

Women's Potential Contributions to Sustainability Innovations

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¹ PU= Public, SEN= Sensitive.



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ACRONYMS & ABBREVIATIONS

EC	European Commission
EU	European Union
WP	Work Package
Project Par	tners
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 POURLE 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	HÖGSKOLAN FOR LÄRANDE OCH KOMMUNIKATION I JÖNKÖPING - HLK SCHOOL OF EDUCATION AND COMMUNICATION



1. INTRODUCTION

FLIARA Work Package 2 is a journey to the future and it applies a futures research approach. The aim of futures research is to make us aware of alternative futures. Without envisioning possible futures we are stuck in the past and blinded by the complexity of the present. Our choices may not achieve our desired future outcomes if we did not know about their existence in the first place. Some of our choices in the present might end up as undesired outcomes if they were not envisioned before the action. As Richard Slaughter elegantly puts it (1993, 290):

"... to the extent that we become aware of different future alternatives, we gain access to new choices in the present. If we become aware of something we want to avoid we can take appropriate action. Similarly, if we can imagine something we want to create, we can set in motion the means to create it ... Future alternatives imply present choices because it takes time to exert our will and mobilize the resources involved to achieve something or to avoid it."

If a specific problem or desire is to be addressed in the future, a vision – a specific design of the future – is a good starting point. As soon as there is a vision of the common future, ideas, insights and incentives may be generated by diverse 'owners' of the vision to make it come true. This is one way to organise futures-oriented concerted action.

The overall objective of FLIARA foresight activities is to become aware of the diversity of alternative sustainable futures related to farms and rural areas and — with this understanding — be able to define innovations needed to make them come true. The core goal at the end of this process was to understand how women can contribute to the sustainability innovations.

1.1 OBJECTIVE

The key objective of WP2 in FLIARA project is to envision the role of women in the innovations demanded for sustainable farm and rural futures. This is supported by three specific objectives:

- To envision sustainable farm and rural <u>futures</u> in nine European contexts (Task 2.1)
- To identify sustainability <u>innovations</u> necessary to realise these visions (Task 2.2)
- To identify possibilities to be promoted and obstacles to be removed to allow women's <u>contribution</u> to these sustainability innovations (Task 2.3).

The overall aim of WP2 is to ascertain the ways in which women could contribute to the various kinds of innovations that promote sustainable farm and rural futures. The objective is very broad and needs to be specified in many ways. First, the potential contributions are studied in <u>nine regional contexts</u> to observe the diversity of socioeconomic, cultural and bio-physical realities in Europe. Each potential innovation and contribution takes place, and is novel, in a certain context. Second, the sustainability innovations serve 'better', <u>more sustainable futures</u>. For this reason, the futures that they



serve need to be specified first, observing the context. For example, the portfolios of sustainable farm and rural futures and the <u>innovations to make them come true</u> are expectedly different in the Mediterranean and in Scandinavia. In the final stage, <u>women's contribution</u> to the defined sustainability innovations will be explored with a positive mindset: how their role could be important and possible more remarkable than currently.

Putting these aspects together results in a research process that is analogous to a distillation process: starting with diverse ingredients and coming up with a solid product. Once the sustainable futures have been designed, it becomes possible to identify innovations that make them come true and, finally, to assess how women could contribute to these innovations. Each specific objective translates into a task in the research process (Figure 1).

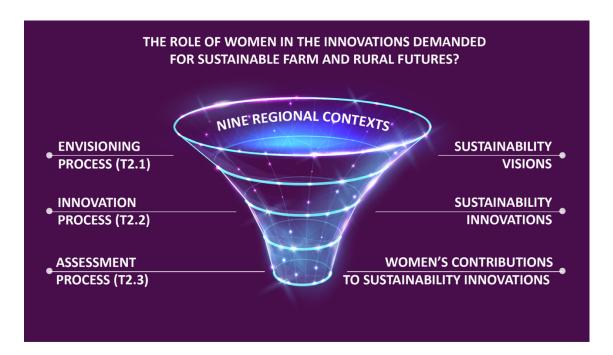


Figure 1. Specific objectives and tasks of WP2.

