the school. The main events are the sorb festival, the farmer's day and others.



Figure 1. Tvarožná Lhota: the municipal house

The village has water supply and sewerage. It is gasified and has a municipal composting plant for biological waste and waste collection yards. It is connected to

the Integrated transport system of the South Moravian Region, which provides 23 bus connections on weekdays and 7 connections on weekends to the closest towns.

THE INNOVATION IMPACT

The village received a green ribbon (for the care of greenery and the environment) in the regional round of the Village of the Year competition and a silver plaque in the Entente Florale European competition of towns and settlements. Although Tvarožná Lhota is located in the foothills in the very east of Czechia, in the district with the highest unemployment in South Moravia, in the last five years, 127 residents moved into the village compared to 59 who left.

After the restoration of municipal self-government in the 1990s, the municipality focused mainly on the completion of technical infrastructure. Currently, it appears that the key to sustaining the population is the support of social life. This approach can be effective, especially in rural areas with a long-term stabilized population that has not undergone intensive industrialization or ethnic exchange of the population.

USEFUL LINKS

<http://www.tvrozna-lhota.cz/>

<https://www.youtube.com/watch?v=IYWmHVC-dE>

THE INNOVATION JOURNEY

The Centre Veronica Hostětín is a professional workplace of the basic organization of the Czech Association of Nature Protectors. Through its expert and educational activities, it provides the interpretation of professional environmental topics. It deals with both urban and rural environments.



Figure 1. Charles, Prince of Wales visited Hostětín in 2010

The mission of the centre, led by Ing. Marie Křiváková, is to show, through practical examples, implemented model projects and the results of their monitoring, that a relationship with nature, local resources and traditions together with considerate management can protect the environment and the global climate, economically stabilize the countryside and solve unemployment even in relatively remote areas. The centre also provides self-realization for mentally disabled citizens.

The functional ecological village (population 240) offers a root wastewater treatment plant, communal heating based on waste chips from the surrounding forests,

a conference centre with a capacity of 50 places and 28 beds in a passive house, including meals based on organic products and fair-trade products, production of cider from own apples and the like. They have successfully solved 55 ecological projects and are currently solving another five.

THE INNOVATION IMPACT

The ecological village is a progressive concept that shows the possibilities of eco-friendly living in a rural area. This method cannot be applied everywhere; so far it is rather limited to small villages. For example, waste wood, which is used for heating, is collected from all over the area, so the surrounding municipalities would have to compete for this fuel. However, it is a model project that works, and the individual processes can serve as an example for other municipalities in the country and abroad or as a valuable educational element.



Figure 2. The US Ambassador Andrew Shapiro in Hostětín 2015

USEFUL LINKS

<https://hostetin.veronica.cz/en>

<https://www.youtube.com/watch?v=z1s2iqnw2do>

THE INNOVATION JOURNEY

Liisa Koivisto is the founder of the Farm Escape Tornio, an escape room experience on a farm with real farm animals. Having always dreamed of living in the countryside and owning animals, she turned her dream into a reality by buying a farm and moving to rural Tornio with her husband.

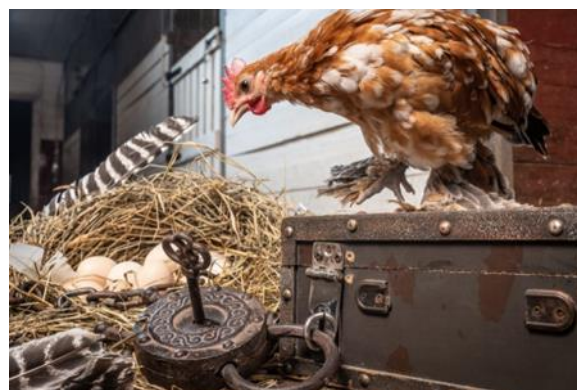
After the number of animals on the farm started to increase, Liisa began thinking of ways for the animals to earn some of their upkeep. Interested in entrepreneurship and being an enthusiastic escape room player herself, Liisa got the idea to combine the escape room experience with real animals. Within the same year after the initial idea, she opened her escape room for customers in 2017. The escape game is inside a stable with real farm animals from which the players will have to free themselves by solving puzzles.



Today, in addition to the escape room experience, her farm offers various other programs, accommodation, animal visits, and organizes events. Alongside running her business and still working in her day job, Liisa hosts a podcast "Maalaiselämää" (*Country life*), to which she also invites other rural women as guests.

Moreover, Liisa has established the international Farm Escape Academy, which offers training and support for other farms interested in hosting escape room games.

THE INNOVATION IMPACT



Through her endeavours, Liisa is boosting local tourism and helping to increase the recognition of Tornio. Her business collaborates with many other local businesses, and she currently subcontracts one local entrepreneur to run her games. She has inspired her neighbour to have farmyard tourism. Liisa is passionate about helping others and in addition to her Farm Escape Academy, she readily advises others with entrepreneurship and utilizes her professional background by offering social media and digital marketing training.

USEFUL LINKS

<https://farmscape.fi>
<https://farmscape.fi/en/organize-animal-escape-games/>
<https://www.facebook.com/farmescapetornio/>
<https://www.instagram.com/farmescapetornio/>
<https://www.youtube.com/c/FarmEscape>
<https://www.tiktok.com/@farmescapetornio>
<https://farmscape.fi/podcast/>

THE INNOVATION JOURNEY

Sirpa Kämäräinen and Katja Vira are sisters, who are running the second-generation family business Isokenkäisten Klubi (Club of the Big-Shoe People), a wilderness lodge and a wild food kitchen, located in remote Särkiluoma village, in Kuusamo. The family tourism business began in 1990's to earn additional income alongside agriculture.



The name of the business comes from the fact that the first customers were usually people from high-ranking positions in Finland, the so-called "big-shoe people". The sisters took over

the family business in 2004. They gave up keeping the farm livestock in 2006 but have continued with crop cultivation to this day. Each sister has contributed their individual strengths to develop the family tourism business. Sirpa's background of working in large kitchens and Katja's background of working in customer service laid the foundation to start offering home-made, wild food dishes, based on locally grown ingredients. In addition, their services include a "seven star" smoke sauna, various program services for tourists, along with accommodation, all based on Finnish nature. The sisters offer tailor-made services with which they wish to create the warm and cozy atmosphere that feels like "visiting one's grandmother's house"

(*mummola* in Finnish). As a testament to the sisters' hard work, about 97% of customers during the winter season are from abroad.

THE INNOVATION IMPACT

Environmental consciousness, respect towards nature, and locally grown, clean, homemade food are values that are driving the sisters' business, and which they themselves learned already at home on the family farm. Most furniture and materials they use are either recycled or made from Finnish wood, and they make sustainable choices all the way from toilet paper to cleaning products. They operate under Sustainable Travel Finland and Green Key certificates. Sirpa has been involved in developing the Wild Food Kuusamo Lapland brand since 2015, which brings together the local wild food producers and experience services from the area of Kuusamo and Taivalkoski. The business has generated seasonal employment, the sisters cooperate with local entrepreneurs through buying each other's services and their facilities and catering are used in local events.

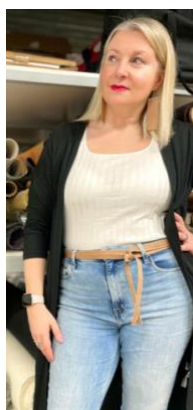


USEFUL LINKS

<https://www.ikk.fi/en/>
<https://www.facebook.com/isokenkaistenklubi>
<https://www.youtube.com/channel/UCDf0w2yqjK2HZGZ73goZv9A>
<https://www.instagram.com/isokenkaistenklubi/>

THE INNOVATION JOURNEY

Eija-Liisa Mäkinen has established a sustainable fashion business Kiedo Ltd., located in Kylmäkoski, that manufactures and sells leather belts and custom leather jackets - made in Finland from start to finish. A commitment to circular economy, along with a wish to empower women to be more confident in their own bodies are the cornerstones of Eija's business.



She wants to make long-lasting, versatile products, while aiming at zero waste. After giving birth to her children, a will to start living more ecologically arose in Eija. Her previous work in clothing industry had left her disillusioned about fast fashion. Eija started work as a salesperson for

a sustainable clothing company. During this time, she met with a lot of women in need for a variable, sustainably made belt. After discovering that no one was making such belts, Eija decided to develop one on her own. In 2019, she collaborated with Salmiak Studio, a small company that uses recycled leather, to make a prototype for the belt. In 2020, she starts making belts on preorder only, and is met with strong demand. The same year, Kiedo Ltd. is established. Kiedo belts are made from surplus leather and vegetable tanned, domestic reindeer leather. Use of recycled leather had to be dropped due to poor availability. Surplus leather from the belt manufacturing is made into earrings. For

the packaging of the jewelry products, Eija uses innovative biodegradable boxes made by Toijala Korukotelo. In 2023, she expanded the production to custom-made leather jackets, for which she has a Showroom in Toijala.

THE INNOVATION IMPACT

The manufacturing of Kiedo's products gives work for six local, rural small businesses. The products of Kiedo have been granted the Key Flag Symbol (Avainlippu) as a sign of Finnish manufacturing. Eija collaborates actively with other small, sustainable businesses. Passionate about promoting domestic manufacturing, she was involved in establishing Suomikki association for responsible fashion businesses that manufacture their products in Finland and thus support Finnish labour and self-sufficiency. Many members happen to also be rural women. Suomikki increases the visibility of and networking between the brands by a joint web platform and by organizing pop up events.



USEFUL LINKS

<https://www.kiedo.fi/>
https://www.instagram.com/kiedo_finland/
https://www.facebook.com/kiedofinland/?locale=fi_FI
<https://www.kiedo.fi/blogs/kiedoitsesihyvaan>
<https://suomikki.fi/>

THE INNOVATION JOURNEY

Linnea Strand is the sole proprietor of the grocery store Livsvinn, which strives to reduce food waste by selling second grade and surplus vegetables as well as products past “best before date” with lowered prices. Coming from an entrepreneur background, Linnea has always been fascinated by the freedom and challenges provided by entrepreneurship. During her studies in Economics in Hanken, starting her own business was an obvious choice. Born in Swedish-speaking majority Närpes, and wanting to continue to live there, Linnea wanted to develop a business idea that would be suitable for her hometown. Närpes is known for greenhouse farming of tomatoes and cucumbers, and Linnea knew that there was a lot of second grade vegetables going to waste. This fact combined with Linnea’s interest in sustainability and a wish to do something societally useful, gave birth to the idea of a grocery store that would reduce food waste.



Linnea developed her business idea with support from Hanken Business Lab and Dynamo Närpes, and after finishing her studies, she was ready to establish Livsvinn. She opened the store in 2019. Currently, the grocery store includes a

café, and an ice cream bar during the summer, where you pay per kilogram. Livsvinn also cooperates with local restaurants by selling surplus lunch boxes and makes one own product out of waste tomatoes.



THE INNOVATION IMPACT

Through her endeavours, Linnea has introduced new ways to reduce food waste, and to promote circular economy. She is changing local attitudes towards the use of second grade vegetables and products past “best before date” into more positive. She employs two people full-time, who, all women so far, share her interest in sustainability. In 2023, Linnea partnered up to open another store in Malax. As part of their responsibility ethos, LivsVinn donates part of the profit every year to local projects or charity. LivsVinn was awarded the prize for innovative young entrepreneurship by the Egil Gullström Foundation in 2022.

USEFUL LINKS

<https://en.livsvinn.fi/>
<https://www.livsvinn.fi/blogg-1>
<https://www.linkedin.com/company/livsvinn/about/>
<https://www.facebook.com/livsvinn>
<https://www.instagram.com/livsvinn/reels/>

THE INNOVATION JOURNEY

Piritta Liikka is the owner of My Trail (Mun Polku), a small tourism business that offers private, tailored nature experiences in the form of guided tours and wellbeing in nature. My Trail operates in the Ruka-Kuusamo region, and in Oulanka, Riisitunturi, Salla, and Hossa National Parks. Originally from southern Finland, Piritta moved to Kuusamo to be closer to its beautiful nature. She has been an avid hiker since childhood. While working an office job, Piritta got drawn into acting as an unofficial tour guide for company guests. She soon realized she had a natural gift for it and decided to turn her beloved hobby into a living. After gaining experience as an assistant guide for a couple of tourism companies, she was ready to establish her own business in 2016. Instead of offering the usual tour guide services, Piritta wanted to combine her passions for nature and yoga in her business, and to share the wellbeing provided by nature she has personally experienced. In addition to more traditional

nature tours, My Trail offers various types of forest therapy: forest and reindeer yoga, treebreathing, meditation and mindfulness techniques in nature.



At the core of all activities are Finnish nature relations and finding a deeper

connection with nature with the help of various ecotherapy methods. During tours, guests are also provided information regarding local culture, nature, and history, as well as on sustainability. In addition, Piritta offers recovery coaching and training for tour guides.

THE INNOVATION IMPACT

Piritta is driven by a wish to offer people such profound experiences in nature that it will change their worldviews and habits into more sustainable direction, thus helping nature in turn. She is a



local forerunner in sustainable tourism, with her business holding a Sustainable Travel Finland certificate, Green Activities certificate and being a signatory of Glasgow Declaration on Climate Action in Tourism. Piritta collaborates extensively with a group of all female tour guide entrepreneurs, as well as with many other local companies, and provides seasonal employment. Through her training of other tour guides in nature wellbeing, she is spreading new influences on tourism in her area.

USEFUL LINKS

<https://www.mytrailfinland.com/>
<https://www.facebook.com/munpolku>
https://www.instagram.com/mytrail_munpolku/

THE INNOVATION JOURNEY

Rita Porkka is the CEO and founder of Naturest Ltd., a nature service company that offers forest pedagogy ("forest nature school") and nature-based wellbeing services in forest environment, in Northern Ostrobothnia. Rita has been living with her husband in Siikalatva since their children moved away from home. For her, the rural nature offers space and freedom that feeds creative thinking. After working for 20 years in various rural development projects for different organizations, Rita started to wish to do something else with her life and put her accumulated expertise into use. During her project work, Rita had been organizing forest pedagogy to school students. She then developed forest workshops to international educational travel groups and established Naturest Ltd. in 2020 with two female partners. However, during the pandemic Rita had to change her target group.



Currently, Naturest offers environmental education in the form of the forest nature school, event production, as well as nature care services in which the forest environment is harnessed for empowering or rehabilitating activities for individuals and small groups. Naturest activities are organized in cooperation

with a network of partners, all of whom are women. Since 2022, Naturest has been running the Nature Cafe Loppula at Sanginjoki nature conservation area.

THE INNOVATION IMPACT

Rita is offering new wellbeing services and, through the forest nature school, involved in spreading nature awareness. Sustainable development is close to Rita's heart, and the activities in Naturest are directed by the Visit Finland Sustainable Travel and Green Activities labels. Moreover, Rita is committed to social responsibility.



Naturest offers internships, also for immigrants, has had so far one wage-supported employee, uses furniture that was made in local prison programmes, and offers a 10% discount for associations of the public good. Rita has also arranged a free winter event for Ukrainian refugee families and participated in the restoration of a local lake, and in foreign species voluntary work.

USEFUL LINKS

<https://naturest.fi/en/naturest-home/>
<https://www.facebook.com/naturestfinland/>
https://www.instagram.com/naturest_finland/
<https://www.linkedin.com/company/naturest-finland/>
<https://www.youtube.com/channel/UCevcsLCHlvGpu0Co9SKla9g>
<https://naturest.fi/blogi/>

THE INNOVATION JOURNEY

Riitta Rontu is the founder of the Syötteen sieni ja yrtti LP (Syöte mushroom and herb) that offers various mushroom products and experiences, based on hand-picked wild mushrooms. Riitta currently lives permanently in Syöte, Pudasjärvi, where she used to spend all of her summers and holidays since childhood, as her family has long roots there. She has always been enthusiastic about mushroom picking, which offers the joy of discovery and of being in nature. Syöte national park provides exceptionally rich grounds for mushrooms: one can find over a 100 different mushroom species in its old forests. Riitta had felt tired of her old job and was studying entrepreneurship alongside work. She ended up establishing her business in 2016 as part of the studies. In 2017, planned layoffs at her work provided the final push to leave, and Riitta was ready to do something new with her life. She decided to try and turn her hobby and passion into a living.



Already before establishing her business, Riitta had been selling some of the mushrooms she had picked. First, she operated in her kitchen, but soon realized she needed a bigger space and better equipment for her operations, which she acquired in 2019. Unreliable mushroom

years lead her to develop other mushroom based products and services based on customer feedback. Currently Riitta offers various mushroom products (such as dried mushrooms and mushroom salt), as well as herb, berry and garlic products, mushroom experiences, and events (such as mushroom picking excursions and company getaways), and mushroom related courses.

THE INNOVATION IMPACT



Riitta has developed new kinds of local food products and services from wild mushrooms. The small business has done its part to invigorate local life. She cooperates with other local tourism businesses and retailers and is one of the few who offer local food products to tourists. Through her endeavours, Riitta is spreading the knowledge of mushroom picking and preparation and helping people to utilize wild food. Riitta has a network of elderly women who have an opportunity to earn extra income by picking mushrooms and berries for her. Some of the old fields at the family farm managed by her brother were restored and now used for growing garlic.

USEFUL LINKS

<https://www.syotteensieni.com/>
https://www.facebook.com/syotteensienijayrtti/?ref=embed_page
<https://www.instagram.com/syotteensieni/>

THE INNOVATION JOURNEY

In 2006 Mrs. Anne-Leena Pellikka bought a village school, set up a small stable and started to provide riding lessons in her home municipality Keitele, Finland. Later on, she acquired the family farm from his relatives and transformed it into a horse farm. There have been investments for various facilities to expand accommodation business (the school buildings and two cottages for rent) and to provide meeting facilities. In 2021 she started to provide riding services in the neighbouring community Suonenjoki by renting an existing facility and in 2023 in Rautalampi as part of the high school specialised in horse riding. Since 2019 she has organised rock festivals in the manège.



What is unique is that she has created all this from scratch and has been able to run profitable business in a very challenging remote rural area. Growth of the event has never been an objective, 'it has just happened'.

THE INNOVATION IMPACT

In 2023 there were 700 visitors in the Manège Rock. During the best summer

season there are about 500 regular riding customers per week, next year possibly 600-700. The camps, events and tourists add these numbers. Provision of active lifestyle for young people and availability of communal space for the villagers have been benefits of the innovative actions. Also new jobs as well as positive direct and indirect impacts on the local economy have been significant.



Contacts are extremely important, and a large network is needed to manage extensive and diverse business in several location and challenging business environments.

USEFUL LINKS

<https://www.wkt.fi>,
<https://www.maneesirock.fi>,
<https://www.facebook.com/profile.php?id=100063474943033>

Goat burns on the field



THE INNOVATION JOURNEY

Goat burns on the field is an annual event taking place in a small rural municipality of Tervo in central Finland. It is organized by a group of local volunteers and coordinated by Mrs. Riitta Raatikainen. She moved back to Tervo about 10 years ago and organized the network from scratch. Last year 80 volunteers were involved.



The goat is made of straw, and it has a wooden construct made without nails. The first event was organized in 2018 by the family alone. The idea was to get light in the darkness. Traditionally the goat is burned during the darkest moments of the year in early November when traditional harvest festivals (Kekri) have been taken place for centuries. More and more people have gathered to look at the burning goat year by year. Part of the people make a long trip to see the goat and to share a primitive connection with land, fire and sky together with other

people. There is no formal organization involved, just a group of people who decide whether to do it again next year. No money is involved in the event. Growth of the event has never been an objective.