1.2 RECAP OF THE PREVIOUS FINDINGS

A recent report (Deliverable 2.2: Future Vision Manifestations) presents 322 rural sustainability problems (Figure 2) and 109 visions (Figure 3) that would remove these problems if they became true. The most common problems that were identified by local stakeholders included lack of infrastructure, lack of social capital, inefficient policies, selective population decline and lack of economic diversification.



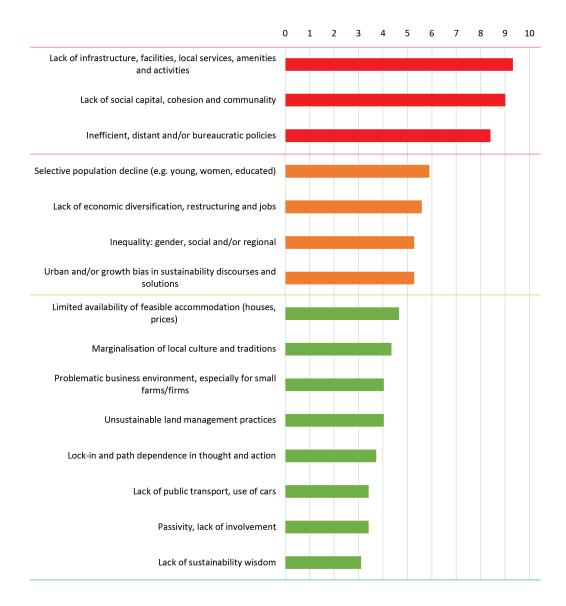


Figure 2. Top-15 types of sustainability problems to be addressed; share in all problems, %. Source: Deliverable 2.2.

The visions that were crafted to remove these problems hosted 762 elements including e.g. environmentally friendly management practices, adequate infrastructure, collaborative networks, novel funding models and rich social fabric for interaction (Figure 2).



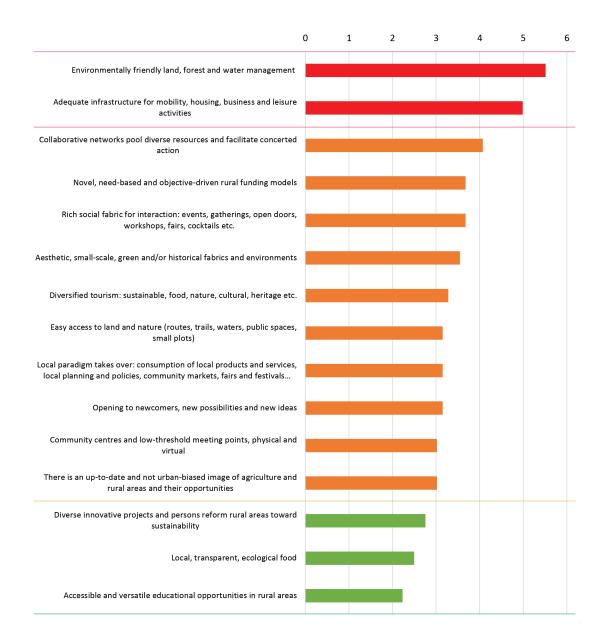


Figure 3. Top-15 types of vision elements that would remove rural sustainability problems, share in all elements, %. Source: Deliverable 2.2.

Innovations that could realise the visions were linked to several broad domains and more specific topics (Figure 4). As it seemed, many types of innovations were needed: economic/technological (30%), social (28%), political (26%) and environmental (16%) – in quite even shares. Most common domain of these innovations were related to novel practices, models or contents in local development (20%), agriculture and food (12%), public policy (9%), business (7%) and culture (7%). Regarding the more specific topics of innovations, the most frequently mentioned ones were new ways to organise local development (11% of the innovations), adoption of sustainable practices and lifestyles (9%), novel organisation of communality (8%), sustainable farming models (7%), new ways to involve people (7%) as well as novel products and services (7%).