THE INNOVATION IMPACT

In 2023, there were 1,200–1,500 visitors in the event. Local artisans have a possibility to sell their products in the event. As there is no money involved in the organisation, no new jobs are created but just communality, pleasure and memorable experiences. The event is big in its context and well-noticed in local and regional media. Local people have started to believe that almost everything is possible.

Women should be encouraged to adopt examples and influences from outside their location e.g. by establishing communities of practice. For this end, making women-led innovations visible and available is important.

USEFUL LINKS

<https://www.facebook.com/pukkipalaa/#>

THE INNOVATION JOURNEY

During recession of the 1990s, the city decided to close Pupula kindergarten in Karkkila, Finland. Parents decided to set up a cooperative to safeguard the services and future for Pupula. The innovation is the only one in Finland of its kind. Mrs. Sonja Jarila has been Managing Director of the cooperative since 2009.



There is room for 21 children, currently there are 18 children. The place is fully booked until mid-2025 and for a long time there have been more incoming children than could have been accepted. Number of members in the cooperative is about 100. They are all parents of the 'clients' (children). They are members of the cooperative as long as their kinds are in the kindergarten. Membership fee is 84.09 euros and start fee is 33.64 euros. The board consists of 5–7 parents of children currently in the kindergarten. The board is chosen annually, but many parents that have become chosen continue many years.

THE INNOVATION IMPACT

Because the kindergarten is a cooperative, parents actually decide

many things concerning the care of their children, including recruitment of employees and additional activities (if there is money) e.g. excursions and movie trips. The cooperative provides an opportunity to have a small, intimate and safe place for the children. Small scale of the operation affords practical food and nature education. The kindergarten employs 4 people.

The municipalities in charge of provision of kindergarten services should observe the option of buying private services to provide options for parents (e.g. small units). Increasing awareness of the cooperative model is also important as many do not know that such is possible and has many advantages (e.g. possibility to directly have an influence of the services by the parents).



USEFUL LINKS

<https://www.pupulanpaivakoti.fi>,
<https://www.facebook.com/Pupulanpaivakoti>



The Municipality Action Programme



THE INNOVATION JOURNEY

The aim of the Municipal Action Programme is to attract women to local politics, ensure equal representation on committees and increase the visibility of women. The focus is on rural areas. To this end, support and networking opportunities, democracy workshops and a mentoring programme for women new to politics are offered. Local counselling services are combined with a supra-regional exchange of experience.



The Municipal Action Programme is funded by the Federal Ministry for Family Affairs, Senior Citizens, Women and Youth (BMFSFJ). The programme is run by the EAF Berlin in cooperation with the Deutscher

Landfrauenverband e. V. (dlv). Three municipal umbrella organisations - the German Association of Districts, the German Association of Towns and Municipalities and the German Association of Cities - support the programme, as does the Federal Association of Municipal Women's Offices and Equal Opportunities Officers.

THE IMPACTS OF INNOVATION

The action programme will run from 2022 to the end of 2024 and is therefore still relatively new. Whether there will be another project in this area from 2025 depends on the federal government's financial situation. Those involved are already saying that the content on offer is useful and necessary to support women in their political involvement. The visibility of women is increased, and the action programme encourages and motivates women to be politically active. The outstanding expertise of both institutions and the good network of the dlv in rural areas could be utilised here. The model regions are independently implementing and establishing their own measures and formats, such as political leadership programmes and mayors' networks. 7% of the mentors have leadership positions, 43% of whom have entered politics as a result of the programme.

USEFUL LINKS

<https://www.frauen-in-die-politik.com/>

<https://www.eaf-berlin.de/>

<https://www.landfrauen.info/>

THE INNOVATION JOURNEY

The Eschenhof is located in a very rural area in Mecklenburg-Vorpommern in north-east Germany. The association "Gemeinsam Gärtnern e. V." was founded 10 years ago on 3.5 hectares of land on the private initiative of Nicole Bowe. The original idea, jointly with a gardening friend, was to propagate seeds, but instead the two of them got people interested in community vegetable growing.



They rented land, reclaimed it from nature and recultivated it. Now they grow vegetables together in the open and in greenhouses; a fruit meadow complements the production. Following on from a loose community of interest, a non-profit organisation was founded which today supplies 20 families with

fresh fruit and vegetables. In addition to growing together, a lot of information is provided, e.g. how to plan a gardening year, how to propagate seeds or how to preserve fruit and vegetables. In 2024, for example, workshops on wild fruits and wild herbs will be held. All club members pitch in and the harvest is distributed equally to all members throughout the year, depending on what fruit and vegetables are available in the season.

THE IMPACTS OF INNOVATION

Sustainable production is very important to the Eschenhof, which is why it is EU-certified organic and has been involved in the network of a regional brand "Schaalsee Biosphere Reserve - for Body and Soul" for many years. The association has been involved in various scientific projects and has won the German Neighbourhood Award several times. They create a sense of community for the members in the region, and also a greater sense of achievement through a broad range of crops and greater diversity of varieties than would be possible when "gardening alone".

UEFUL LINKS

<https://eschenhof-verein.de/>
<https://www.nachbarschaftspreis.de/de/projekt/2021-19217-Koenigsfeld-OT-Gross-Ruenz-Eschenhof---Gemeinsam-Gaertnern-eV-517/>
<https://www.mikrolandwirtschaft.org/s/erz5wlp/eschenhof-gemeinsam-gaertnern-e-v>

THE INNOVATION JOURNEY

Uta Janbeck runs a Fairhaus with 7 rooms for 21 guests near the Danish border in northern Germany. In 2002, she and her husband renovated the old farmhouse of a three-sided farm and gave it back its old look. Later, a wooden house with further accommodation was added.

From the outset, care was taken to conserve resources whilst building. The largest private sewage treatment plant in the Schleswig-Flensburg district is located on the farm. Energy is supplied by a combined heat and power plant, solar hot water and mainly photovoltaics. The water consumption is 68 litres per guest compared with 200-300 litres as common in other guest houses. In 2006, Uta started with a small ecological guesthouse, and in 2018 she ran the first climate-certified hotel in Schleswig-Holstein.



THE IMPACTS OF INNOVATION

Conserving resources and the circular economy are very important to Uta. The guest house is a patchwork of sustainability. There are QR codes in the flats that provide guests with information about, for example shower water consumption or cloudy toilet water, which is recycled. Not only water and energy are recycled, but even the bed sheets. Uta describes her project as "contagious, because anyone who thinks about conserving resources is already one step ahead". Uta has received numerous awards such as German and Schleswig-Holstein environmental prizes and Green Brand nominations. Her accommodation is CO2-certified. She is often invited to give lectures and works with various schools.



USEFUL LINKS

<https://janbecks.de/>
<https://www.umweltbundesamt.de/umwelttipps-fuer-den-alltag/heizen-bauen/heizen-raumtemperatur#gewusst-wie>
<https://www.verbraucherzentrale.de/wissen/energie/strom-spahren/ledlampen-worauf-sie-beim-kauf-achten-sollten-6579>



THE INNOVATION JOURNEY

Anja Hradetzky ran a 250ha organic farm near the Polish border in eastern Germany with her husband until 2024. She was trained Low Stress Stockmanship in Canada, and has been giving seminars herself in Germany since 2012. This makes her the first woman to offer this form of training, which was previously a purely male domain. She also keeps ponies for landscape conservation, offers time out with horses for women together with a friend and organises seminars on personal development and team days.

THE IMPACTS OF INNOVATION



Anja is passionate about handling animals in a manner that is appropriate to their nature and as stress-free as possible. As a cattle grazer, she has therefore worked intensively on the possibilities of a "gentle" method of dealing with animals in general and with cattle in particular. Herd animals are managed and driven using body

language, at their own pace and according to the rules of "cow psychology" rather than with haste and force. This simplifies the work and saves labour, because humans and animals work together and not against each other. Anja also gives lectures on pasture farming and animal welfare and takes part in panel discussions. With her commitment as the first woman in Germany to train in this discipline, she not only spreads the innovation of Low Stress Stockmanship as a gentle method of livestock husbandry, but also as an innovator has a positive influence on the perception of women in agriculture.



USEFUL LINKS

<https://anjafeierabend.net/>
<https://www.fokus-tierwohl.de/de/rind/berichte-aus-den-veranstaltungen/low-stress-stockmanship-stressfreies-treiben-von-rindern>

THE INNOVATION JOURNEY

Master confectioner Nanetta Ruf runs a mobile bakery in the Wetterau region of Hesse in the centre of Germany. Her 26-tonne truck has an 18m² bakery, a mini office, a sleeping area and a separate toilet.



She does contract processing of farm produce from organic farms within a radius of around 150 kilometres from her home. She visits the farms, stays on the farm for about a week with her lorry and creates a stock of products for the farmers and direct marketers, such as cakes in jars, tartlets, eggnog, jams and spices, which they in turn sell in their farm shops.

THE IMPACTS OF INNOVATION

Nanetta would like to be self-employed, develop her own products and make beautiful, creative things. She was also looking for an alternative to the night

work of traditional bakers and confectioners. She developed KondiTOUREi, Germany's first mobile confectionery, modelled on mobile cheese dairies and butcher's shops.



With her initiative, she created the opportunity for direct marketers to offer a wider range of products for direct marketing without the need for extensive investment. Otherwise, they would not be able to produce many products themselves because they lack the necessary resources. Through Nanetta's work, the farms she cooperates with become an attractive destination that can offer a nice piece of cake as well as many other products. With her courage and creativity, Nanetta is a role model for many women.

USEFUL LINKS

<https://konditourei.de/>
<https://www.lwk-rlp.de/de/beratung/lwk-beratung-news/news/News/detail/konditourei-mobile-produktveredlung-am-hof/>
<https://www.ardmediathek.de/video/kochstories/kochstories-suesses-on-tour-die-konditorin-mit-dem-truck/hr-fernsehen/NjMwYmZhMDUtODQwMi00ZmUyLTkwMjAtMzlkZDIjZWlwMGV>

THE INNOVATION JOURNEY

Miriam Peters and her team from 'Rural Graces' (Landgrazien) are active in southern Schleswig-Holstein in northern Germany. They provide counselling for women and children who have experienced violence. It does not matter whether it is physical violence or massive digital abuse. Their mobile counselling unit – an unmarked VW bus – can be found for example in supermarket car parks.



Women seeking counselling can make an appointment. It is also possible to contact the Landgrazien online or by telephone throughout the region. The topics can vary - one woman may want to leave her abusive husband and is looking for help, another may just want to explore her legal options in the event of a divorce. It is important to note that exclusively counselling is offered; the victims must take action on their own initiative and take the necessary steps.

THE IMPACTS OF INNOVATION

This initiative is new for rural areas; previously, counselling centres for women who have experienced violence only existed in cities. However, the urban environment is culturally very different from the rural one.

This was the main driving force for Miriam and her team. There are now six women working for the Rural Graces, two of them as counsellors, who have already advised over 1000 women. They are financed by foundation funds and donations.

Rural Graces was founded in 2021 and is now the largest prevention account in Germany, which has already attracted a lot of attention. The initiative is currently only active in Schleswig-Holstein, but could be copied throughout Germany and possibly across the EU.



USEFUL LINKS

<https://land-grazien.de/>
<https://fhf-sandesneben.de/>
<https://www.betterplace.org/de/projects/132740-land-grazien>

THE INNOVATION JOURNEY

Britta Johannsen and her husband are the fourth generation to run a grassland farm with suckler cows and dairy cattle on a small North Sea island (Hallig) in the north of Germany. In summer, the milk from 8 of the 30 cows is processed into butter, cream and yoghurt in the farm's own dairy and sold in the farm shop. Their butter is also sold in shops on other islands. This makes Honkenswarf the last dairy farm on a Hallig. The farm shop is also a speciality; it has been the only shopping opportunity in this remote region for 10 years.



THE IMPACTS OF INNOVATION

Her father-in-law already ran a small direct marketing business for farm produce, but Britta has expanded the business into a respectable shop selling everything the islanders need apart from bread, fruit and vegetables. Meat and sausages are processed on farm, but are also bought in. From April to October, dairy products are produced on the farm. The region is very remote and

is only served by ferries twice a day in summer and irregularly in winter. As a result, her shop is not only popular with tourists, but also with many locals and is also a social meeting place. As their farm is small-scale, it is popular for 4-week student internships.



USEFUL LINKS

<https://www.honkenswarf.de/willkommen/>
<https://www.langeness-tadenswarf.de/willkommen/>
<https://www.plastikfrei-wird-trend.de/plastikbewusste-ferienunterk%C3%BCnft/plastikbewusste-unterkunft-halligen/hallighof-johannsen-plastikbewusste-ferienunterkunft/>



Innovative Measures for Women in Rural Areas (IMF)



THE INNOVATION JOURNEY

The "Innovative Measures for Women in Rural Areas (IMF)" project offers customised support for women in rural areas in the federal state of Baden-Württemberg in southern Germany. It specifically supports women by promoting investments in companies as well as measures for qualification and coaching.



ländlicher raum

frauen schaffen zukunft

The aim of the IMF programme is to empower women to become entrepreneurs themselves. It enables women to return to work and thus contribute to the family income. In this way, it helps families to remain in rural areas and thus contributes to social cohesion. In contrast to conventional support measures for agricultural businesses, it is not aimed at farm owners, but explicitly at all women in rural areas who want to become self-employed with their innovative ideas. This makes the innovative strength of

women visible. The project is unique in Germany and was launched in 2006 on the initiative of an MEP. It is already in its 3rd funding period from 2024 to 2030, with support from the EU and the federal state.

THE IMPACTS OF INNOVATION

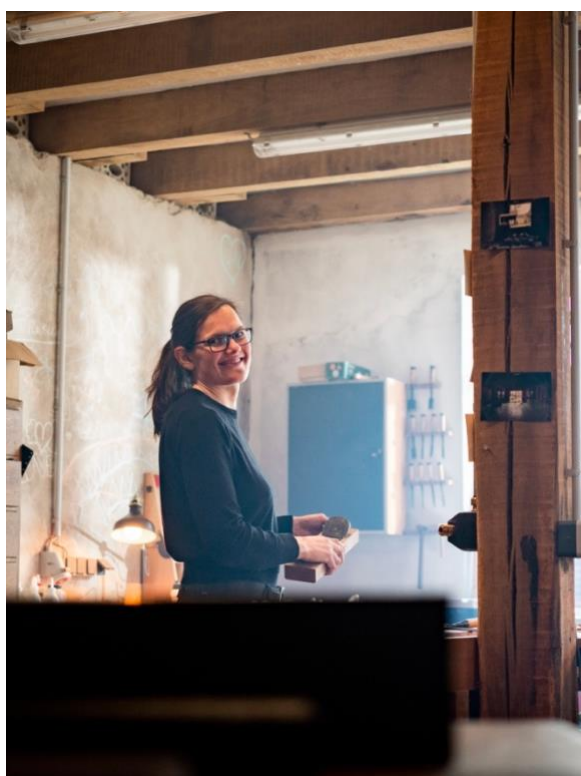
The three rural women's associations in Baden-Württemberg have campaigned for this project. Innovative projects with a lighthouse character are funded. As a result, there have been more business start-ups by women and an increase in jobs. Many of the first projects from the early years of the project are still running and have found imitators. The customised measures for qualification and coaching have also enabled women to further develop their entrepreneurial skills. In this way, a change towards women's rights has taken place. Women have become more self-confident, and the level of education has increased. The IMF programme itself therefore has a beacon character.

USEFUL LINKS

<https://mlr.baden-wuerttemberg.de/de/unsere-themen/laendlicher-raum/foerderung/innovative-massnahmen-frauen>
<https://foerderung.landwirtschaft-bw.de/Lde/Startseite/Foerderungswegweiser>

THE INNOVATION JOURNEY

Johanna Röh is a master carpenter and lives in Lower Saxony in north-west Germany. After four years of travelling, she set up her own business in 2016. She initially rented a carpentry workshop and converted an old farmhouse for her business in 2018. After a long period with employees and trainees, she is now working alone again. Her USP is the use of local and ecological materials and surfaces.



Her daughter was born in 2022. She found it unfair that self-employed women in Germany - unlike employed women - are not entitled to statutory maternity leave. She complained loudly about this

in her ‘Maternity protection for all!’ initiative, which was well received by similarly affected female entrepreneurs.

They found it unfair to be left alone with the risk of insolvency during the postnatal period, when they are unable to work and therefore have inadequate protection.

THE IMPACTS OF INNOVATION

Women have formed a network and have since founded a non-profit organisation with over 100 members. Their petition gained momentum through social media and spread like wildfire. Johanna received "funding for political talent" and thus access to money and counselling. Her work triggered a process that was supported by many politicians, but also by associations and chambers. In the meantime, the Federal Ministry for Family Affairs is carrying out a needs analysis and measures are being discussed in the Ministry of Economics. So far, those involved have only worked on a voluntary basis, but the aim is to expand the counselling initiative to include full-time positions and to offer events for self-employed pregnant women.

USEFUL LINK

<https://mutterschutzfueralle.de/>
<https://mutterschutz-fuer-selbststaendige.de/>
<https://www.johanna-roeh.de/>

THE INNOVATION JOURNEY

The abbreviation VERN stands for "Verein zur Erhaltung und Rekultivierung von Nutzpflanzen" (Association for the Conservation and Recultivation of Crops). The association is based near Berlin in eastern Germany. Its aim was and is to preserve old agricultural and horticultural crops as genetic resources and thus to revitalise a piece of cultural heritage and cultural history. In 1994, a former market garden was reactivated and "forgotten" cultivated plants were grown there.



The association is financed by membership fees, donations and third-party projects, as well as the sale of seeds and young plants to allotment gardeners and small horticultural businesses. Vegetables, herbs and ornamental plants are grown for seed production. Two separate networks are dedicated to the on-farm preservation of old grain and rare vegetable varieties. Old potato and tomato varieties are offered at regional farm days and seed courses, workshops, exhibitions and conferences are regularly held by VERN and external providers in the affiliated education centre. Members of the

association are private individuals, farmers, gardeners and institutions.



THE IMPACTS OF INNOVATION

VERN e.V. makes a significant contribution to biodiversity by preserving the diversity of old varieties and underutilised crops. The organisation currently preserves around 2,000 old varieties and keeps them accessible to the public. VERN supports the development of value chains, e.g. regional processors produce single-variety products such as bread or whisky from the 'Norddeutscher Champagnerroggen' variety. Regional gardeners market fresh vegetables from old varieties as "varietal treasures". VERN has created several jobs in a structurally weak region. The association now employs various staff in its office and in the show and propagation garden for gardening and seed work, the administration of the association and the coordination of the conservation networks.

USEFUL LINK

<https://vern.de/>

<https://samenbau-nordost.de/vern-e-v/>

<https://landsorten.de/>

THE INNOVATION JOURNEY

Helena Golden, a Leitrim based basket maker, champions inclusivity, welcoming individuals of all ages and abilities to experience the tactile craft of Willow Weaving.



From community initiatives to corporate team-building activities, Helena's workshops instill a deep connection to our ancestral traditions and Irish culture with an inherent sense of active mindfulness. This approach simplifies the traditional process, ensuring that people from all walks of life can enjoy the art of basket making, allowing each individual to create beautiful, functional baskets with ease.

THE INNOVATION IMPACT

Helena featured as an expert basket maker in a video production project, led by Leitrim County Council Heritage office and Creative Ireland; she joined a local development company in a programme to tackle isolation by bringing people together to weave; worked with an Association of people with disabilities to foster wellbeing and capacity building; she collaborated with

a local artist to combine skills and showcase creativity.

Helena has designed and offers tailor made courses for community groups, team building events and offers specifically designed packages for schools. She is a registered Heritage Specialist with the Heritage in Schools Scheme and has completed the prestigious TAP Programme (Teacher Artist Partnership) focussing on arts and creativity in school.



In these roles she actively engages children with the art and skill of basketry. Online workshops and classes are provided as an option to facilitate different groups and demands. All materials are provided for online workshops which are live and interactive. An online school of natural craft offers an alternative to live workshops. This option is centred on self-paced learning and is an on-demand video course.

There are five courses to choose from in this package.

"Cultural heritage is about so much more than the craft itself. It is about community, people coming together, memories shared, and stories told"
(Helena Golden, Website).

USEFUL LINKS

<https://helenagoldenwillow.ie>

THE INNOVATION JOURNEY:

Aisling Kelly Hunter, is proprietor of WBs Coffee House, a thriving establishment nestled in Sligo Town and married to an Oyster farmer. Established in 2018, Aisling identified the untapped opportunity that is 'Sligo Oyster Experience'. Sligo Oyster Experience offers visitors a guided tour through Sligo town, culminating in a delightful serving of freshly shucked oysters sourced directly from her husband's oyster farm, savoured at the purpose-built oyster bar within the café.



Building upon the success of Sligo tours, the business was expanded in 2020 to include the introduction of Sligo Oyster Farm Tours. Recognising an increasing demand and eager to offer a more immersive experience, Aisling devised farm tours, granting visitors a first-hand insight into the entire oyster cultivation process, from inception to harvest.

THE INNOVATION IMPACT:

Aisling sought to tap into the intersection between food and tourism, aspiring to illuminate the complexities of oyster cultivation and the labour behind it. Aisling's entrepreneurial acumen extends beyond mere profit, as she is committed to fostering economic sustainability, while championing environmental conservation and preserving local cultural heritage.

Through her endeavours, she not only entices tourists to the opportunities, but safeguards traditional fishing practices. Aisling extended the Sligo Oyster experience further in opening a shop, which supplies a selection of their produce as well as crafts and books.



The Sligo Oyster Experience has been named on GoAdventure as one of the top 10 food experiences in Ireland.

USEFUL LINKS

<https://sligooystereperience.ie/>
[Sligo Oyster Experience](#)
[Sligooysters](#)

THE INNOVATION JOURNEY

Ursula Kelly is the second generation in 'Cormac Tagging' Irish owned family business. This company is a Department of Agriculture, Food and Marine approved supplier of cattle, pig, sheep, and goat identification products.



Following a successful career in accountancy, Ursula became the Director of Operations of Cormac Tagging, which is based in Tuam, County Galway and plays a vital role in catering to the needs of farming communities at local, regional, and national levels. In addition to this, its operations contribute significantly to employment in the region.

THE INNOVATION IMPACT

As of 2015, the cattle tag market in Ireland was controlled by a single supplier approved by the Department of

Agriculture. With Ursula as Director of Operations, Cormac Tagging made a successful application to become an approved cattle tag supplier by the Department, providing farmers in Ireland with alternative product options in the market. The diversification not only broadened Cormac Tagging's product offerings, but also opened up new avenues for growth thereby also increasing employment opportunities for the region.



After entering the cattle tag market in December 2016, the business grew by 1200% by 2022, with a 99.2% customer retention rate during this period. Cormac Tagging was recognised by AIB as a benefit for both Ireland's national dairy and beef herds, with Ursula being named as a finalist in the Irish Strategic Growth Award in a female-led enterprise category at the National Women in Enterprise Awards in 2018. Ursula has joined forces with Censortec and Alfco Farm Services in a strategic partnership to offer Irish cattle farmers the complete solution in animal monitoring, autodrafting and identification.

USEFUL LINKS

<https://www.cormactagging.ie/>
[Cormac Tagging](#)
[Cormactagging](#)

THE INNOVATION JOURNEY



AgriKids was created with the principle of actively engaging, educating, and empowering children to become ambassadors for farm safety.

Founded by Alma Jordan, AgriKids is a farm safety educational platform for children and teachers and grew from an increasing concern for safety on farms. AgriKids began in 2015, a year after the worst on record for farm fatalities. In 2014, 30 people lost their lives in farm accidents, five of those were children. Inspired by witnessing the extraordinary capabilities and influence children possessed during a Green Schools program, where children actively motivated their parents to embrace new recycling practices at home, Alma recognised the immense potential of children as catalysts for change.

“Current advertising practices are being directed solely to farmers, but I believe that by empowering children through education and engagement we are also educating the adults” (Alma Jordan, cited in Agriland, 2015).

The strategy of engaging children as the point of contact for educating and raising awareness on farm safety necessarily draws in other key people into the discussions, for example parents,

guardians and experts, thus the learning outcome reaches a wider audience.

THE INNOVATION IMPACT

AgriKids have carried out various initiatives nationwide to promote and raise awareness of farm safety, health, and wellbeing. During COVID, a zoom lesson hosted by Alma was attended by 4,000 children from all over Ireland and the UK and she regularly invited as a guest speaker to events across Europe. Alma has developed various resources to promote farm safety on the AgriKids website to aid families, communities and schools in making the farm a safer place to live, work and visit.



The website offers resources such as supported learning programmes, various workbooks, lesson plans, discussion sheets and a game zones to children from pre-school to sixth class. There is a dedicated space for AgriKids School's Farm Safe Hub which provides links and resources to two tailor made programmes both of which align to specific aspects of the school curriculum. Links are also provided to other relevant organisations and agencies.

USEFUL LINKS

<https://www.agrikids.ie>

THE INNOVATION JOURNEY:

CERES was founded by ten leading female professionals, from diverse backgrounds including academia, consultancy, and agri-business. The aim of CERES is to develop and promote leadership and diverse thinking within agriculture. The network is named after Ceres, the Roman goddess of agriculture and growth, known as the protector of the land and its products.



Karen Brosnan is originally from a dairy farm in County Kerry and is one of the founding members of CERES.

She has worked nationally and internationally as a strategy consultant, facilitator, and executive coach. She works with companies, boards, and executives to plan strategically for organisational change, to implement leadership development programmes and to facilitate culture change. She is a Director of Nuffield Ireland and a board member of Gurteen College.

THE INNOVATION IMPACT:

Through the delivery of a range of dynamic, engaging, and thought-provoking events, the network provides

a platform for knowledge sharing, collaboration, and peer support. CERES events are now open to everyone with an interest in critical thinking and leadership in Irish agri-business. Karen has also delivered a report on the *Pathways of Leadership Development in the Agri-Food Sector*.



CERES is committed to evaluating the current role of women in agriculture and hold network-building events for women in agriculture and contribute to gender equality in agriculture in Ireland.

"It's great to have a lot of really credible women in ag as role models today, however, there isn't necessarily a succession plan in place where women are equally coming up behind. The movement will continue to require encouragement and nudging for another decade, and we're part of the machine that does that – we are part of the many other agencies that are nudging forward," (Karen Brosnan, cited in Agriland, 2017).

USEFUL LINKS:

<https://nuffield.ie/scholar/karen-brosnan-2013/>

THE INNOVATION JOURNEY

Aoife Noone has over 20 years of experience in information security and compliance. She has worked across various industries in diverse roles, tackling numerous system access challenges and implementing preventive measures. She has designed and ran various system access programmes from access design to remediation projects. Noone Cyber Services uses highly skilled expertise and knowledge to efficiently resolve issues and achieve significant operational cost savings in the process.



Noone Cyber Services helps in getting cross-functional leaders on board with IAM or user access management Programme. A cyber security expert is assigned to help organisations build collaborative engaged teams. They also provide support when introducing new systems during mergers, acquisitions, and integrations.

THE INNOVATION IMPACT

In January 2023, Aoife set up 'THINK SMART', a new cyber mindset program for educational facilities, community organisations as well as national and international business organisations. 'THINK SMART' is built around a program of workshops and talks.

For educational organisations it educates and empowers students, parents, and teachers when it comes to the use of social media and smart devices. This initiative directly responds to a societal challenge and responds to increased awareness of the link between mental health challenges and misuses of social media and smart technology. For businesses, the workshops aim to train employees to "think in a certain way", to learn new techniques and create new mindsets around cyber security thereby reducing vulnerability to cyber-attack.

By integrating cyber security expertise with high-performance mindset skills, this program equips participants with lifelong tools to foster more positive attitudes and behaviours online.

USEFUL LINKS

<https://noonecyberservices.com/>

[Aoife Noone](#)

Roscommon Home Services

THE INNOVATION JOURNEY

Veronica Barrett is the Director of Services at Roscommon Home Services Home Care. This is a non-profit organisation that has been offering compassionate and professional home care services to families in the Midlands, West, and Northwest of Ireland since 1996. When Veronica joined RHS it had only 12 registered carers. During her 28 years leading RHS, through her dedication and business acumen, RHS now provides services to hundreds of clients and has over 300 employees. From the outset Veronica focused on building the co-operative through securing contracts that would provide a stable financial income. The co-op's not-for-profit ethos was a significant factor in securing a contract with government agencies and in gaining support and trust within the community.



THE INNOVATION IMPACT

The aim of RHS Home Care is to provide quality-driven care that enables their clients to keep their independence and dignity while staying in their own homes. This is achieved by providing a range of services including private home care, dementia care, palliative care, live-in care, companionship, and overnight care.



RHS have recently experienced a surge in demand for their services and in January 2024 announced 490 job vacancies and expansion into a new region including Leitrim and Sligo. To meet demand, RHS organise recruitment drives. RHS attract employees by prioritising fair wages and staff are supported through: professional development opportunities; support from supervisors; staff discounts on car and tyre services; flexible working schedules and unlimited mileage; and travel time to attend each call. RHS provide updated information to potential employees regarding the benefits of caring as a career and also use their platforms to promote the wellbeing of clients in the home.

USEFUL LINKS

<https://rhshomecare.ie/rhshomecare>



Count On Us Recruitment



THE INNOVATION JOURNEY

Fiona established 'Count on Us Recruitment' to offer a unique service to



family carers in Ireland looking for part time work by recruiting them to a position

that is suited to their commitments. Fiona holds a degree in Business Studies in Marketing and has professional level work experience. However, as a carer she must have flexibility in working hours and as a carer is limited by regulation to engaging in employment outside of the home for no more than 18.5 hours a week.

This reality motivated her to establish 'Count on Us Recruitment', which is dedicated to helping family carers in discovering regular work opportunities that can easily accommodate caregiving tasks.



Through her initiative, Fiona has become a source of empowerment for many Irish Family Carers, enabling them to strike a balance between their crucial caregiving roles and flexible employment, thus enhancing their overall well-being and financial stability. Count On Us Recruitment also strives to

spotlight family carers as a valuable resource to the Irish work force.

THE INNOVATION IMPACT

Count on us Recruitment offers a unique service to family carers in Ireland and also offers support to employers in filling their vacancies as they are provided with and given access to a database of professional family carers with various skills and qualities. Fiona was named All-Star Social Entrepreneur of The Year 2022 by the All-Ireland Business Foundation.

Many employers are unaware of the demand for contracts of this size, resulting in very few 18.5 hour per week job opportunities on the market for Family Carers to avail of. The lack of connection between Family Carers and employers has resulted in a large labour market in Ireland not being availed of by employers at a time of labour shortage.

Count on Us Recruitment work with companies who are progressive, dedicated to diversification and who are innovative. Employers willing to look at the current employment challenge of skill and labour shortage from a different angle. This will support those companies in securing the right talent that they need in their business to keep the wheels of their business turning.

USEFUL LINKS

<https://countonusrecruitment.ie/>

THE INNOVATION JOURNEY

Caroline Cullen has united her skills from a background in music, yoga and special needs and a career in the corporate sector with her love of nature to develop The Roots of Ireland. She always had a yearning to set up a business, alongside her husband, that was conducive to family life and their love of outdoors. The Roots of Ireland is a contemporary handcrafted nature-themed sterling silver jewellery business in Leixlip, County Kildare.



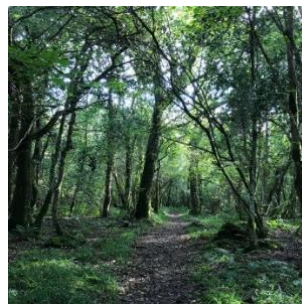
Inspired by their surroundings the Jewellery is designed on elements of



Irish nature. To create the designs, twigs or leaves and other organic matter are taken and covered with up

to 13 layers of silver paste before being placed in a kiln, which burns away the original organic matter – leaving a silver representation of the original piece.

THE INNOVATION IMPACT



Each piece is passed through Dublin Castle to be stamped with an Irish Hallmark certifying its authenticity and quality. In addition

to its own online store, the collections are available in other Irish retailers, for example, Blarney Woollen Mills and Bunratty Woollen Mills. It also has an export market and has relationships with retailers in the United States. Caroline was identified as one Ireland's Women Entrepreneurs to watch in 2023.

The vision is to create beautiful gifts and at the same time help to preserve the Irish woodlands. To actively contribute to this, for each piece from 'The Woodlands Collection' there is a donation made to the Irish Native Woodland Trust who are dedicated to the preservation and restoration of Ireland's ancient woodlands.

USEFUL LINKS

<https://www.therootsofireland.com/>



THE INNOVATION JOURNEY:

SMARTHEAT is the Irish partner for Ravelli and Nobis, producers of high-tech wood pellet stoves. Pat Murphy is CEO and the business is based in Edgesworthstown, County Longford.



SMARTHEAT have been supplying the Irish market since 2005 and supply directly to the public and through other distributors on a wholesale basis. Pat has a mission to increase home comfort and reduce heating bills, while also looking after the environment. SMARTHEAT keeps abreast of the latest developments in the industry and uses this expertise to the customer's advantage. The product range is thoroughly researched to offer the most cutting edge in renewable technologies to ensure optimal efficiency and design.

THE INNOVATION IMPACT:

SMARTHEAT provides sustainable heating solutions since 2005 and are user focused. They provide an integrated approach to their services. They offer advice on the reduction of energy consumption, support in project

management and provide core services such as service and maintenance. SMARTHEAT also utilise technicians and contractors that have been product specific trained both in Ireland and abroad. Pat and her company partner Gilbert McCormack continue to upskill in bioenergy and focus on energy efficiency in the home, positive environmental impact and dissemination of bioenergy knowledge. SMARTHEAT has exclusive import rights covering all of Ireland for the *Tonwerk* heat storage stove, a unique product suitable for passive and low energy homes.



The Tonwerk range of wood storage stoves was launched at Plan Expo 2008 in conjunction with SMARTHEAT and won the Best Interior Design Product of the Show award, going on to win this prestigious award again in 2009.

Pat is conscious of supporting national commitments to increase the percentage of heat use from renewable sources and believes the products they provide can support these targets.

USEFUL LINKS:

<https://smartheat.ie/>

<https://www.facebook.com/Smartheat.ie>

INNOVATION JOURNEY

Meike Hollnaicher grew up on her family farm in Germany. She graduated in media design and then worked in an advertising agency. She moved to Italy to study eco-social design at the University of Bozen.

In this period, she developed the idea of Farmfluencers of South Tyrol. The aim of the project is to support eco-social transformation and the preservation of small farms in the region.

The project, initiated in 2020, is an informal initiative run on a voluntary basis and partly funded through crowdfunding campaigns and small grants by private foundations.



THE INNOVATION IMPACT

The project provides a space for local small farmers to narrate their stories and connect. Particularly, it involves farmers who cultivate organic and traditional varieties of crops, promoting these as

important for the sustainability of rural ecosystems.

Podcasts and short movies about these small farmers are spread through local TV channels and radio programs, social media, and the project website.

This way, the stories reach different generations, encouraging everyone to buy local, healthy food. They also motivate young people to engage in agriculture, promoting it as something “cool”.

Through the project, small farmers start to be part of a network and build synergies. Meike and her collaborators organize meetings at least two times per year so that farmers can meet, build synergies, and support each other. Involving farmers across gender, class and ethnicity, the project also fosters social and gender inclusion in rural areas.

Meike is also trying to connect farmers with local restaurants so that chefs can use more and more local (and unique) products. She is also participating in a film project to reach a wider audience and more farmers.

USEFUL LINKS

<https://www.farmfluencers.org/>

<https://www.instagram.com/farmfluencers/?hl=en>

<https://www.youtube.com/@FarmfluencersofSouthTyrol>



INNOVATION JOURNEY

Giulia Montepaone, who studied agronomy at the University of Reggio Calabria and lives in a small rural village of the Ionian Calabrian Coast, with other friends have founded We're South - a territorial network including different local businesses, mainly managed by young women, in six municipalities of the Ionian Calabrian Coast: a trekking organization, several farms and agritourism, a jewellery shop, an educational farm and a theatre, among others. Currently, Giulia work as a volunteer for We're South, and have another job to make a living. However, the idea is to expand the network and gain more visibility to transform it into a job. In 2024 the informal network became an association. We're South aims to celebrate the slowness of Calabrian rural villages, so that people who live there, as well as travellers and tourists, can discover them and enjoy them.



The different experiences offered can be booked on the website of We're South. The website also includes a section where local public events, including religious ceremonies and village food festivals are promoted. Moreover, the association also organize specific events so that local people can meet and feel part of a community.

THE INNOVATION IMPACT

We're South is not only a network concerned with local economic development; it is also very attentive to environmental and cultural sustainability. In fact, all the businesses that are part of the network share specific values, including caring for the local ecosystem and animal and preserving the local cultural heritage. They also actively fight for the rights of local people to have access to basic public services: the maintenance of counselling hubs for women, nursery schools and clinics, that get easily dismantled in rural -and particularly remote rural- areas. In this regard, Giulia believes that collaborating with local institutions is fundamental for an association like We're South, to support local rural development in the interest of all.

USEFUL LINKS

<https://weresouth.com/>

https://www.instagram.com/wearesouth_con tents/

INNOVATION JOURNEY

Anna Garofalo is the manager of Garritano 1908, a company located in a rural area near the city of Cosenza, Calabria, specialized in the processing of a particular type of PDO fig: the "Fico di Cosenza". She inherited the enterprise from her mother in 2011, representing the fifth generation developing the business.



Nowadays, thanks to Anna's innovative ideas, the company, which used to work only a few months a year due to the seasonality of the fig, continues to work all year round. This has led to a diversification of production. New products have been created using local ingredients such as chilli peppers and Tropea onions. Fig processing has been diversified, for instance, with the production of fig honey, a product traditionally made by families in the area. Products made with chocolate are also several. In the factory, they only use local products, and the processing is strictly

manual, according to ancient recipes jealously guarded and rigorously preserved. The products, which by Anna's choice are not sold in large retail distribution, are sold in their factory store and local stores, also throughout Italy and abroad.

Anna also works with schools and other organizations, to organize visits and workshops to show how different products are processed and to valorise local products.

THE INNOVATION IMPACT

Anna, together with other local entrepreneurs and farmers, engaged in a long process to obtain the PDO certification for the "Fico di Cosenza". And now she is the president of the Consortium for the protection of the Fig of Cosenza PDO.

She is very engaged in valorizing local products and food traditions. Since she has been managing the business, it has grown, she has initiated an important communication strategy, invented new products and bought large fridge cells to store figs and thus process them throughout the year. The workshops organized within the factory helps valorizing specific local food traditions and products also among the youngest generations, in fun and creative ways.