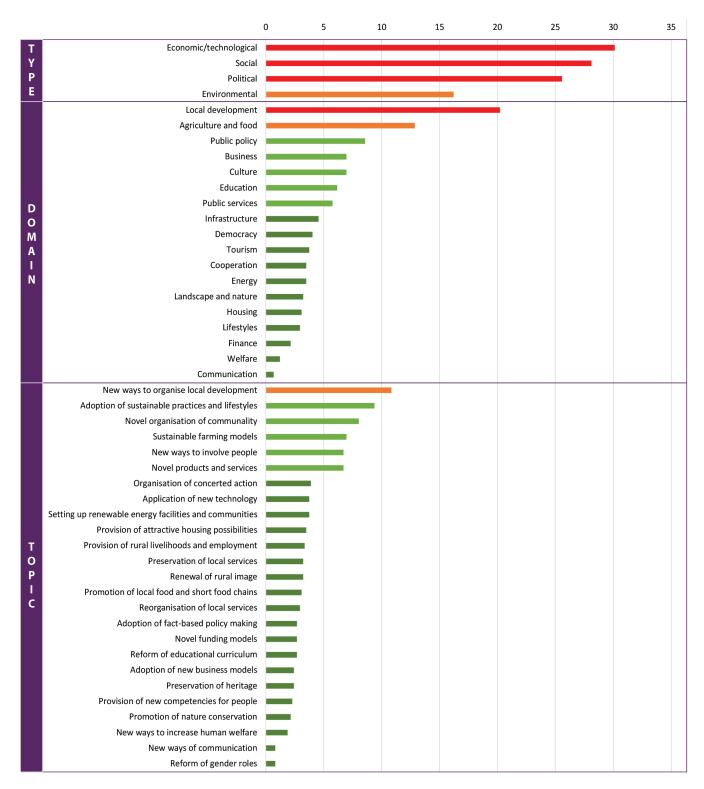


Figure 4. Types, domains and topics of the sustainability innovations, %. Source: Deliverable 2.3.



2. METHODOLOGY

As the <u>regional</u> and <u>national</u> context is crucial both for the prevalence of various sustainability problems as well as for the measures to address them, nine regional contexts have been selected to present the diversity of social, economic, cultural and bio-physical diversity (Figure 5). The sustainability problems as well as the visions removing them have been crafted for these regions. Logically, also the innovations making the visions come true were crafted for these same regions.



Figure 5. Regional and national contexts for the sustainability visions.

Further on, to observe the even more specific rural contexts, three types of <u>rural</u> realities were taken into account through a typology presented in Table 1. Figures 6–14 summarise the main characteristics of each region.



Table 1. Matrix with four broad regional contexts, nine national contexts and three dimensions of the rural contexts.

Regional context	National context	Rural context
Atlantic	Germany	Rural village
Atlantic	Ireland	Remote rural area
Atlantic	The Netherlands	Rural area close to city
Central/Eastern	Czech Republic	Rural village
Central/Eastern	Slovenia	Rural area close to city
Nordic/Baltic	Finland	Remote rural area
Nordic/Baltic	Sweden	Rural area close to city
Mediterranean	Italy	Rural village
Mediterranean	Spain	Remote rural area

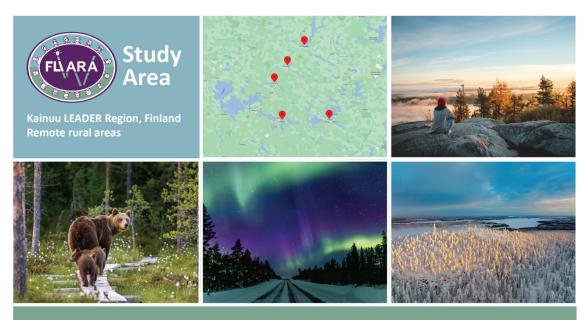


The area consists of the town of Kyjov and 27 rural villages. The area is traditionally rich with intensive agriculture, wine and folklore, but it shows unfavorable characteristics of depopulation and unemployment. The territory is situated between the Lower Morava Valley and the low highlands of the Ždánický les and Chřiby. Most of the territory is covered by intensively cultivated arable land. The population density is 137 inhabitants/km². About 10,800 inhabitants live in Kyjov; the remaining population live in villages. Combined population in the area is slightly over 32,000. Unemployment is around 5%. The age index is 1.54.

The largest enterprises are the glass factory Moravia Glass and Šroubárna Kyjov (engineering), primary sector being 4,3% of the economic structure. Secondary sector covers 41,3%. Kyjov Hospital is the largest employer. The potential of tourism is underutilized. The frequency of public transport is sufficient. In the smallest municipalities, some technical and social infrastructure facilities are missing. The territory is part of the LAG Kyjovské Slovácko In Motion. The inter-municipal collaboration is based on four voluntary associations of municipalities.