USEFUL LINKS

<http://www.garritano1908.com/>

INNOVATION JOURNEY

Giulia Marzaro is the founder and manager of Cilento Lab, an artistic lab located in Orria, a small remote rural village in the Cilento National Park, Campania.

Giulia was born and lived for many years in Venice. Passionate about jewellery design, she attended a School of Arts and Crafts specialising in jewellery making, and then lived and work abroad. When she returned to Italy, she continued her artistic craftsmanship and deepened her ceramic techniques. Due the Covid pandemic, decided to return to her grandparents' village in South of Italy, where her mother had recently moved and where she had met her partner. In 2021, she opened CilentoLab, accessing a public grant.



Cilento Lab is not only her creative lab where she makes ceramic products such as glasses, mugs, bowls, jewellery, etc., but it is also a place where she organizes, with the help of her mother, creative

workshops, especially for tourists. In particular, she organizes aperitifs and dinners during which people can create and paint small ceramic objects. She has organized a calendar of events, available on her website, where people can book in advance the different experiences offered. Giulia has also started to organize private events on request. She sells her products also online and at local markets.



THE INNOVATION IMPACT

Giulia is challenging patriarchal social norms that are prevalent in the area, by demonstrating how a young woman can manage a successful creative business in a remote rural area by herself.

The increasing numbers of tourists who attend her workshops discover the beauty of this village. In this way Giulia is also contributing to local rural development.

USEFUL LINKS

<https://cilentolab.com/>

<https://www.facebook.com/CilentoLab.Orria>

<https://www.instagram.com/cilentolab/?hl=it>

INNOVATION JOURNEY

Flavia Amato grew up in Guardavalle, a small village in a remote rural area in Calabria, in the South of Italy. After finishing high school, Flavia enrolled in the Academy of Fine Arts in Macerata, a town in central Italy. Upon completion, she attended a vocational school of clothing pattern making and completed a master's degree in artisan tailoring. She then accessed a capacity building programme for young innovators wanting to develop a start-up. As she finished this programme, in 2015 she decided to move to her native village, with her partner, to realize a dream: to launch her sustainable and tailoring fashion brand, producing items with natural, ethical and high-quality textiles. Flavia started Malia Lab, in 2016, renovating a space that she inherited from her grandmother.

The activity involves the handmade production of clothes designed by Flavia. She uses only sustainable fabrics produced in Italy, both with traditional fibers (such as organic cotton, linen and silk) and innovative ones (such as milk fiber, bamboo, etc.). She sells her products also online, throughout Italy as well as abroad. Her partner helps her managing the marketing strategy and communication of the business. The made-to-order concept is another distinctive feature. This avoids waste, reduces environmental impact and allows the customer to have a tailor-made dress. When ordering, customers

report their measurements by following the instructions on the website.



INNOVATION IMPACTS

Flavia interweaves environmental, cultural and economic sustainability, by producing clothes made of sustainable textiles that prioritize local, ancient tailoring traditions. Flavia recovered ancient handlooms and in May 2024 opened the textile lab “*Origini*” in the village's historical centre, where classes are held to teach traditional weaving techniques to tourists and locals. She is also working to recreate the broom supply chain that traditionally existed in the area. Flavia has initiated several collaborations with other local entities and is a member of an association that aims to revitalize the village's economy.

USEFUL LINKS

<https://malialab.com/>

https://www.instagram.com/malialab_official/?hl=it

INNOVATION JOURNEY

Francesca Casaluci moved back to her native village in Salento (Apulia) after graduating in anthropology. She then took part in environmental justice movements against industries that destroy the local ecosystem and are held responsible for increasing health problems. Together with other friends, she realized that small farmers (especially those practicing organic and natural agriculture) were particularly affected by the extractive practices of these industries and that a different model of agriculture needed to be supported.

In 2011 Francesca co-founded the association Salento Km0, of which she is currently the president. The aim is to create a network of solidarity economy in the Salento area. In 2012, Salento Km0 recovered and catalogued the seeds of ancient varieties and published a Guide to promote small local farmers who adopt natural and sustainable agricultural practices. They contributed to the establishment of the "Network for Natural Agriculture in Salento," which involves local food producers and associations that share similar ethical values. The project expanded in 2015 when the *To Kalò Fai* Laboratory was opened in a public space provided by the Municipality of Zollino, where events, workshops and dinners dedicated to the enhancement of local products are organized, as well as

a weekly farmers' market. A new, updated edition of the Guide was published in 2017.



THE INNOVATION IMPACT

Salento Km0's action is characterized by a strong focus on environmental sustainability, interconnected with cultural and social sustainability.

Over time, the collective work done has led to the establishment of several Solidarity Purchasing Groups (GAS) in Salento; to the drafting of a "Manifesto of the Salento Km0 Network", signed by numerous local realities, which are committed to defending the environment, protecting the health of consumers, respecting the rights of workers. The network of farmers who signed the Manifesto was chosen by a local municipality to supply the nursery school canteen. Furthermore, the association organizes events, workshop activities, exhibitions, publications, meetings, audiovisual products, also collaborating with local institutions.

USEFUL LINKS

<https://www.salentokm0.com/>

INNOVATION JOURNEY

Sarah Khoudja is the founder of CuCilento, a tailoring upcycling laboratory.

She is originally from France and worked for several years as a project manager in different humanitarian NGOs in Brussels. In 2021, Sarah with her family decided to move to Cilento to start a new life. She participated in the Empowering Women in Agrifood (EWA) programme – a training co-financed by the EU to support women entrepreneurs to develop their business idea. After completing the course, she opened the CuCilento lab, which quickly grew.

This is a project that recycles agricultural materials such as olive harvesting nets, and other materials such as boat sails and factory scraps, to create sustainable products.

Furthermore, the aim is also to promote environmental protection and social regeneration with the intention of stimulating greater awareness also in people's purchasing and consumption habits. She therefore organizes sewing workshops for children and adults to spread the culture of upcycling.

THE INNOVATION IMPACT

Thanks to her innovative idea, Sarah is spreading the culture of upcycling and

recycling in a region where these concepts are still unpopular.

Sarah also gives work to several women in the area who find themselves in particularly vulnerable situation and would like to expand her laboratory to implement more social projects that empower women and are environmentally sustainable.

Sarah has been also the promoter of the *Circe* women's collective (and its transformation into a non-profit association) whose aim is to promote women's resilience, awareness, and empowerment.



USEFUL LINKS

<https://cucilento.com/funnel/cucilento-family/cucilento-upcycling-sartoriale/>



Associazione CiRCE, a women's collective



INNOVATION JOURNEY

In 2022, three women have promoted the establishment of the women's collective named CiRCE in the rural area of Cilento, Campania. They felt the need of overcoming women's isolation and marginalization in a rural area where few services are offered and where patriarchal social norms are still predominant.



They started to organize monthly meetings for women to discuss common issues, give each other emotional and practical support, organize markets and events. The word spread, the collective quickly grew, thanks also to the creation of a WhatsApp group, involving more than 100 women (entrepreneurs, teachers, freelancers, housewives, employees) living in the Cilento area. CiRCE is a very diverse collective: women have very different backgrounds and ages; some were born in Cilento, and some migrated from other parts of Italy or from abroad.

CiRCE supports and promotes different women's projects, from textile handicrafts to confectionery, from the exchange of ancient seeds to reading and language groups. They also organize public events to discuss issues

such as violence against women and contribute to local struggles for women's rights.

In 2024, they set up the Circe Association, involving about 40 women.



THE INNOVATION IMPACT

CiRCE help women living in the Cilento area to overcome isolation and fight gender inequality. It represents a safe and inclusive environment where women can meet, share knowledge, resources, opportunities and where they feel free to share their issues and ask for emotional and practical support. The WhatsApp group is a fundamental tool favoring daily exchanges, showing the richness of women's work in the area. The women of Circe recognize themselves as central to the economic growth of the Cilento area supporting projects that are socially, environmentally, culturally and economically sustainable.

USEFUL LINKS

<https://circecilento.wixsite.com/circecilento>

https://www.instagram.com/associazione_circe/

INNOVATION JOURNEY

Sofia Rasini, her two sisters and their mother, Marina Clerici, are the managers of the non-profit association Campo Base, which organizes summer camps for children and young adults affected by different, mostly chronic, illnesses.

The family moved between the United States and Switzerland for several years. Then, in 2003, after the death of her husband, Marina Clerici moved back to a small rural village close to Riva del Garda, by the Italian Alps, where she inherited an ancient medieval castle, Castel Campo. Marina opened an organic farm by the castle, and then, in 2016, her three daughters joined forces to found the association, which has its venue by the castle itself. Sofia studied medical anthropology and worked for several years as a volunteer for another recreational therapy organization. Her sisters studied theatre and engineering. Sofia recently moved next to the castle with her family, while the two sisters live in other cities and join her only for the association's activities.

The camps involve different outdoor activities, cooking workshops, trekking, sailing, bushcraft and climbing. The association is supported mostly by private foundations and donors. Children and their families as well as young people come from all over the world to

participate in the camps, and their participation is for free.



THE INNOVATION IMPACT

The association collaborates with hospitals and associations, both in Italy and abroad, that support children and young adults living with serious illnesses and coping with psychosocial challenges. They create spaces of growth and self-esteem for these children and their families, generating networks of care. By organizing summer camps based on outdoor activities for children and young people, the managers interweave social and environmental values, showing the potential of such a rural space and creating collaborations and synergies among different local actors and realities (e.g. local farmers, mountain guides, sailing instructors, social workers).

USEFUL LINKS

<https://www.associazionecampobase.org/castel-campo/>

https://www.castelcampo.com/https://www.instagram.com/campobase_org/

INNOVATION JOURNEY

Silvia Rovere moved to the remote village of Ostana, on the western Alps of Italy, in 2011, with her husband and two children (now three) to start a new life. Before moving to this remote mountain area, she graduated in Educational Sciences and worked for about 10 years in different cities, including abroad, on public health projects.

Moving with the whole family to Ostana was a courageous decision because at that time only about twenty people lived there permanently.

Silvia took over the management of the Galaberna Refuge, a hotel/restaurant owned by the Municipality, ensuring its opening throughout the year. Galaberna is managed with the help of 4 permanent employees, which can become 15 in the summer period. Over the years, the hut has become a meeting centre for the community as well as a tourist reception point.

THE INNOVATION IMPACT

In 2019, Silvia became the first woman mayor of the village. As mayor, she was able to implement policies to attract tourists as well as to support several local initiatives.

Thanks to the public-private synergies that Silvia was able to implement, different projects were developed in the village such as a community cooperative

managing a day nursery, a land association, and an organic farm. Moreover, in the village different buildings have been renovated, creating spaces for a cultural center, a wellness and sports center, and for craftsmen's workshops. Collaborations with scholars and experts studying mountains and monitoring water situations have also been established. Thanks to these developments, the population of the village is increasing (now there are about 50 people living permanently in Ostana), and more and more tourists are arriving.



In this way, Silvia showed the importance for local institutions to closely work with citizens: to understand and address their needs. Her activities also prove that it is possible to choose to live in remote rural areas: they are inspiring others to move to Ostana.

USEFUL LINKS

<https://www.rifugiogalaberna.com/>; <https://www.comune.ostana.cn.it/>

Vertical Roots and Grassroot-ology



INNOVATION JOURNEY

Spending her vacations with her grandparents in the countryside, Alina Zlati developed a deep connection to the land, a theme that would deeply influence her personal and professional life. After completing her studies in psychology, she ventured into the academic world, blending teaching with research. Her life took a turn back to her roots when she decided to move to the countryside with her husband and daughters, seeking a quieter life away from the urban hustle. In the village of Sălicea, Alina embarked on the path of rural development, which soon became an essential component of her life's work.



One of Alina's significant contributions is her business, Vertical Roots. This sustainable venture hosts green events, offers workshops and experiences designed to reconnect people with nature, guided nature trails and seasonally adapted kits for outdoor activities. Her emphasis on sustainability also led her to partner with the slow food movement, promoting local products and sustainable living practices.

Furthermore, Alina established another NGO, Grassroot-ology, dedicated to sustainable rural development and environmental stewardship. This organization has been proactive in the community, advocating for additional bus services, organizing waste clean-up initiatives, and updating local urban plans in collaboration with local authorities.

THE INNOVATION IMPACT

Through these actions, Alina has not only improved the infrastructure of her community and increased the attractiveness of the area but has also played a crucial role in changing perceptions about women's roles in rural settings. Her work has shown that women can be powerful agents of change, increasingly visible and active in community life.

Alina's efforts have transformed her into a spokesperson for her community, often consulted by local authorities on various issues. Her diplomatic and patient approach has made her a respected partner in dialogue and an agent of change, fostering a growing acceptance and appreciation of women's contributions in Sălicea. Through her endeavors, Alina continues to inspire and lead, showing that with determination and a clear vision, significant changes can be achieved in rural Romania, emphasizing sustainability, gender equality, and a cohesive community spirit.

USEFUL LINKS

[Alina Zlati on LinkedIn](#)

[Vertical Roots](#)

[Alina Zlati on Research Gate](#)

Anca Marcu – Primar al Comunei Cojocna



THE INNOVATION JOURNEY

After completing her pedagogical education, she began her career as a schoolteacher in her home village of Cojocna. She then moved to Spain where she worked various jobs.

When Anca returned to her multicultural home village in Romania, she decided to directly influence local development by running for local councilor. Despite initial resistance to a woman leading in public administration, she was actively engaged in the community, discussing issues and potential solutions with residents, and giving particular attention to all ethnic groups. Her efforts paid off when she was elected vice-mayor, and afterwards as Mayor.

Anca initiated key projects such as the revitalization of the Cojocna Baths, which is under the administration of the local authority; she established a committee to investigate the failing resort, which had been a financial drain; environmental initiatives like introducing the village's first recycling program promoting protected areas and spearheaded tree planting campaigns.

THE INNOVATION IMPACT

Anca's initiatives significantly enhanced the local infrastructure and public services. The transformation of the Cojocna Baths into a profitable enterprise revitalized a key local asset, generating revenue that could be reinvested into the community. Her environmental projects, including the introduction of a recycling program and the creation of public parks, not only beautified the village but also

promoted sustainability. These projects improved the quality of life for residents and set a standard for responsible community management.



Anca's health campaigns had a profound impact on the accessibility of healthcare in her village. By organizing medical services locally, she reduced the barriers residents faced in accessing specialized medical care, such as pediatric and cardiology services. These initiatives demonstrate how local administration can play a crucial role in enhancing public health.

One of the most lasting impacts of Anca's journey is the shift in social and cultural attitudes towards women in leadership within her community. By successfully managing major projects and navigating the complexities of local politics, she challenged prevailing stereotypes and proved that women can lead effectively in roles traditionally dominated by men. Her leadership inspired other women in the community and nearby areas to pursue active roles in public life and seek leadership positions.

USEFUL LINKS

[Cojocna Baths](#)

[Cojocna Commune](#)

Casa din baloți de paie

THE INNOVATION JOURNEY

After being born and raised in Bucharest, Brîndușa Birhală had a learning and formative experience as an international student, which fomented her passion for ecology and sustainable food production. She moved to Stanciova village in 2013, together with her partner, to contribute to an intentional community aimed at ecological living, practicing agroecology and ecological building. After some research they designed the project of the strawbale house which they went on to build to make their home. After many trials and errors, as well as economic challenges, they managed to finish the house in 2016, when they moved to their new home. For the 3 years it took them to research and build the house, both Brîndușa and her partner were unemployed and dedicated their time fully to their strawbale house.



They lived in the strawbale house until 2023, when they moved to a bigger, more conventionally build house. However, the

strawbale house has been much improved during the years and is now available for other persons who want to join their homestead and experience living in an ecological home in a rural area.

Brîndușa is a mother, peasant, activist and researcher. Her holistic sustainability approach permeates all her personal and professional life. She is actively engaged in community supported agriculture, promotion of peasants' rights, and access to land.

THE INNOVATION IMPACT

When Brîndușa and her partner started their strawbale house building project in Stanciova, the community became intrigued with the ecological construction techniques and methods. Since then, more ecological buildings have been erected in her village and in the vicinity, demonstrating how powerful leading by example is.

The impact of the natural building project of the strawbale house has been increased by Brîndușa's attitude towards the rural community she decided to join. She has been involved in the rural community in different ways, including teaching at the local kindergarden, participating in local celebrations, goods and practices exchanges with the locals, and overall by sparing no effort to become included in the local community.

USEFUL LINKS

[Brîndușa on LinkedIn](#)
[Letter From the Farm](#)
[The Association for Supporting Peasant Agriculture \(ASAT\)](#)
[Access to Land for Agroecology - ALPA](#)

INNOVATION JOURNEY

Born and raised in the commune of Saschiz, Florentina Călugăr pursued a university degree in journalism and public relations in the city of Sibiu. After a brief stint as a teacher, Florentina transitioned into the media. Her journey took a significant turn when she returned to Saschiz to work at the local municipality, where she spearheaded various community projects. Her pivotal role emerged as she became the manager of the Local Action Group Dealurile Târnavelor, focusing on rural development. In 2015, to meet one of the selection criteria for the Local Development Strategy of the LAG, she established the Saschiz Women's Neighborhood Association.



The association was born out of a need to formalize the already strong informal networks among women in Saschiz. Traditionally, women played significant but often unrecognized roles in the community, organizing social gatherings and supporting local traditions. The association aims to empower women economically and socially, providing

them with the resources and support needed to develop sustainable small businesses and engage more actively in community life.

The association focuses on various sustainable initiatives, from promoting local crafts and gastronomy to organizing community events and educational programs, while also developing tourism. The initiative is instrumental in organizing the annual Rhubarb Fest, supporting local artisans, and creating educational opportunities for both children and adults, while increasing the visibility of the rural community at a regional, national and international level.

THE INNOVATION IMPACT

Florentina's initiatives have significantly increased volunteerism and community engagement in Saschiz. The Rhubarb Fest, for instance, attracts tourists and promotes local heritage. This festival has become a symbol of the pride and unity of the community, drawing participation from residents and tourists alike.

Economically, Florentina's model empowers women by supporting sustainable small businesses led by women. Women in Saschiz have gained financial autonomy, contributing to the local economy by producing, selling traditional foods and handmade crafts and providing services. This economic empowerment reinforces their role as vital contributors to sustainable community development.

USEFUL LINKS

[Saschiz Volunteering Center](#)
[Saschiz Women's Neighborhood Association](#)
[Local Action Group Dealurile Târnavelor](#)

THE INNOVATION JOURNEY

Born in Bucharest, Gabriela Cotaru immigrated with her parents right after the 1989 events, spending her youth and finishing her studies in technical drawing in Germany. However, upon meeting her husband in 2003, they began envisioning a personal and cultural project in Hosman (Hârtibaciu Valley, Sibiu County, Transylvania). Their first step was buying the old derelict mill in the village and restoring it so that bread could be produced there. This was also the first step in establishing the Old Mill Hosman Collective, as the mill served as collaboration opportunity with a baker couple. With the Old Mill as their inspiration, they were aiming to bring culture to the village and create a rural economic point.

While they first established a small company to implement the activities and interventions, in time due to the bureaucracy and the type of activities they wanted to carry out, they opted for an NGO/association. Gabriela and her husband established the Sustainable Hosman Association, focusing on cultural activities in their village.

THE INNOVATION IMPACT

Many of the projects implemented by Gabriela – such as Transylvanian Women's Week at the Barn (2019), Digital Centre for Women (2021), and the current ongoing recurrent meetings with more than 70 entrepreneur women from the Hârtibaciu Valley, are aimed directly at women, and creating women's networks, safe and supportive spaces.



Through each project, new collaborations are created, ensuring the continuity of these initiatives within the local community. The projects establish social spaces which empower women to initiate personal projects or advance their ideas in an otherwise conservative social context. Gabriela, the collective and their partners managed to create a space where women can express themselves and be heard. They have succeeded in women connecting with and supporting each other, creating a network where women can meet, empower one another, and foster mutual support. The entrepreneur women's network allows women of the Hârtibaciu to step out of their homes and engage in activities that strengthen their personal and professional growth while challenging gender stereotypes.

USEFUL LINKS

[Old Mill Hosman](#)
[Digital Centre for Women](#)
[Open Landscape Forum](#)
[Transylvanian Women's Week 2019](#)

THE INNOVATION JOURNEY

Born and raised in a small city, Ioana pursued a university degree in philology in Cluj-Napoca, and later a PhD, which gave her the opportunity experience living abroad. During her PhD, she sought a house in the countryside near Cluj to connect with nature and eat healthy food while staying close to the city's cultural events.

Since first moving to the village of Bontida in 2010, Ioana discovered her artistic side – she has a passion for painting, writing and reusing materials for collages. As she became a mother of three, she began focusing on sharing her creative moments with her children, creating educational artistic activities which she could use to support the development of her children (project called MaternitArte).

Living in Bontida made Ioana aware of the needs and opportunities for local development, both in terms of sustainable economic enterprises and sustainable cultural and social projects.

Ioana and her husband established two small family businesses in Bontida in the food services sector – Terasa de stat (Terrace for Staying) and a pizzeria with the same name.

THE INNOVATION IMPACT

The Terrace was opened as a local gastronomic hub, cooking meals at home and operating only on weekends. Ioana and her husband introduced a sustainable approach by collecting and preparing traditional local recipes with

ingredients from local producers. Meals were served in a social, gift economy model. The pizzeria also hosted cultural events, such as concerts and discussions on gastronomy. After about two years, Ioana and her husband decided to spend more time with their children, pausing their small business activities.



Ioana is now implementing the project “The Happy Class” at the local school, in collaboration with a local foundation, using alternative methods to teach children to read and create stories.

Ioana was involved in organizing the first women’s meeting in her commune (2024), to which diverse and numerous women participated. She hopes that many more such meetings will occur to create a mutual support network, including by women supporting each other's entrepreneurial projects.

USEFUL LINKS

[Ioana Pop Manta on LinkedIn](#)

[Terasa de Stat on FB](#)

[Terasa de Stat Pizzeria](#)

THE INNOVATION JOURNEY

Laura Albu is a sociologist who has always worked in civil society organizations (CSOs)/NGOs. Her passion for women's rights and community development led her to establish the Community Safety and Mediation Centre Foundation (CMSC) in 2000. CMSC operates in rural communities in various counties in NE Romania and is a member of the Romanian Rural Net (network of organizations active in rural community development).



CMSC works primarily with and for women and children in rural communities, on three main topics: rural communities' development, support to victims of domestic violence, and transnational cooperation. CMSC is also member in Romanian Women's Lobby, Network of NGOs against Violence on Women and FONSS (Federation of NGOs on Social Services).

THE INNOVATION IMPACT

Through her CMSC work, Laura has prioritized rural areas due to the high incidence of safety and violence issues, especially affecting women. CMSC's

efforts have expanded to focus on women's economic development and independence, while challenges remain in women's leadership and engagement in decision-making, economic autonomy, and cooperative membership, prompting the involvement of CMSC in LAGs and the LEADER program. Through their transnational cooperation with the Republic of Moldova, they aim to expand this approach to Moldavian CSOs and LAGs.

Among the impacts of the many projects she coordinated, the support to rural women's empowerment and enhancement of their self-esteem so that they perceive themselves as agents of change stands out. Currently she is focused on supporting more women to run for Local Councils to reframe the priorities of local administration in a way which addresses the needs of rural women.

She and the Centre are deeply involved in influencing public policy and legal changes in Romania. The war in Ukraine prompted her to coordinate the update of Romania's "National Plan for Women, Peace and Security", linked to the UN Resolution 1325. The research and advocacy efforts of CMSC resulted in an updated Law No 217/2003 on Preventing and combating domestic violence, with many other legal initiatives advancing women's rights being also submitted for review and voting.

USEFUL LINKS

[Laura Albu on LinkedIn](#)
[Community Safety and Mediation Centre Foundation](#)
[Laura Albu's CV \(Council of Europe/GREVIO\)](#)

MarinArt. Centru Cultural, Educațional și Artistic

THE INNOVATION JOURNEY

Born in 1997 and raised in the village of Marin in NW Romania, Patricia Marina Toma realized she is interested in developing her artistic skills (photography and painting) early on.



She pioneered an inclusive local festival to unite the rural community and preserve the cultural heritage of Marin despite logistical barriers and lack of urban resources. The festival had three editions, growing with each one between 2016 and 2019. She conceived it as a participative event for the community, an event which would tell their story. The festival included diverse cultural activities: the reenactment of a local wedding ritual in traditional costumes, tastings of local gastronomy, exhibitions and educational workshops with children.

Post-pandemic, she partnered with an NGO securing national funding for art-based education projects benefitting children and women in Marin and surrounding areas. Artists and trainers from across Romania convened in Marin to lead workshops in storytelling, illustration, theatre, photography, documentary filmmaking, and textiles.

Patricia has the particular sensibility of lending her ear – and her camera lens – to those most vulnerable in rural communities: children, women, seniors. Her recent innovative photography project “People of the village” focused on capturing the life stories of the elders in villages and resulted in an itinerant photo exhibition which was displayed in more than 7 locations across Romania.

THE INNOVATION IMPACT

Patricia’s innovations have brought educational activities to children in a village where all education institutions have been shut down. The culturally sustainable approach she has taken ensures their access to education through art, an alternative to the existing institutional approach to education. She curated collaborations emphasizing inclusive education methods, imparting diverse skills beyond artistry to children. These activities have impacted how the children perceive themselves and the world, teaching them to value their own creativity, learn about their emotions and how they collaborate with others.

Her photography storytelling projects focusing on the rural elderly fill a void in Romanian society by enriching it culturally, but also socially by giving visibility to a category of the population which is usually made invisible, with direct impact on their lives and wellbeing.

USEFUL LINKS

[Patricia Marina Toma](#)
[MarinArt. Cultural, Educational and Artistic Centre](#)
[The Blue House from Marin](#)

THE INNOVATION JOURNEY

Stela Zămoiu is a proud peasant woman who has been part of the Romanian Peasants' Association Eco Ruralis since 2014. She is part of the Seed Saving and Agroecology Working Group of the NGO, as well as a member of the Eco Ruralis Coordinating Committee. Supported by her family, Stela became an ambassador for peasant seeds and peasants' right to seeds, often hosting the national meeting of the working group in her home village of Dâmbroca. Being engaged in various national seed exchange networks, she promotes peasant seeds and peasants' right to seeds at seed exchange markets throughout the country, and at national and international events. Stela also innovates by promoting gift and exchange economy practices, oftentimes offering, or exchanging her seeds.

THE INNOVATION IMPACT

Stela brings all her varied experiences to fuel her activism within Eco Ruralis and her advocacy for peasants' rights. The tradition of peasant seed saving is an inherently sustainable practice which preserves the treasure of biodiversity, culturally and environmentally adequate (and resilient) varieties of vegetables. She thus contributes to displacing the idea that food production should be done for profit. Her innovative practice is a model of applied food sovereignty, one which she is eager to showcase in media and share with or advise others on.

However, her activism goes beyond this in that Stela, as part of Eco Ruralis, positions herself politically as a peasant and advocate for peasants' rights. The

peasant way of life grounded on environmentally sustainable practices like localized food production, natural construction, community living and in general a simple sustainable lifestyle in harmony with nature is rapidly disappearing in Romania and the EU, the peasants and small food producers being overburdened by bureaucracy and considered to lack in terms of modernization and development.



Stela and Eco Ruralis counteract this perspective through their public discourse; by forming alliances and networks of peasants and small farmers (both at national and international level); and organizing collective political action to secure their rights as peasants. The impact of these actions consists in (re)presenting peasants as political actors with a continued, historical, and fundamental contribution to environmental sustainability who continue to claim their rights.

USEFUL LINKS

[Eco Ruralis](#) – Romanian Peasants' Association
[The Seed Keeper](#) (documentary about Stela)
[Stela Zămoiu on FB](#)

INNOVATION JOURNEY

Andrea Tasnádi grew up in the city of Zalău, spending time as a child in Petrinzel village where her grandparents lived. She developed a deep connection to the land, a theme that would deeply influence her personal and professional life. After completing her studies in psychology, she moved to Austria for 13 years. After seven years in Austria, Andrea reflected on her life goals and realized her desire to live closer to nature. Inspired by ecological practices and the importance of community, decided to return to her roots in Petrinzel, where her parents had retired.



Burnout prompted her to reassess her priorities, leading to the creation of the Humus Association in 2022. The association focuses on biodiversity, sustainable living, and community support. Andrea initiated a crowdfunding campaign in Austria to start a seed bank, emphasizing the importance of preserving autochthon seed varieties and educating the community about their benefits. Collaborating with local craftsmen and elderly women, she

successfully established the seed bank and began organizing workshops and educational events.

THE INNOVATION IMPACT

The impact of Andrea's innovations is multifaceted, encompassing social, educational, and environmental dimensions. The Humus Association's work in preserving biodiversity and promoting sustainable practices aims to revitalize the small community of Petrinzel. With a population of about 60, mostly elderly residents, the association seeks to foster a sense of purpose and connection among locals.

By focusing on autochthon seed varieties, Andrea has highlighted the nutritional and ecological benefits of traditional crops, encouraging peasant agroecology as a way to support local ecosystems and reinvigorate rural communities.

Educational efforts have been crucial in raising awareness about the importance of biodiversity and sustainable living. Workshops on grafting and seed preservation, collaborations with botanical gardens, along with informational campaigns at local markets, have empowered community members with practical knowledge. These activities not only enhance individual skills but also strengthen community bonds as people work together towards common goals.

USEFUL LINKS

[About Andrea](#)

[Humus Association](#)

[Humus on Facebook](#)

THE INNOVATION JOURNEY

Sabina Hameršak Zorec is a refreshing example of an innovative entrepreneur in a rural area. With a degree in fashion design, she has focused her passion and knowledge on designing unique, environmentally friendly clothing, raising awareness of sustainable practices in fashion and demonstrating that it is possible to influence global trends and contribute to positive change from the countryside.

Her work in the local community contributes to economic development and breaks stereotypes about limited opportunities for women in rural areas. By attracting customers from different regions and using modern technology to market her products, Sabina proves that geographical distance is not a barrier to success.

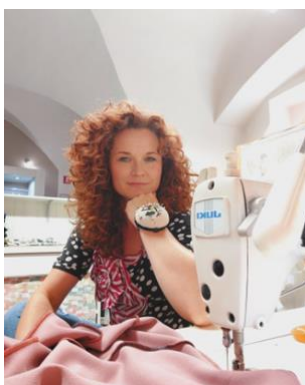


Figure 1. Sabina Hameršak Zorec in her workshop.

Sabina not only manufactures finished products, but also allows the public to

participate in the entire production process. She promotes recycling and reuse of materials, preserves old sewing techniques and knowledge, and advocates for a longer lifespan of clothing – using her creativity to raise awareness of the importance of environmental protection and sustainable development.

THE INNOVATION IMPACT

Innovative approaches to sewing and reusing clothing. Preserving old sewing techniques, manual skills and reducing dependence on electricity. She favours the recycling and reuse of materials, helping to reduce environmental impact, promote creative reuse and extend the life of clothing. This contributes to greater environmental awareness and promotes sustainable development. Sabina actively shares her knowledge in workshops and as a mentor, encouraging others to learn craft skills and develop their own creativity. She strengthens the community and promotes a culture of mutual support and collaboration.

The impact of Sabina's work can be seen in her expertise and innovation in textiles and sewing and underlines her commitment to sustainable development, education, and social engagement.

USEFUL LINKS

<https://www.instagram.com/sabinahamersak/>

https://issuu.com/lasbogastvopodezelja/docs/_iv_za_okolje_katalog_2022_web

THE INNOVATION JOURNEY

Amanda Kladnik and Maja Žerovnik were united by their love of their home region, herbalism, and tourism. They develop tourist experiences in the remote and rarely visited Gornji Grad. The experiences are based on their herbal activities and incorporate the natural, cultural, and intangible heritage of Gornji Grad and the Upper Savinja Valley.



Figure 1. Amanda and Maja in the herb garden (photo: Tomo Jeseničnik).

With enthusiasm, a little naivety, a love for where they live and an ambitious vision to develop local resources for the most discerning tourists, they began their entrepreneurial journey in 2018. Their idea of developing tourism and preserving cultural heritage was supported by a LEADER/CLLD project, which enabled them to set up and gradually expand their business.

Today, their activities are based on a herb farm and a herb garden. These are the two spaces they have at their disposal. One for workshops, the other for experiences and also as a source of raw materials for their creations. They focus on experiences and organise tea parties, a walk through the garden, a

walk in nature to collect and learn about herbs, workshops to make creams and incense. The experiences include learning about cultural and natural heritage, local stories, dialect, etc.

THE INNOVATION IMPACT

Amanda and Maja market two 5-star experiences under the brand "Slovenia Unique Experiences", which allow visitors to discover unique corners of Slovenia. In addition to the experiences, they also offer their own herbal products such as teas, incense, ointments, etc.

They have various projects in the local area, including setting up an herbal shop as a meeting place where they organise discussion evenings with locals, an artist residency with foreign artists in Gornji Grad, they have also participated in projects to record local stories and published a book with recipes about herbs.

With their activities, they have created two jobs and thus contributed to the economic development of the small local community. Their efforts have also helped to raise the profile of Gornji Grad as a tourist destination. The products they have developed help to realise the vision of Slovenia as a boutique green destination for 5-star experiences, while preserving and promoting the local intangible and cultural heritage, which is key to sustainable tourism and respect for local traditions.

USEFUL LINKS

[Babave official website](#)
[Babave on Facebook](#)
[Babave on Instagram](#)

THE INNOVATION JOURNEY

Anamarija Slabe has designed and established a broad network of organic school gardens at all levels of the Slovenian education system - from kindergarten to secondary school. A graduate agricultural engineer, specialised in organic farming, she made it her mission to develop organic farming in Slovenia.

The experience she gained in raising awareness among farmers and other stakeholders encouraged Anamarija to look for other solutions for the dissemination and transfer of knowledge. She wanted to introduce young generations to organic farming in an innovative way. As part of the project, she started setting up organic school gardens in 2010 and encouraged schools to grow their own produce in their own gardens or in co-operation with local organic farms.



Figure 1. Children carry out daily chores on the school's organic garden.

The innovation launched by an NGO was initially financed by the Swiss mechanism. Today, it has grown into a well-functioning network of schools and

kindergartens (around 100 participants) that offers training for mentors (teachers), cooperation, exchange of practises, etc. under the umbrella of the Organic School Gardens Association

THE INNOVATION IMPACT

The impact of this innovation is significant in terms of environmental and social sustainability. Through the activities in the gardens, children and teachers learn about food production, gardening and fruit growing and come into contact with the garden, plants and nature. Changing habits is encouraged on a broader scale as the children carry their new knowledge into their homes and local neighbourhoods. The Organic School Gardens Association also has a major impact in the field of education. Sustainable development issues are now being integrated into the curriculum of most school subjects.

As part of the EU project EATHINK2015, they have transferred their best practises to other EU countries. The idea of school gardens has also gained wider support - after the experience of the COVID-19 period, outdoor education is becoming particularly desirable. The work of the network has been recognised by policy makers at national level and organic school gardens have been included in the Action Plan for the Development of Organic Farming until 2027.

USEFUL LINKS

[Official website of the Organic School Gardens Association](#)
[Web map of organic school gardens in Slovenia](#)

THE INNOVATION JOURNEY

Since 2016, Darja Korelc has been running the social enterprise Makrobios Panonija, which brings new knowledge and methods to remote rural areas through various projects and trainings. Ten years ago, she and her family decided to buy an abandoned farm in Goričko. They moved from Ljubljana to a remote rural area that was struggling with problems such as depopulation, an unfavourable age structure of the population and a lack of knowledge, among others.



Figure 1. Darja in front of a building constructed from natural materials.

The change of location and career was triggered by her son's initiative to create an open space for collaboration and networking in the fields of environmental protection and self-sufficiency. In 2016, they registered the social enterprise Mikrobios Panonija, which introduces innovations and changes through various projects, such as responsible use of local materials for construction, agriculture, and more.

Darja also plays an important role in connecting with the local community, especially on environmental issues. The business will to gradually be passed to the younger generation, but Darja still has many ideas for the future. She is in the process of completing the renovation of old farm buildings and building a greenhouse. In the future, they also want to focus on empowering women, who are one of the more vulnerable groups in the region.

THE INNOVATION IMPACT

The results of Mikrobios Panonija's activities are numerous and constantly evolving:

- Construction and renovation of farm buildings using natural materials (hemp and straw) while maintaining traditional construction methods.
- Employing three people and carrying out various activities. Employment of vulnerable groups.
- Carrying out numerous environmental protection projects, such as natural construction, installing bird nesting boxes, raised garden beds, colorful meadows, etc.
- Founding of the Pomurje Organic Farmers' Association Rodna Grūda and Cooperative. Raising awareness about organic farming.
- Close cooperation with the local community and residents, ensuring the transfer of specific local knowledge, and raising awareness among young people through cooperation with local schools.

USEFUL LINKS

<https://www.makrobios.si/>

THE INNOVATION JOURNEY

Polona Štolfa founded the Zlata Ptička (Golden Bird) shop in Kamnik with the idea of supporting Slovenian small businesses. Her desire was to present approaches for a healthy lifestyle in a direct way. The ideas came from her previous knowledge and experience, and Polona envisioned her own space where she could work independently from a young age.

The concept of the Zlata ptička shop was based on offering healthy local food (Polona opened the shop in 2014), and she gradually added natural cosmetics and handicrafts to her range, and later also nutritional supplements. As the product range expanded, so did the number of employees.



Figure 1. Polona's shop, Zlata ptička, in the old town of Kamnik is helping to revitalise this part of the city.

A few years ago, she expanded the shop with her own brand, Zlata ptička, which exclusively involves small businesses and places a strong emphasis on sustainability. With their own brand, they mainly produce a range of gifts that they offer to companies for corporate gifts and occasionally to other small businesses.

THE INNOVATION IMPACT

Polona has gradually created 6 full-time jobs with the business and ensures good processes and a positive environment that creates a high level of trust among employees. She has developed her own brand, Zlata ptička.

The functioning of the shop creates good relationships with suppliers and a high level of trust among (local) small entrepreneurs, farmers, etc., for whom the shop provides a stable income. They support small, local, Slovenian farmers, craftsmen, artists, etc., for whom Zlata ptička represents an important part of their monthly income. They promote a healthy lifestyle and short supply chains.

The shop contributes to the revitalisation of the abandoned old town centre of Kamnik. Zlata ptička attracts many people from Slovenia with its concept and is an important link in the revitalisation of Šttna (the old town centre of Kamnik).