Figure 6. Characteristics of Kyjov area, Czech Republic.



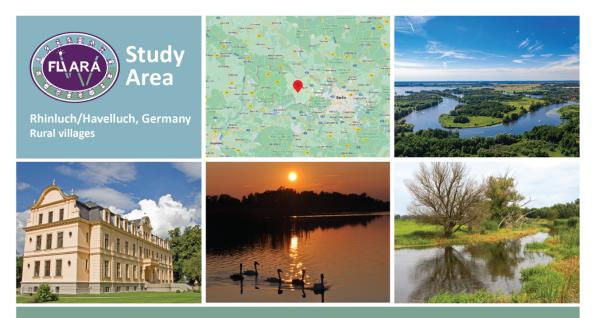


The area is the local LEADER group's (Elävä Kainuu or LAG Living) area of operation. This covers 15,000 km² of Kainuu province consisting of the municipalities Hyrynsalmi, Kuhmo, Ristijärvi, Sotkamo and Suomussalmi. Sotkamo has the largest population with a little over 10,000 inhabitants. The population has been slowly decreasing for a long time. Population decline is partly fuelled by the limited local educational opportunities as young people have to leave for bigger cities with better study options. The share of elderly people is high in many rural areas. Alltogether, the area has about 28,000 inhabitants.

Over 80% of Kainuu is comprised of forest land and the average population density is 2 inhabitants/km². Rich and extensive Nature nhas been utilized in the region with nature parks, skiing resorts, cabin culture and a variety of activities, such as fishing, mountain biking and excursions. Kainuu has a rich culture and a history that dates back to the stone age.

Figure 7. Characteristics of Kainuu LEADER Region, Finland.





Havelland covers 391 km² and has a population of a little over 20,000. This group of municipalities differs from administrative county borders. The case study area overs villages of the municipalities 'Schönwalde-Glien', 'Amt Friesack' and 'Kremmen'.

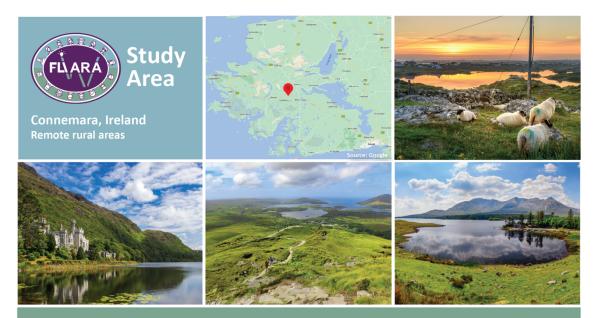
The area was selected because of the controversial topic of the ground water level management that is expected to affect the area in the next decades. High water levels in moors contribute to reducing the total of climate gas emissions. In this respect, the Havel valley is very interesting for model calculations of climate gas emission. The area's geology and associated hydrology was caused by glacial drift in the last ice age, which left gravel/sandy hills at the southern border line of the glacier's extension (end moraine). As a result, the river Havel drains from North to South (which is unusual for the northern German plain), before it turns westwards towards the Elbe.

The Havel area is a wide river valley plain characterised by extensive (drained) lowland moors with sandy patches emerging out of the wet and moor land. These are called 'sand lentils' (Sandlinsen) or 'little countries' (Ländchen). Settlements (including horticulture) and forests are located on the 'sand lentils'. The moor areas, which have been drained since the 19th century are mainly used as grassland for dairy and beef cattle.

Economic activities mainly refer to the proximity to the Berlin metropolitan area with employment mainly in the tertiary sector. Some processing businesses are present in the area but no large corporation. Most people work in the service sector, either in the area, or they commute to Berlin. All municipalities of this case study have experienced the transition from the socialist GDR system to the western German system (FRD) in the 1990s. This transition affected the population in many ways. In particular, the change in local administration, administrative areas and responsibilities still has a major impact on trust and engagement in local governance.

Figure 8. Characteristics of Rhinluch/Havelluch, Germany.