They co-operate with various local actors (Municipality of Kamnik, Kamnik Institute for Tourism and Sport, etc.) and thus contribute to the development of tourism in Kamnik.

USEFUL LINKS

[Zlata ptička – official website](#)

[Facebook Zlata ptička](#)

[Instagram Zlata Ptička](#)

THE INNOVATION JOURNEY

"Dobrote Dolenjske" (Dolenjska Delights) is a regional collective brand that emerged from a social initiative aimed at connecting producers and processors, creating added value in agriculture and developing tourism in Dolenjska.

Špela Smuk is the founder and development manager of Dobrote Dolenjske. She started her professional career in a travel agency and later became one of the founding members of an association in the municipality of Trebnje that focused strongly on rural development. As part of various projects, they implemented activities in the local community, e.g. setting up a local farm and craft market, encouraging farmers to register processing on their farms, etc. In 2012, they founded an institute under which they still operate today, with Špela taking the lead role.



Figure 1. Dobrote Dolenjske in Trebnje.

Today, the company offers more than 700 products. Some products are sourced directly from local producers and sold as is, others are repackaged, and

around 40% are processed and developed in-house. They adhere to the principles of known origin, local ingredients and quality control. In addition, they carry out various project activities, including the development of a regional culinary map of Dolenjska to bring tourists closer to the destination through taste experiences, as well as conducting educational workshops for children. Their social responsibility is reflected in the fact that they employ disadvantaged or hard-to-place groups of people.

THE INNOVATION IMPACT

Dobrote Dolenjske is a regional collective brand, operating as an institute with 11 employees, a production and store unit in Trebnje, and boutique stores in Ljubljana and Novo mesto. Through their activities, they contribute to the promotion and support of agricultural production and processing. They have the status of an organization operating in the public interest in agriculture and in tourism promotion.

In addition to their impact on local self-sufficiency, they contribute significantly to the recognition of the region and the development of culinary tourism in Dolenjska. They have received numerous awards for their work (Gault&Millau, Agrobiznis, etc.).

USEFUL LINKS

<https://dobrote-dolenjske.si/>

<https://www.facebook.com/dobrotedolenjske/>

THE INNOVATION JOURNEY

The masterminds behind the project are geographers Petra and Janez Matos, both of whom have been volunteers all their lives. Park Istra is an innovative initiative that addresses the needs of the local environment through volunteer work.



Figure 1. Petra and Janez Matos are the masterminds behind the Park Istra project (author: M. Jordović Potočnik).

The couple were inspired to set up Park Istra during their

stay in India, where they took part in a similar volunteer project. With a strong desire to do something good and enjoy life to the fullest, they moved to the outskirts of Primorska and started a new story.

Park Istra has existed since 2013 and at any given time hosts around 15 volunteers from different parts of the world who live, work and learn in the community for an average of two to four months. The volunteers carry out daily activities and help tackle various challenges in the local environment.

Park Istra is committed to creating green jobs in rural areas, bringing young people back to the countryside and strengthening solidarity and volunteering. Through their work, they support other organisations and individuals. Five years ago, the Slovenian army rented out for free the old guardhouse in Kastelec which they renovated and set up a welcoming volunteer centre. In the early years, it

was also difficult to secure continuous funding, but in recent years this has been made easier by the European Solidarity Corps programme. Petra is the project manager and mentor for the volunteers, while John coordinates the volunteers and the work with other work organisations.



Figure 2. Park Istra responds to the needs of the local environment through volunteering.

THE INNOVATION IMPACT

In 11 years, they have hosted (and trained) 1,250 volunteers from 56 countries, working successfully with more than 50 organisations in the local area. Together they have carried out 3,400 work actions and donated around 105,000 working hours to the Obalno-Kraška region.

Park Istra acts as a supportive environment for other organisations, innovative, active and needy people in the local area. Through their activities, they contribute to the creation of green jobs and the promotion of sustainable development in the region. Through their voluntary work, they take care of the people in need and thus contribute to a fairer society.

USEFUL LINKS

[Park Istra website](#)
[Facebook page Park Istra](#)

THE INNOVATION JOURNEY

Marija Zupanec has lived in Rogaška Slatina all her life. In 2018 she started to build and develop programmes and services for psychosocial support and inclusion of people with disabilities in various activities in the border tourist municipality. She founded a private organisation in the field of personal assistance and obtained social enterprise status in 2023.

Together with her colleagues, Marija fills an important gap in the provision of public services: She is committed to developing activities to enable people with various forms of physical and/or mental disabilities to enjoy a good quality of life. In recent years, Zavod Uvid has also been successful in project tenders (Norway Grants, Erasmus, national projects); as "pioneers", they are gradually and comprehensively tackling the issue of cycling for people with disabilities on the Beaver Centre's cycle paths.

THE INNOVATION IMPACT

Although it is a young organisation, its most important results show the breadth of their work and their holistic approach. They have set up advice centres for older people and people with disabilities, providing them with verified and up-to-date information in several areas relevant to the needs of their users. More than 50 personal assistants are involved in the functioning personal assistance network, with interaction taking place between the user, the personal assistant, key members of the user's environment and the social worker. They want to show

users that it is possible to live well even with some disadvantages. They involve them in various programmes, offer long-term unemployed people on-the-job training and prepare them for a new working environment.



Figure 1. Marija Zupanec on an adapted bicycle for people with disabilities.

They provide comprehensive care for a large group of people with various forms of disabilities. They also work increasingly closely with the local community - the municipality, the local action group, the development agency, volunteers, associations, a primary school for children with special needs, etc. As advocates for people with disabilities, they sensitise society as a whole to the fact that there are groups of people in the community who would like to cycle but cannot because they do not have suitable bicycles. In co-operation with other actors in the local area, they will therefore gradually try to develop the full range of activities towards a bicycle product for businesses of people with disabilities or as a tourism product.

USEFUL LINKS

[Zavod Uvid - official website](#)
[Facebook - Zavod Uvid](#)

THE INNOVATION JOURNEY

Nina Arnuš and Anka Pintar are the driving forces behind Zavod 3, an organization that develops social and cultural innovations in the local community, with a particular focus on the integration of migrant women and the promotion of gender equality. Zavod 3 operates as a non-governmental organization, whose project activities are mainly funded through public tenders and NGO support.



Figure 1. Zavod 3 aims to reduce cultural differences.

Anka Pintar, a philosopher and sociologist, started her career in youth centers and as a researcher, while Nina Arnuš, a cultural scientist, gained experience in various NGOs and conducted trainings at the European level. Both encountered challenges in rural areas, such as accessibility and community homogeneity, and have committed themselves to improving the situation of immigrant women and promoting gender equality.

THE INNOVATION IMPACT

Zavod 3 successfully conducts education for local communities on migration, provides intercultural mediators and offers courses for immigrant women tailored to their needs. They have established a textile community that promotes intergenerational cooperation and learning through creative activities and develop projects that emphasize the achievements of women.

They also advocate for a better understanding and management of migration and gender equality in rural areas where they are confronted with stereotypes and traditional patterns. Nina and Anka's approach aims to raise awareness of the importance of community and non-formal education and to encourage local communities to adopt a more open and inclusive attitude towards migrants and women.

Zavod 3 focuses on the quality of their work rather than the expansion of activities and aims to create sustainable and effective solutions to the challenges in their communities. Nina and Anka remain committed to promoting social change and improving the lives of people in the local community.

USEFUL LINKS

<https://zavod-tri.org/> ,
www.facebook.com/brejapreja/?locale=sl_SI

Centri ponovne uporabe

THE INNOVATION JOURNEY

Marinka Vovk is a socially responsible entrepreneur, innovator, founder of the first reuse centre and the first social enterprise in Slovenia.



Figure 1. Marinka Vovk is always looking for new ways - a furnished workspace with reused products that was set up in a former shipping container.

The first Reuse Centre was opened in 2009 in the rural municipality of Rogaška Slatina, where support from the local level (mayor, municipal company) was important. In 2014, the network of reuse centres began to expand, and they were involved in the opening of six more centres in Slovenia. After a few years of support, most of the reuse centres were gradually handed over to local actors for independent management.

THE INNOVATION IMPACT

Today, they operate four reuse centres - three in rural municipalities and one in Ljubljana. Each centre has its own "specialisation" (e.g. repair of electronics, upholstered furniture), but there is cooperation and exchange of goods and products between them. They currently employ 32 people. Most of the

employees are women. The employees are trained for the work as many of them are long-term unemployed and people with disadvantage in the labour market, especially women.

Half of the income comes from the sale of products and the other half from various projects. The most recent project is the breeding of silkworms for medical purposes, which they see as an opportunity to integrate people who are disadvantaged on the labour market into work with higher added value.

Marinka is involved in the development of waste management legislation, social entrepreneurship and the management of innovative projects to promote environmental and social sustainability.

She believes that their work has helped to change attitudes towards waste. She is proud that they have managed to achieve a shift from selling individual products to offering reusable products. For example, they use modular shipping containers to demonstrate the reuse of products and use them as offices for co-working". Marinka sees the greatest added value in giving people who are disadvantaged in the labour market the opportunity to lead a normal life. She is characterised by the efficient adaptation of her business model and the constant search for new solutions.

USEFUL LINKS

[Center ponovne uporabe - official website](#)
[Facebook Center ponovne uporabe](#)

THE INNOVATION JOURNEY

Camporal, spearheaded by sisters Rocío and María Vera in the province of Ciudad Real, Spain, revolutionises rural areas with specialised technical solutions for extensive livestock management. Their innovative tools streamline data collection, enhance farm efficiency, and facilitate seamless communication of essential data to administrative bodies. Camporal's product lineup includes a comprehensive livestock diary for extensive bovine and ovine operations, facilitating data collection and business evaluation. Additionally, they offer a cutting-edge mobile app that not only collects data but also integrates with online management platforms supported by public administration. Recognising the significance of continuous improvement, innovation, and training, Camporal empowers farmers with insights that boost profitability, farm enhancement, and health standards.



Collaborating closely with rural development associations and groups like Ganaderas en Red, Camporal extends its impact beyond rural boundaries, advocating for the benefits of

extensive livestock production. Headquartered in Brazatortas, a rural hub with less than 5000 inhabitants and a pivotal role in the farming sector, Camporal implements every innovation directly in Brazatortas and neighbouring rural areas, contributing to the local agricultural ecosystem's growth and sustainability.

THE INNOVATION IMPACT

Camporal's strategic partnerships across various sectors have significantly transformed the farming landscape. Collaborative agreements with agricultural, banking, laboratory, and technology entities, coupled with university-business collaborations with the University of Castilla la Mancha, have established a robust network that fosters continuous innovation. Participation in coworking spaces alongside organisations like the EOI and the Chamber of Commerce from Ciudad Real further amplifies their collaborative endeavours.

Since the commercialization of their farming diaries in April 2017, Camporal has sold over 2500 diaries within a year, with a substantial waiting list of over 100 farmers eager to access their app. This achievement underscores the effectiveness of their technical solutions and highlights the growing demand and recognition within the farming community for Camporal's innovative tools and services, driven by the visionary leadership of Rocío and María Vera.

USEFUL LINKS

<https://www.facebook.com/camporal.es>

THE INNOVATION JOURNEY

Specifically, she developed a production model that integrates mushrooms and extra virgin olive oil. The products distributed are sauces or pâtés made with mushrooms from environmentally friendly, circular cultivation. The project started out of pure curiosity to explore mushroom cultivation. Presently, María operates independently without assistance. During olive harvesting, she piles up olive tree leaves with cereals to form substrates for mushroom growth, minimising environmental impact by avoiding air conditioning.

María sells silk and olive oil, with the latter sold to a cooperative. She holds ecological and biodynamic certifications and is expanding sales to end consumers through social networks and consumer groups. Although she is not looking to expand the shop, María aims to diversify mushroom types rich in polyphenols. She collaborates with the University of Seville to produce animal feed, addressing the excess purine issue in the north of Cordoba province due to dam contamination from antibiotics used in animal husbandry.

THE INNOVATION IMPACT

Being a woman and having created a project that is different from the usual ones has helped María Rosas to receive awards and visibility.

Specifically, she won the Ministry of Agriculture Award, for Excellence in Innovation, in 2020. Of great importance is the positive environmental impact, as the integrated production of mushrooms

and oil strengthens the environment through the use of circular and ecological farming practices, which help to protect the biodiversity of the local ecosystem.



Furthermore, through the use of its ingredients, María ensures sustainability and autonomy for its business model. A further success is María's demonstration of courage by cultivating new varieties of mushrooms, such as pink ones. This makes the pâtés and sauces produced from them of high quality. María's initiative also contributes to the local community, creating jobs, benefiting the rural environment and strengthening the local economy. Of great importance is the role that Maria Rosas gives to the use of organic products from ecological cultivation, as well as the decision not to use any type of air conditioning. It is an example to follow to try to combat climate change starting from a small scale.

USEFUL LINKS

<https://www.setacor.com/>

https://www.facebook.com/setacor.setacor/?locale=es_ES

<https://www.linkedin.com/in/mar%C3%ADa-rosas-alc%C3%A1ntara-b88345b0/>

THE INNOVATION JOURNEY

Judith Iturbe's La Balluca stands out as an innovative force in Spain's craft beer scene. Despite being the country's smallest brewery, their approach to local production and sustainability sets them apart. They craft top-notch beer using exclusively local ingredients sourced from Guadalajara and Aragón, championing the circular economy and OKM concept. Their sales strategy, initially targeting bars, restaurants, and regional shops, reflects a strong commitment to community support.

As they expand into the capitals of Guadalajara and Zaragoza, La Balluca demonstrates that small craft breweries can thrive by prioritising quality, sustainability, and regional collaboration. This innovative ethos mirrors the current trend favouring local, sustainable products in the brewery industry.



THE INNOVATION IMPACT

Judith's achievements, including recognition through the Talent Programme 2022 and winning the Entrepreneur Women 2021 award in the Rural Category in Guadalajara, underscore her significant contribution to rural entrepreneurship and her ability to excel in a fiercely competitive craft beer sector.

At a national level, La Balluca's emphasis on local, sustainable production and engagement with circular economy principles serves as a model for how small breweries can thrive while promoting ethical, environmentally friendly sales practices. Their expansion into major cities like Guadalajara and Zaragoza signals promising growth in the beer market, where they are gaining acclaim for their product quality and authenticity.

Operating Spain's smallest brewery, she has successfully increased sales and expanded her business footprint, proving the viability of her business model—a model grounded in sourcing ingredients exclusively from Guadalajara and Aragón.

USEFUL LINKS

https://www.facebook.com/laballuca/?locale=es_ES

<https://www.instagram.com/laballuca/?hl=es>
<https://laballuca.es/>



THE INNOVATION JOURNEY

La Jaira de Ana is a testament to Anabel Calderín's vision and determination, transforming her family's property in Agüimes into a thriving farm school in 2018. With a deep-rooted passion for education and culture, Anabel embarked on a journey to highlight the significance of the primary sector and the identity rooted in her rural upbringing. La Jaira de Ana's mission is not just about providing educational leisure but also about granting access to families, communities, and schools to the enriching experiences of the rural environment.

Anabel's project is not limited to workshops and participatory experiences; it extends to creating a safe haven for women who have endured gender-based violence. This dual-purpose initiative reflects Anabel's commitment to social inclusivity, empowerment, and community enrichment.



THE INNOVATION IMPACT

Their impact resonates far beyond its picturesque setting in Agüimes, Gran Canaria. The farm school has attracted

families, groups, and schools to the charms of rural life. Its innovative approach to educational leisure has garnered attention and admiration. Moreover, their contribution to creating safe spaces for women victims of gender-based violence is nothing short of transformative. It underscores the project's commitment to inclusivity, empowerment, and social justice, setting an example that extends beyond its immediate surroundings.

Regionally, the project has fostered a deeper appreciation for the primary sector and local identity. Through highlighting the importance of rural life, it sparked conversations and initiatives aimed at preserving and celebrating these invaluable aspects of our heritage. At the national level, it serves as a model for similar initiatives that promote education, inclusion, and connection with the rural environment.

To ensure sustained success and impact, La Jaira de Ana recognises the importance of visibility. Through strategic publicity, social media engagement, and event organisation, the project aims to raise awareness and garner support for its noble objectives.

USEFUL LINKS

<https://lajairadeana.com/es/>

<https://www.instagram.com/lajairadeana/?r=nametag>

<https://www.facebook.com/lajairadeana/about>

Regenerative crafts with Pilar Ureña Escariz



THE INNOVATION JOURNEY

Pilar Ureña Escariz is an entrepreneur and artist who has created her regenerative handicraft project through the recovery of residues from banana trees in the Canary Islands, Spain. Pilar started to investigate handmade textile techniques that could be made with this kind of material, and she started to work in 2017 on interior décor, architectural lining projects, and fashion accessories, researching and exploring its many textile applications using a variety of needlework. In 2021, she opened a studio in Moya, a municipality in the north of Gran Canaria known for growing bananas, where she investigates, creates, and sells handmade, sustainable, and contemporaneous pieces. The project is a creative innovation that makes the most of local and sustainable materials to create a wide range of unique pieces that combine contemporary aesthetics with traditional embroidery techniques.

THE INNOVATION IMPACT

Pilar has created an innovative, sustainable and inclusive circular handicraft project that has a social and economic impact on the territory. This project has a sustainable approach since it utilizes natural and local materials. In addition to the sale of her products, which she makes at the specific request of customers, she offers training in the use and processing of fibre planta and actively participates in social projects to teach her techniques to local communities seeking other options to strengthen their economy. In addition,

Pilar has a relationship with the Canarian Planta Museum, where there is a space for artistic research. Through her project, Pilar contributes to the valorisation of manual labour, creating unique, durable and quality products that do not suffer from planned obsolescence, in contrast to the low-priced mass distribution.



Projects like Pilar's have an impact not only economically but also socially and are important to revive handicrafts. There is a need to increase the visibility of projects like this, which highlights the merits and advantages of disseminating these products. It is important to create spaces for collaboration and meetings between artisans to encourage the creation of networks that can foster the creation of synergies and the dissemination and publication of these realities, which can also take place through the launch of themed events.

USEFUL LINKS

<https://www.homofaber.com/en/discover/pilar-urea-escariz-2a7grs>

<https://www.instagram.com/pilarurenaescariz/>

<https://www.facebook.com/pilar.urenaescariz>



Residencia Campo Romano



THE INNOVATION JOURNEY

Residencia Campo Romanos represents a pioneering initiative in Romanos, Aragon, Spain, offering a residential development tailored for the elderly. The essence of this project lies in providing ample living spaces for seniors, fostering a sense of belonging and comfort akin to home. With a strong emphasis on eco-friendly practices and lifestyle amenities such as recreational areas and fitness centers, the residence aims to create an idyllic community where residents can lead fulfilling lives.



THE INNOVATION IMPACT

The impact of Residencia Campo Romanos extends far beyond providing living spaces for new inhabitants. In a region grappling with an ageing population and serious depopulation issues, this project plays a vital role in revitalizing the community. By attracting new residents and diversifying the local economy beyond agriculture, the

residence contributes significantly to the area's growth and sustainability.

Moreover, Residencia Campo Romanos is actively involved in promoting active ageing through workshops and initiatives aimed at encouraging physical activity among the elderly. This proactive approach not only enhances residents' well-being but also addresses cognitive health concerns associated with sedentary lifestyles.

Additionally, the residence has tackled housing shortages in the town by not only creating homes for the elderly but also developing spacious, eco-friendly environments that blend harmoniously with the surrounding nature. This holistic approach reflects a commitment to providing the best possible living conditions while preserving the natural beauty of the area.