Connemara is a NUTS 3 region situated in the West coast of Ireland. It lies in the West of Connacht and is divided into North and South Connemara, divided by the mountains of the Twelve Bens. Connemara consists of fifteen small rural towns, many of which are located along the Wild Atlantic Way.

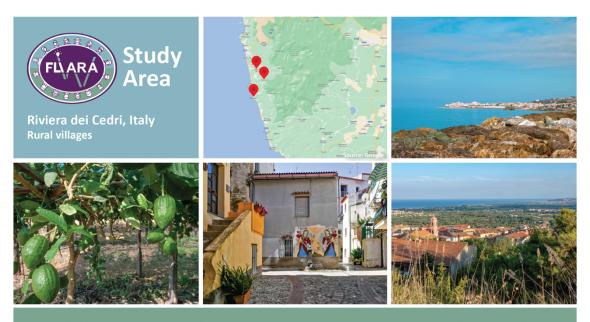
Connemara has around 32,000 inhabitants and a slowly increasing population. The region has a wide variety of natural and semi-natural habitats, including geological deposits, lake regions, boggy areas and coastlines and offshore islands. Connemara is considered a wild and remote region where small less populated areas depend on local fishing and tourism as the mainstay of its economy. Connemara is a Gaeltacht region, which means it is an Irish speaking region, although the English language is widely spoken.

The region is well known for its tourism attractions, built largely on the landscape but also its unique cultural heritage. Connemara is services by the Galway County council, but services and facilities vary depending on the level of tourism in the particular region. The region is accessible largely by car and a limited public transport, but no train service and a ferry industry that brings people to the islands off the coast of Connemara. The region is well known for its craft industry, which is largely sustained by local women.

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Figure 9. Characteristics of Connemara Region, Ireland.





Santa Maria del Cedro, Diamante and Grisolia are three contiguous villages on the north Tyrrhenian coast of the province of Cosenza with a combined population of 12,000. Their territory extends from the sea to the mountains.

Grisolia is one of the municipalities of the Pollino National Park. The nearest railway station with national connections is in Scalea (about 12 km away); the connection with the autoroute is about 50 km away. The nearest airport is about 100 km away. The particular microclimate allows the cultivation of the citron of "Santa Maria del Cedro" which is used as Etrog by the Jews during their Feast of Tabernacles. At the beginning of 2023, the citron of Santa Maria del Cedro obtained the European PDO recognition. The area is characterized by summer tourism mainly linked to the sea resource and the presence of second homes.

Figure 10. Characteristics of rural villages of Riviera dei Cedri, Italy.



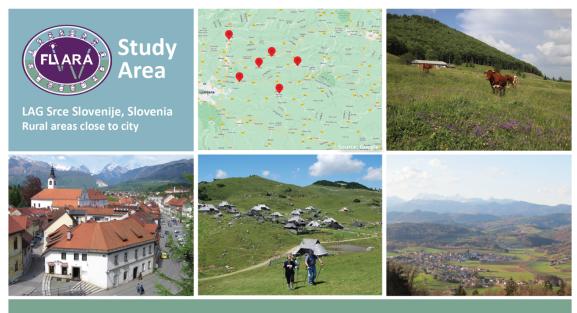


The Alblasserwaard is an area close to the city of Dordrecht in the province of South Holland. It is both rural and urban with a total population of almost 167,000 residents. This polder area is surrounded by the rivers Lek, Beneden Merwede, Noord. The western part of the polder is urbanised (Alblasserdam, Sliedrecht, Papendrecht, Hardinxveld- Giessendam and Gorinchem). This urbanised zone is situated along the Noord and is dominated by the maritime industry and other harbour-related industries. The rest of the Alblasserwaard, Molenlanden, is mainly used for farming. Combined this land area is 257 km². The polder is closely connected to the Vijfheerenlanden (province Utrecht), especially in agricultural studies.

Almost 70% of the Alblasserwaard-Vijfheerenlanden area is used for farming. The rural landscape contains 696 agriculture and horticulture companies of which 65% is in dairy farming, 15% horse breeding, 10% in fruits, 6% intensive husbandry and 3% intensive agriculture. The population in the urbanised areas is more or less stable and new houses need to be built to facilitate young people to remain in this area, a problem for many more areas in the Netherlands. The population in Molenlanden is increasing. The most western part of the Alblasserwaard is the UNESCO World Heritage site Kinderdijk is a tourist attraction, known for its water management and large number of windmills.