Marta Reinares Gómez, the visionary behind Residencia Campo Romanos, serves as an inspiration to others. Her success in establishing a thriving business in a predominantly agricultural region showcases the potential for innovation and growth even in traditional sectors. Marta's ability to attract funding, leverage networking opportunities, and prioritize the well-being of elderly residents highlights the multifaceted impact of this project on both the local community and the broader region.

USEFUL LINKS

<https://www.facebook.com/profile.php?id=100063732516290>

<https://residenciamporomanos.com/la-residencia/>

THE INNOVATION JOURNEY

Sepulveda Viva is a cultural organisation created by Ana Herrero, who, after studying history of art and museum management in Madrid, decided to promote the city of Sepulveda in Spain through history and theatre, thus giving birth to Sepulveda Viva.

Ana works as a self-employed entrepreneur, and alongside her are Alejandro, Antonio, and Elena, forming a team of four. Together, they organise theatrical visits, guides, night trips, and cultural experiences with the aim of experiencing history through emotions, offering a variety of thematic tours to suit different interests.



THE INNOVATION IMPACT

Through customised visits, Sepulveda Viva allows greater accessibility, meeting the needs of everyone. Among the options are visits that encompass the

monuments and an overview of Las Hoces del Duratón; personalised visits exclusive to family, friends, or work colleagues; themed experiences from various historical periods; and more. This project has succeeded in sharing the immense cultural wealth of Sepulveda, allowing visitors to delve into the history behind every street, monument, and corner of the town for a memorable experience.

The promotion of Sepulveda serves as an example of maximising the potential of lesser-known territories through innovative cultural initiatives like theatre-led tours.

Ana Herrero's entrepreneurial journey with Sepulveda Viva has not only injected dynamism into the village but also earned recognition, including the prestigious 11th Excellence Award for Women's Rural Innovation in Spain. She emphasizes the transformative power of theater in emotionally connecting with places, a realization that has fueled her dedication to promoting Sepulveda's cultural heritage.



USEFUL LINKS

<https://sepulvedaviva.es/>

THE INNOVATION JOURNEY

Trasdeza Natur is a business founded by María José Tallon in Galicia Spain, in 2016, which focuses on the production of fruit through sustainable guidelines, which is then marketed as ecologically and artisanal dehydrated fruit, and vegetables produced with solar energy so that all their organoleptic values and nutritional properties can be preserved. She started as a self-employed business selling fresh products and converted a house she owned into a workshop for processing surplus fresh produce into dehydrated products.

The idea was to extend the life of fresh produce with the dehydration process, and no sugar or sweeteners were added to her products. María also wanted the dehydration processes to be natural, so she travelled to South America to study how this was done, entered into an agreement with the University of Santiago de Compostela, and bought a machine designed for drying seaweed. This is a renewable and green technology, with zero environmental impact, and María's production is currently almost 100% dehydrated products.

THE INNOVATION IMPACT

María declares that thanks to her project she has given more visibility to the rural area, obtaining a certificate of 'ecological', given her sensitivity to the issue of healthy products. Among the indicators of the success of her production is the 'Sello de Artesanía Alimentaria' awarded by the Government of Galicia, as well as the BBVA award to

Best Sustainable Growers in Spain in 2023. In addition, of great value are the recognition of the optimisation of the fruit and vegetable dehydration process through renewable energies, and the maintenance of nutritional values, demonstrating the ability to preserve all the properties and organoleptic values of dehydrated fruits.



It is important and desirable to use a targeted approach to production with the total use of renewable energy, such as that used by Trasdeza Natur, to contribute to combating climate change. Also of great importance is the focus on preserving the nutritional values of fruit and vegetables, as a promotion of a healthier diet.

USEFUL LINKS

<https://www.trasdezanatur.com/>
<https://www.facebook.com/trasdezanatur>
<https://twitter.com/trasdezanatur?lang=es>
<https://www.instagram.com/trasdezanatur>



Escuela de Turismo Generativo by Isabel Sánchez Tejado



THE INNOVATION JOURNEY

Isabel Sánchez Tejado, a rural tourism trainer, founded the Escuela de Turismo Generativo, an online school proposing a new management model for rural tourist destinations. This sustainable model aims to boost demand for tourist services while safeguarding and enhancing natural resources. The journey began in Gredos, Spain, in 2011, where Isabel revitalised a local entrepreneurs' association and formed a working group to develop sustainable tourism practices that honour traditions, gastronomy, and landscape heritage. As the success of this approach spread, Isabel received requests from other regions, leading her to establish the school.



THE INNOVATION IMPACT

Isabel and her team provide online training to destination managers and rural entrepreneurs. They also customise content for specific destinations and host a Spanish-language podcast, 'Mundo rural en positivo', targeting rural communities. These initiatives have

increased local pride, fostered collaboration, and led to the creation of new tourism infrastructure and employment opportunities. Through implementing this model, tourism has become less seasonal, contributing to population retention, and combating depopulation—a critical issue affecting rural regions in Spain.

The Escuela de Turismo Generativo presents an opportunity to revitalise depopulated areas by promoting sustainable tourism and leveraging existing resources. Strengthening local networks, respecting communities, and tailoring strategies to each region's unique characteristics are crucial aspects of this approach. Ultimately, it transforms rural areas into attractive, vibrant tourist destinations while preserving their cultural and natural heritage.

USEFUL LINKS

<https://www.isabelsancheztejado.com/la-escuela-de-turismo-generativo/>

<https://www.instagram.com/isabelsancheztejado/>

https://www.facebook.com/isabelstejado?locale=it_IT



Vermiduro – earthworm humus



THE INNOVATION JOURNEY

Vermiduro, a company in Burgos, Spain, specialises in manufacturing ecological products derived from worm castings. With a young and innovative team, Vermiduro prioritises product quality and sustainability.

The journey began when Nazareth Aparicio, the founder, stumbled upon a manual about earthworms in 2015–2016. Unsure of her career path but motivated by a lack of job opportunities in her village, she and her partner embarked on an experimental journey, purchasing their first worm bin and placing it on a friend's farm. This marked the inception of Vermiduro's innovation.



Years later, Nazareth and her partner acquired a farm in Burgos, now Vermiduro's headquarters, housing over 800 bins for breeding earthworms. Nazareth, a self-employed entrepreneur, is also part of the ADRI Association for Integrated Rural Development. The company has received several accolades, including Best Business Project 2022 from the AJE (Association of Young Entrepreneurs of Burgos) and

the Third Prize in the XI Awards of Excellence for Innovation, Rural Women category.

Looking ahead, Vermiduro aims to install solar panels and renewable energy devices at their farm to reduce their carbon footprint.

THE INNOVATION IMPACT

Vermiduro's mission is to transition traditional agriculture towards more sustainable practices by offering natural fertilisation solutions for all crops. Their products, suitable for organic farming, are entirely natural, safe for people and the environment, and compatible with auxiliary fauna. The Vermiduro team provides personalised attention and advice to clients, optimising harvest results based on crop peculiarities, soil conditions, and land status.

In the face of damaging soil cultivation techniques, pesticide use, chemicals, and climate change, Vermiduro advocates for environmentally friendly cultivation methods. Their products, coupled with personalised support, aim to support farmers in this transition towards sustainable agriculture, expanding their range of ecological products to further benefit the land and ecosystem.

USEFUL LINKS

www.vermiduro.es

www.facebook.com/vermiduro

www.instagram.com/humusvermiduro/

INNOVATION JOURNEY

Återbruket Klädtrasan is a voluntary and non-profit clothes mending circle. The "Reuse Cloth Workshop" takes place on Tuesdays at Tomelilla public library for patching, mending, decorating, altering, tailoring, and making new garments from old ones. The aim of the organization is to contribute to the planet by extending the life of people's existing clothes or adjusting second-hand garments to fit instead of buying new ones. The leader is Maria Åkesdotter, who is accompanied by a group of skilled textile ladies who provide tips and advice.



Återbruket Klädtrasan started by Maria Åkesdotter, a retired apparel teacher, in 2019. She was inspired by the book *Mending Matters*. Maria talked to the Red Cross, that had an unused store area and

posted her idea on Facebook, inviting others to join. Two more ladies joined and the local newspaper wrote a story about the initiative. The group grew and more and more participants joined the mending circle.

INNOVATION IMPACT

The initiative took a long break from its operations during the pandemic, but by autumn 2021, the group started meeting

again, first informally, and later once again in the Red Cross's premises. As the circle's work continued, the group moved to Tomelilla's culture house and then to the library.



Apart from the meetings on Tuesdays, which anyone can join, the group's activities, thus far, include:

- Fashion shows
- Lectures and exhibitions
- Organisation of clothes exchanges and flea markets
- Workshops, for example at Ecotopia Österlen or Syateljé Vitaby
- The "Knit for climate" initiative

USEFUL LINKS

https://www.facebook.com/aterbruketkladtrasan/?locale=sv_SE

THE INNOVATION JOURNEY

The Knowledge Center Ecotopia Österlen opened its doors with an Open Farm event on Saturday, May 19, 2012. Situated on seven hectares, Ecotopia serves as an inspiration for ecobuilding, energy-efficiently, self-sufficiently. Ecotopia operates in a way that is conducive to recycling and environmentally friendly practices.

The planning for Ecotopia began by Karin Malmgren in 2007 and the organisation has consistently employed a holistic perspective guided by her principles of permaculture and her interest for environmental issues. Ecotopia currently comprises several buildings made from various combinations of ecological building materials, along with associated structures, energy calculations, recycling systems, a combined solar-solid fuel heating system, and solar collectors and cell installations. Activities include linseed oil and egg tempera painting, among other sustainable solutions in a natural environment.

THE INNOVATION IMPACT

Ecotopia serves as a bridge between old and new knowledge. This agricultural property comprises a Skånelänga from the 19th century constructed from dried clay stones, which was extended with an barn building in 2010. Subsequently, a meeting place and a workshop were established. In 2013, the construction of

a total of five eco-cabins was completed, one of which is accessible for people with disabilities. This project was achieved through running various construction workshops where the participants were involved in constructing the buildings. All of Ecotopia's courses are conducted by external Swedish and foreign course leaders. The final building, a straw bale house built to a plus-energy standard, was inspected in December 2016.



A private initiative underlies the vision and realization of Ecotopia. This initiative follows the principle of small-scale development in a rural environment based on available resources. Everything that takes place at Ecotopia is driven by simplicity. Thus, their aim is to live sustainably and grow together in harmony with nature.

Today Karin is retired from working at Ecotopia Österlen and instead she is running the place on a voluntary basis.

USEFUL LINKS

<https://www.ecotopia.se/sv/>



THE INNOVATION JOURNEY

After many years of being passionate about and competitive riding, in 2021, Linda Gustafsson formed her vision of Freelayer. At that time, she bought a young foal but could not find suitable blankets for the animal. So, Linda took matters into her own hands and decided to sew and create top-quality horse blankets. In 2023, Linda officially established her company, Freelayer, on the picturesque island of Öland, Sweden.

Today, Freelayer produces high-quality blankets that are modular in construction. The horse owner can choose and adapt the blankets' sizes, fillings, and materials. These blankets stand out on the market for their innovative features, providing horses with ample freedom of movement, ensuring they stay dry, and effectively regulating their temperature. The company's goal is to sell between 150 to 200 specialized blankets in the upcoming year.

THE INNOVATION IMPACT

Freelayer is a pioneer in the horse blanket industry by focusing on innovation, sustainability, and horse welfare. In 2023, Linda Gustafsson received the prestigious scholarship, *ÅForsk for entrepreneurs*, and 200 000 SEK.

Sustainability is a core issue for Freelayer and is integral to every aspect

of the company's operations. Freelayer's vision is to create excellent blankets for horses while not damaging the planet.



Sustainable material. Freelayer uses materials that have a low impact on animals, nature, and human health. This entails that the company avoids using toxic chemicals and chooses certified and tested materials.

Sustainable design. Freelayer seeks to minimise its ecological footprint by using as little material as possible in an effort to reduce waste in its production and packing. A fundamental consequence of their modular construction is that Freelayer offers the horse owner an opportunity to replace just one part of the blanket when it is worn out. This reduces textile waste and unnecessary consumption.

Sustainable technology. Freelayer incorporates new technology in their blankets to reduce material usage and improve the horses' well-being.

USEFUL LINKS

<https://www.freelayer.se/en>

THE INNOVATION JOURNEY

Meetingpoint Häradsbäck started from a rural grocery store and, since 2018, has developed into a café and restaurant and also a rural center for cultural events.

The different components of the organisation feed into each other in an innovative way since the company is owned by several local non-profit organisations.



The café hosts a branch of the municipal library, and the store provides groceries and functions as a pharmacy and post office. Food delivery services for the elderly and living facilities for the elderly are also offered by the organization. For tourists, campervans can stay overnight, and the store sells camping gas, which attracts some travellers to stay in the village and enjoy the activities the village offers.

THE INNOVATION IMPACT

The Meetingpoint serves several vital practical and social purposes for the rural population. Without Meetingpoint

Häradsbäck, it would be less attractive to live in the village, and those who do live in the village would be more socially isolated. Without the Meetingpoint, the elderly would have had to use municipal services to a larger extent. Häradsbäck would also be less attractive as a stop for tourists and other visitors travelling though on the main road.

Mette Adolfson, with her excellent ability to secure external funding, has been vital to the success of the organisation.



However, she could not have done this alone. The local community along with dedicated volunteers have made the meeting point a reality.

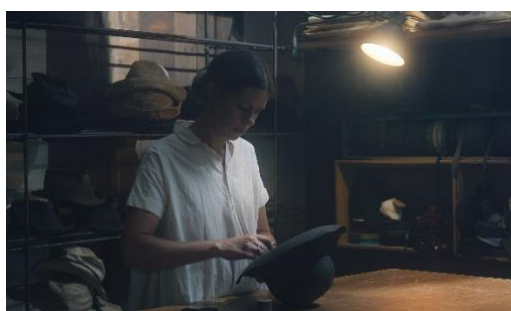
Apart from supporting social sustainability, cultural and environmental sustainability are also facilitated by the organisation. However, what Meetingpoint Häradsbäck is struggling with is long-term economic sustainability. The pandemic and the subsequent recession have hit the organisation hard. Securing sufficient community participation has also been a challenge.

USEFUL LINKS

<https://haradsback.se/>

THE INNOVATION JOURNEY

Horisaki Design & Handel produces and sells artisanal hats worldwide from its rural farm location in Småland, Sweden. Karin Horisaki and her husband, Makoto, own and run the company.



Karin's passion for handicrafts and hats was triggered in her youth when she was captivated by French literature and fashion. After finishing an education in millinery, Karin started a small business in Stockholm in 2008, focusing on fashionable, premium-quality hats. Since 2013, Horisaki Design & Handel has operated from the small village of Kåremo. Inspired by the surroundings and the cultural heritage of Småland, Karin produces two collections per year, which she traditionally exhibits during the fashion weeks in Paris.

Horisaki's stylish hats blend innovation with a commitment to preserving the time-honoured tradition of hat-making. Sustainability is deeply ingrained in the company, through for example incorporating solar energy, repurpose materials from the farm for renovation,

and meticulously oversee their supply chain.

THE INNOVATION IMPACT

They produce around 1,500 exclusive, tailor-made hats annually, which are sold in 20 countries. Their hats have graced the heads of international celebrities like Lady Gaga and members of several royal families. In a move to further expand their reach, they have recently launched a web shop. This summer, Horisaki Design & Handel will open a small shop, offering a diverse range of products produced by other craftspeople in their network.



A few years back, the company made 3 000 hats each year. However, the owners made a deliberate choice to reduce production in order to lead more sustainable and personally fulfilling lives. Karin stresses her desire to reconnect with the craft's artistic aspects instead of being a CEO who oversees an expanding business.

USEFUL LINKS

<https://horisaki.com/>



THE INNOVATION JOURNEY

The Innovation Centre is a knowledge bank that complements and extends municipalities' work with business and entrepreneurship development. The centre connects rural entrepreneurs and businesses with stakeholders and support systems that typically are located in urban areas. Currently Helena Kurki is the Business manager and an innovation advisor at the centre. She was also part of the start-up of the innovation centre in 2015, steering the mission towards societal change. The centre makes available information about existing support systems that might be needed to support rural businesses.

THE INNOVATION IMPACT

The centre offers:

- advisory meetings with businesses in order to guide and support them
- contacts and suggestions for rural businesses, including information about local and region support systems that are relevant to rural businesses
- meetings and seminars for idea generation, sharing innovations, developing business relationships
- creation of collaborations through events

- lobbying to direct attention to the challenges and needs of rural businesses
- development of new models and tools to create a financially sustainable and flourishing rural business landscape
- highlight the importance of challenging the urban bias in innovation systems and effectively represent rural businesses
- emphasis on the importance of relationships, dialogue, and networks in a rural context
- support and dialogue that are necessary to help ideas become innovations



USEFUL LINKS:

<https://www.innovationscenter.se>

THE INNOVATION JOURNEY

In 2019, the municipality, that the village of Ryssby belongs to, decided to close the village library. However, a group of engaged readers protested vehemently against this decision. Ing-Marie was the first villager to hear about this news from the librarian and decided that this could not happen to her village. So, she brought this issue up with the village's voluntary associations, and they initiated talks with the municipality.



A consultant from Coompanion was engaged by the municipality and he suggested to the municipal officials and electives that the library could be run as a Civil Society Public Partnership (CSPP). Subsequently, a cooperation agreement was written between the municipality and fourteen local associations. A facility to house the library was offered by the municipality, plus some basic financing for expenses and new books. In the autumn of 2021, the new library opened.

Moving and re-cataloging all the books and staffing the library during opening hours twice a week are done by a group of ten volunteers, all of whom are senior citizens.

THE INNOVATION IMPACT

The Ryssby's library is Sweden's first CSPP library. The new library has become a model for how things can be done in rural Sweden. In the municipality that Ryssby belongs to, there are now several CSPP agreements in place.

The library project managed to secure funding from the municipality and from an external fund. Many new people now use the library. The library has garnered interest from the newspaper and the library sector in Sweden.

In addition to its book collection, the library has become a 'local living-room' that is used by other village associations. The library also hosts cultural events, not least for children.

USEFUL LINKS

<https://www.facebook.com/profile.php?id=100089245087640>

THE INNOVATION JOURNEY

Virserum was a hub for Swedish furniture production until the 1970s. When the industry declined, the area suffered, and properties fell into disuse. A local artist, Henrik Teleman, envisioned that the property could be restored as an art gallery for non-traditional art audiences. His dream became reality when the museum opened on June 27, 1998. In 2004, a 1600 m² exhibition hall was constructed to showcase art exhibitions including wood art, textile art, and addressing topics such as household labour, sustainable architecture, consumption, and social sustainability.



Currently, Julia Wiel Fredén is acting operations manager, and the museum employs four full-time employees. In addition to hosting art exhibitions, the gallery operates a vegan café, hosts cultural events, and collaborates with art and cultural institutions, nationally and internationally. The gallery is owned by a non-profit organization and is funded by public funds and private foundations. The gallery is a unique cultural destination

and functions as a meeting place in a rural area in Småland.

THE INNOVATION IMPACT

The museum impacts on the rural life of the local inhabitants in several ways. Firstly, it serves as a meeting place for locals where they can engage with contemporary art and connect with one another in a dynamic setting. Additionally, the gallery collaborates with several schools to empower young people and amplify their voices within the community. Moreover, it is a tourist attraction, drawing attention to an otherwise economically challenged area. The gallery has also won national and international recognition. Finally, the Art Gallery constitutes a forum where issues related to gender, class, geography, and sustainability can be explored thus creating awareness about these issues in visitors to the gallery.



USEFUL LINKS

<https://www.virserumskonsthall.com/english/>

THE INNOVATION JOURNEY

Josefin Damm and partners have created a medical bandage with perfect compression characteristics regardless of the shape of the patient's leg and who applies the bandage. The compression system is used for leg ulcers and venous and lymphatic leg diseases. Current solutions on the market are not specifically adapted for use for such conditions.



The initial smart bandage produced by the company was the result of a collaboration between a mathematician, a surgeon, and a textile developer. The surgeon, Dr. Erney Mattsson, saw an unsolved problem with the bandages he used in his practice. The mathematician,

Prof. Torbjörn Lundh, solved the problem by developing a mathematical formula. This mathematical formula was handed over to Josefin Damm, a textile developer, who incorporated this formula into a textile.

These innovators developed the bandage material and patented it in 2013. In addition to this product, the company has released other products, including support socks and stockings based on the same textile used in the original bandage. These products are also patented. Their collaboration has resulted in the creation of a cutting-edge technology.

THE INNOVATION IMPACT

The company has a unique selling proposition and a competitive advantage in the market.

First and foremost, Lundatex improves the quality of medical health care provision with a product of a higher quality than those on the market today. This leads to a better life for all the people in need of medical bandages. And, in turn, enhanced customer satisfaction.

Josefin Damm was on the short-list 2016 for 'woman innovator of the year'. The company holds five patents for its products.

USEFUL LINKS

<https://www.presscise.com/>

THE INNOVATION JOURNEY

Alexandra Larsson started her own driving school in 2014, called Rosa Kortet (The Pink Card). The name pays homage to the colour of a Swedish driver's license.

After three years, she owned the largest driving school in the county. The business remains the largest.

A couple of years ago she expanded her business and now has two offices in an adjacent village in rural Dalarna. She bought one of Sweden's first driving simulators, which has been noticed in the driving instructor industry.



Recently, she and a colleague launched a franchise concept called *Rosa Kortet Involve*. A franchise concept in this sector is unique in Sweden.

THE INNOVATION IMPACT

When Alexandra started her business, she changed the norms in the industry –

at least regionally – by employing only women driving instructors. This business strategy turned out to give her business a competitive advantage since many students, of either sex, prefer women driving instructors. This move paved the way for women to gain employment as driving instructors at other driving schools, too.

Today, the company employs twelve driving instructors (both women and men) covering three communities. Alexandra's business is continually expanding. She also employs her husband.



USEFUL LINKS

<https://www.rosakortettrafikskola.se/>

THE INNOVATION JOURNEY

Blijham, a rural village with 2,610 inhabitants in the northern Netherlands, is known for its clean air and ancient trees. Since 2014, the village council has been developing a plan for a large arboretum that integrates an existing orchard and food forest. This project aims to create a greener, more vibrant landscape. With the support of the local authority, which owns 170 hectares of open countryside, the village council secured a LEADER grant in 2019. Lineke Lamfers played a crucial role in raising funds and uniting various parties through her leadership during her term on the village council.



Figure 1. Tree planting by Lineke Lamfers, chairwoman of the Blijham village council, and Bart Huizing, alderman of the municipality of Westerwolde, on 4 March 2021.

The grant helped finance the landscape design, attracting sponsors like the Groningen National Programme, the Province of Groningen, Google Eemshaven Data Centre, and the Prins

Bernhard Cultural Fund. Between 2020 and 2023, ten themed tree gardens and a 6.7km public footpath were created. Around 200 trees have been labelled with their scientific names, the adopters names, and their special memories, being given an extra emotional meaning.



Figure 2. Volunteers planting trees

THE INNOVATION IMPACT

The arboretum project has enhanced biodiversity, cultural-historical value, landscape aesthetics for ecotourism, and the quality of life for residents and wildlife for the local society. The footpath, surfaced with olivine split to absorb CO₂, reflects the council's careful consideration of environmental, social, and ecological impacts.

Building on the project's success, the village council is now addressing other challenges, such as securing a new village hall and building more houses for younger residents. The arboretums creation has greatly improved the quality of life in Blijham, boosting biodiversity and strengthening the socio-cultural identity. The residents take pride in their designation as 'the arboretum village'.

USEFUL LINKS

www.dorpsraadblijham.nl/arboretumdorp

THE INNOVATION JOURNEY

The Bee Foundation was founded in 2015 by Sonne Copijn to champion the cause of bees. The Bee Foundation advocates that bees and humans benefit from a bee-friendly environment. She raises awareness that bees are responsible for around 90% of all pollination on Earth and that the disappearance of bees will result in a significant loss of biodiversity.



Figure 1. Volunteers building bee oases in Beukenburg (March 2022)

The Foundation's country house in Groenekan (Utrecht), a village of 1,965 people, serves as an educational centre. The Copijn family has lived here for over 140 years, as botanists, landscape architects and beekeepers. Sonne Copijn, the fourth-generation family member, is carrying on this legacy in a transformative way.

THE INNOVATION IMPACT

With a Board of Trustees, staff, advisors and thousands of volunteers, the Bee Foundation's mission rests on four pillars: (1) to fascinate people with the biodynamics of bees, (2) to educate about bees and biodiversity, (3) to create a bee-friendly built environment, (4) to

advocate for the welfare of bees. They organize theatre workshops, train aspiring wild beekeepers, advise landowners on how to set up hives and publish annual surveys of bee mortality and warnings of threats to bees.



Figure 2. Sonne Copijn in a bee suit in Amsterdam (October 2022)

From 2015 to 2023, the foundation has created more than 30 hectares of bee oases across the Netherlands in partnership with government, businesses, and civil society organizations. Its vision is to create 10,000 hectares of bee oases by 2028, with more than 10,000 participants educated about bees and biodiversity.

USEFUL LINKS

<https://bee-foundation.nl/>

THE INNOVATION JOURNEY

LiberTerra, an eco-village of 10 relocatable tiny houses, promotes bio-based construction and sustainable living. In 2018, a group of environmentally conscious citizens initiated the project by identifying a promising site to lease in the Geestmerambacht nature reserve in Koedijk, and Heerhugowaard (Noord-Holland), in line with the circular economy policy of the province and municipality. After two years of planning, approval, and design, construction started in July 2020.



Figure 1. A bird-eye view of the site LiberTerra (January 2022)

LiberTerra's 1-hectare site includes ten houses and a knowledge centre, with house sizes ranging from 23 m² to 62 m². Built from natural and upcycled materials, many houses are off-grid and designed for easy relocation, recycling waste streams. A permaculture garden with

rainwater harvesting will encourage self-sufficient food production.



Figure 2. Student excursion on LiberTerra (March 2023)

THE INNOVATION IMPACT

Mieke Elzenga, a key figure from the beginning, now runs the LiberTerra Knowledge Centre with the community, helping other eco-villages to develop. The centre focuses on promoting the circular economy, bio-based construction, and eco-conscious minimalist living, raising awareness of climate challenges and training young people to become eco-champions.

They organise events such as gardening days, litter picking walks, seminars, and workshops, are open to their neighbours, volunteers, visitors and student interns, and actively work with Green Oasis, Ecolise and various organisations.

USEFUL LINKS

<https://geestmerambacht.liberterra.eu/>

THE INNOVATION JOURNEY

Bregje Hamelynck runs Ús Hôf (Our Courtyard), a self-harvesting farm cooperative in the village of Sibrandabuorren in the province of Fryslân since 2013. The farm is based on the principles of permaculture and *Community Supported Agriculture* (CSA). The farm has more than 200 harvest partners with regular subscriptions for 35 weeks a year, and over 100 subscribers for a weekly vegetable package for 30 weeks a year.



Figure 1. A bird-eye view of Ús Hôf (left) and Bregje Hamelynck on the farm (right).

Rural newcomer Bregje Hamelynck moved to Fryslân looking for an environmentally sustainable lifestyle after a career as an economist in energy transition and sustainable development. After integrating into the local community, she and her partner transformed 2 hectares of former horse land into a permaculture-friendly farm.

The farm has become a place of belonging with local partners and volunteers. They organise an educational centre promoting CSA. Her partner Michel takes care of soil improvement

and physical farm tasks, Bregje focuses on CSA start-ups and public advocacy, co-founding the CSA Network Netherlands and the Federation of Agroecological Farmers.



Figure 2. Bregje Hamelynck as keynote speaker at the establishment of the Farmers' Council (10 December 2019)

THE INNOVATION IMPACT

Bregje is a rural development innovator known for collaborating with environmental and socio-economic transformation agents at various levels. She strategically bridges her networks, initiating projects like 'Foodcoop Ús Iten' in 2015, which increased the regional market share for sustainable food and created a circular food chain. She also co-initiated a community land trust at Ús Hôf, ensuring ethical and social land use.

Overall, Bregje has demonstrated the effectiveness of CSA and now she, teaches the principles, supports the development of CSA farms and other activities and initiatives on CSA.

USEFUL LINKS

www.ushof.nl

www.usiten.nl

THE INNOVATION JOURNEY

‘Natuurlijk Heel Leuk’ (Naturally much fun) is a social enterprise specialising in developing natural playgrounds and food forests with environmental and educational functions. Since 2018, Petra Eckhardt, Nancy Rietveld and Barry Blommestein run the business together as a general partnership. Their mission is to reconnect people of all ages with nature and each other through nature activities.



Figure 1. Founders of Natuurlijk Heel Leuk Petra, Nancy, and Barry (from left)

A shared passion for nature and social work brought Petra, Nancy, and Barry together. Petra specialises in ecological and permaculture design for gardens, schoolyards, and larger green spaces. Nancy excels in business operations, marketing, communications, and partnership development. Barry brings extensive experience working with children and individuals with learning disabilities.

THE INNOVATION IMPACT

Their integrative approach to green space design and outdoor area management is outstanding. ‘Natuurlijk Heel Leuk’ combines the design of

natural outdoor playgrounds and food forests with operational expertise to foster social inclusivity, engaging children, (grand)parents, refugees, and vulnerable groups.



Figure 1. The construction of a new food forest on the edge of Wijk bij Duurstede with educational and social functions (May 2021)

Their thoughtful approach enhances integration and solidarity by creating diverse playgrounds and networks across different villages in the municipality of Wijk bij Duurstede. This afforded them a LEADER subsidy in 2019 and an AMIF grant in 2020 for incorporating social gatherings and language learning for refugees. They maximise their innovative impact by collaborating with local stakeholders like private farm owners, school boards, care foundations, social housing providers, volunteer associations, and local governments.

USEFUL LINKS

<https://natuurlijkheelleuk.nl/>
www.groendoetgoedinwijk.nl/
www.facebook.com/natuurlijkheelleuk/?locale=nl_NL

THE INNOVATION JOURNEY

In 2020, Karin Körver founded Plantalia, a Community Supported Agriculture (CSA) farm between Middelburg and Ritthem in Zeeland. The farm has expanded from 0.5 to 1.5 hectares and grew from 40 to 100 members, with potential for more. Plantalia offers a self-harvesting membership, allowing members to pick their products from April to December, fostering a direct connection with their food. The farm offers a variety of vegetables, herbs, and flowers, including rare varieties like black tomatoes and Siberian kale. Members pay an annual fee and receive guidance on harvesting techniques.



Figure 1. Karin Körver, founder of Plantalia

Former ICT professional Karin used her skills to establish Plantalia, developing the website by herself and attracting members through local news features. Her sincerity helped secure plots from sustainable, organic landowners. Inspired by initiatives like Tuinen van Groede and CitySeeds, Plantalia emphasizes the social nature of sustainable food consumption. CitySeeds provides fresh vegetables to at-risk families with the help of volunteers, offering small urban garden plots for rent and cares for children. In line with these

initiatives, Plantalia more stands out with its membership system, diverse crops, larger size for more households, and professional guidance, having obtained EU organic certification in January 2024.



Figure 2. Potato harvest on newly leased land in 2023

THE INNOVATION IMPACT

Plantalia engages the local community by hosting open days and educational sessions. To keep members updated she provides newsletters on seasonal products and recipes. She organizes events, strengthening community ties and promoting transparency. In Zeeland, known for industrial potato and onion production, Plantalia offers villagers hands-on opportunities to experience the joy of self-harvesting and it broadens their choices beyond supermarket vegetables.

USEFUL LINKS

www.plantalia.nl
www.halloboer.org/bedrijven/tuinderij-plantalia
www.oestfarmandstay.nl/good-to-know
<https://veltzeeuwseeilanden.nl/handige-websites/>

THE INNOVATION JOURNEY

Springt Design, founded by Evelien Kamphuis in 2021, showcases a commitment to environmentally friendly interior products by using natural, biodegradable, or recyclable materials. Growing up in a potato-cultivating region and working as an independent journalist specializing in agriculture, Evelien was inspired to create sustainable alternatives to plastic interiors. She developed the TOVVEL lampshade, made from potato starch - a by-product of the potato chip industry. The name "TOVVEL" comes from the Groningen dialect word for potato.



Figure 1. "TOVVEL", three lampshades

Through rigorous experimentation with raw materials and prototypes, Evelien moved from concept to production, establishing herself as a multi-talented entrepreneur in biodegradable products. Her journey involved sourcing materials, designing prototypes, coordinating with manufacturers, securing funding, and managing logistics, resulting in a product line that emphasizes sustainability without sacrificing design.



Figure 2. Evelien Kamphuis in a design process

THE INNOVATION IMPACT

Evelien's innovation focuses on environmentally conscious industrial design, emphasizing local sourcing and on-demand supply. From material sourcing to production and delivery, her business significantly minimizes the environmental footprint, a stark contrast to plastic product manufacturing. She continues to develop her range, aiming to offer biodegradable interior products that are not only aesthetically unique and environmentally friendly but also functionally efficient.

She serves as a role model for rural female entrepreneurs. Starting from scratch, she attended numerous startup workshops, tested prototypes, applied for and received a LEADER subsidy, and has been actively involved in Innovatiehub Oost-Groningen.

USEFUL LINKS

<https://springtdesign.com>

INNOVATION JOURNEY

The Seizoenarbeiders Foundation, an innovative employment agency, connects enthusiastic, hard-working individuals with farm opportunities. Born out of necessity in the spring of 2020, when the pandemic left many festival workers unemployed, the initiative matched them with Dutch farmers facing a labour shortage, creating a productive environment for both parties.



Figure 1. Workers from the Seizoenarbeiders harvesting pumpkins at the Zonnegood farm in Flevoland.

More than 400 applications have been received for 2020 alone. Seizoenarbeiders has developed a unique recruitment system for sending the right workers, to which Ellen de Lange has made a major contribution, using her expertise in anthropological research on Dutch farms. Miriam van Bree has been instrumental in scaling up the initiative, strategizing her role as a promoter of sustainable transition in agricultural education and policy advisor.

INNOVATION IMPACT

This successful model is spreading from Flevoland to the rest of the country. Whether it is working in the fields, making new friends or learning first-hand about

sustainable agriculture, Seizoenarbeiders brings people from the city closer to the land and the origins of their food.

Unlike traditional temp agencies, Seizoenarbeiders focuses on providing a holistic and engaging experience for both workers and farmers. Workers, especially those looking for a break from the conventional workplace and more physical work, are offered farm work for 1-2 weeks, camping on-site.



Figure 2. Workers eating together on the farm with logistics from Seizoenarbeiders.

As well as helping to meet the demand for seasonal labour, Seizoenarbeiders enriches the lives of its participants, leading them to reconsider their lifestyle and career choices. They are often motivated by their practical experience to look for different ways to contribute to sustainable food production.

USEFUL LINKS

<https://deseizoenarbeiders.nl/over-ons/>
www.instagram.com/deseizoenarbeiders
www.youtube.com/@deseizoenarbeiders501

THE INNOVATION JOURNEY

Since 2017, landscape architects Inge Vleemingh and Heimen Vos have run De Goed Gevulde Boerderij, a 17-hectare sustainable pig farm in Halle, Gelderland.

Inge's 2014 graduation project 'Go nuts!' demonstrated her ability to synergize urban and rural perspectives. Partnering with Heimen from a traditional pig-farming family, she took her ideas further by creating a closed-loop system to minimise waste in multifunctional farming. The farm is energy-neutral with solar power and heat pumps and offers tours and direct meat sales both on-site and online. Their high-quality pork attracts royal customers.



Figure 1. Presentation of meat products in a mobile stand

Inge handles sales and public relations, increasing turnover significantly, with direct sales achieving ten times the price a farmer gets for regular meat. She also shares their story as a speaker and collaborator with various networks.

THE INNOVATION IMPACT

De Goed Gevulde Boerderij is a beacon of sustainable rural development,

boosting economic viability while minimizing environmental impact.



Figure 2. Inge Vleemingh at the farm (Photo by Jan Ruland van den Brink)

The key innovations include: (1) Closed-loop system: Crossbred wild boar and Duroc pigs are fed local food waste, and manure fertilizes crops, reducing environmental impact. (2) Direct sales: Offline and increasing online sales through SEO boost revenue, expanding a niche market. (3) Resilient land use: Raising bees, chickens, and various crops alongside pigs diversifies income and reduce risks. (4) Community engagement: Workshops and farm visits spread inspiration.

The farm's robust business model ensures economic success and environmental sustainability, proving multifunctional livestock farming can lead to a thriving rural landscape.

USEFUL LINKS

www.degoededgevulde.nl

<https://ingeveleemingh.wordpress.com/go-nuts>

www.leaderachterhoek.nl/projecten/de-goed-gevulde-spaarvarkens

THE INNOVATION JOURNEY

The Reigerhof in Heerhugowaard (North Holland) has been in the Beers family and is a preserved municipal monument. It's the home for Joke Beers-Siep, Hanneke van der Veeke, and Sandra de Jong-Beers. In 2004 the dairy farm was converted into an art farm with a sculpture garden, 17 studios, and an exhibition hall and creating an inspiring environment for artists and enthusiasts.



Figure 1. A bird-eye-view of the Artfarm with an outdoor sculpture garden

The transition illustrates the power of passion for art and community. Joke Beers-Siep, a lifelong art lover and wife of Piet Beers, a third-generation dairy farmer, has been the driving force behind this transformation. Without external subsidies, they renovated the old barns using the proceeds from the sale of their surrounding land.

The Artfarm rents ateliers at affordable rates to painters, sculptors, photographers, and graphic designers. It also hosts art fairs, exhibitions, festivals, and workshops. Emphasizing the healing combination of art and well-being, workshops for all ages and abilities

encourage reflection on memories, emotions, and experiences, helping participants confront and embrace life challenges.



Figure 2. Creative workshops (left) and excursions (right)

THE INNOVATION IMPACT

Upon opening, the Artfarm's ateliers were quickly rented out, demonstrating the high demand for artist spaces in rural areas. The main innovations include:

- 1) Transforming a dairy farm into an arts center
- 2) Promoting holistic wellbeing by providing a space for mental relaxation and creativity, utilising the tranquil atmosphere of the farm
- 3) Offering opportunities for people of all ages and abilities to enjoy the arts

While Joke and Piet rent the atelier, their two daughters serve on the foundation's board and organize cultural events. They ensure all events are low-threshold and welcoming to locals, including vulnerable populations.

USEFUL LINKS

www.artfarm.nl

www.instagram.com/artfarmkw



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