Figure 11. Characteristics of Alblasserwaard, The Netherlands.



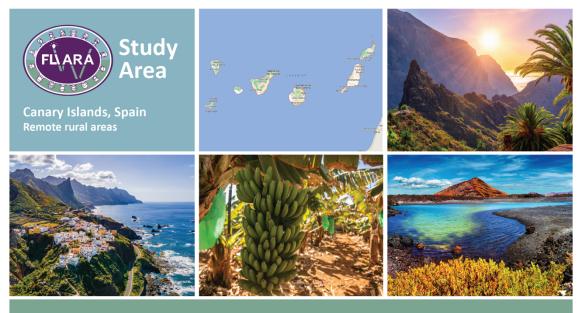


Local Action Group (LAG) "Srce Slovenije/Heart of Slovenia" is situated in the central part of Slovenia. The area represents a relatively homogeneous spatial unit, territorially defined by six municipalities: Dol pri Ljubljani, Kamnik, Litija, Lukovica, Moravče and Šmartno pri Litiji. It covers 751,5 km2 and it is relatively densely populated area, with approx. 69,900 inhabitants and 74.1 inhabitants /km², in the vicinity of the capital, City of Ljubljana.

The biggest town in the area is Kamnik with 13.768 inhabitants. Economic development and demographic trends are characterised by the vicinity of the capital city: increasing population, younger population, favouring economic situation, pressures on a gricultural land (new constructions). The area and people face some common challenges regarding rural area close to the city.

Figure 12. Characteristics of LAG Srce Slovenije, Slovenia.





The Canary Islands is a Spanish archipelago located in the Atlantic Ocean close to the northwestern coast of Africa and it is one of the EU's outermost regions. Politically, the archipelago is one of the 17 autonomous communities of Spain, composed of 8 islands that are divided into two provinces. These islands have a land area of 7,400 km² and over 2.26 million residents.

The islands are of volcanic origin, and they are part of the natural region of Macaronesia. Its climate is subtropical, although it varies locally depending on the altitude and the north or south slope. This climatic variability gives rise to a great biological diversity that, together with the landscape and geological richness, justifies the existence in the Canary Islands of four national parks. These natural attractions, the good climate and the beaches make the islands an important tourist destination (Las Palmas and Santa Cruz de Tenerife). Especially tourism makes the tertiary sector (75% of employment) prominent.

Figure 13. Characteristics of Canary Islands, Spain.



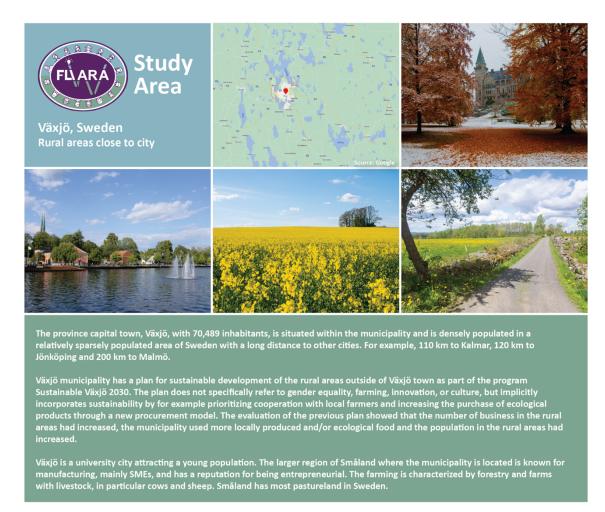


Figure 14. Characteristics of Växjö municipality, Sweden.

Within this spatially contextualised general framework, an overview of the research process to assess women's contributions to sustainability innovations is described in Figure 15. The process starts with <u>rating</u> of the innovations (Task 2.3) followed by assessment of <u>supporting or affording and constraining factors</u> and well as measures to promote women's contributions in workshops and interviews. The last step was an expert survey in which the findings were still developed for the part of the <u>measures</u>. Finally, the findings were documented, analysed and reported (deliverable). Each stage of the process will be briefly discussed next.

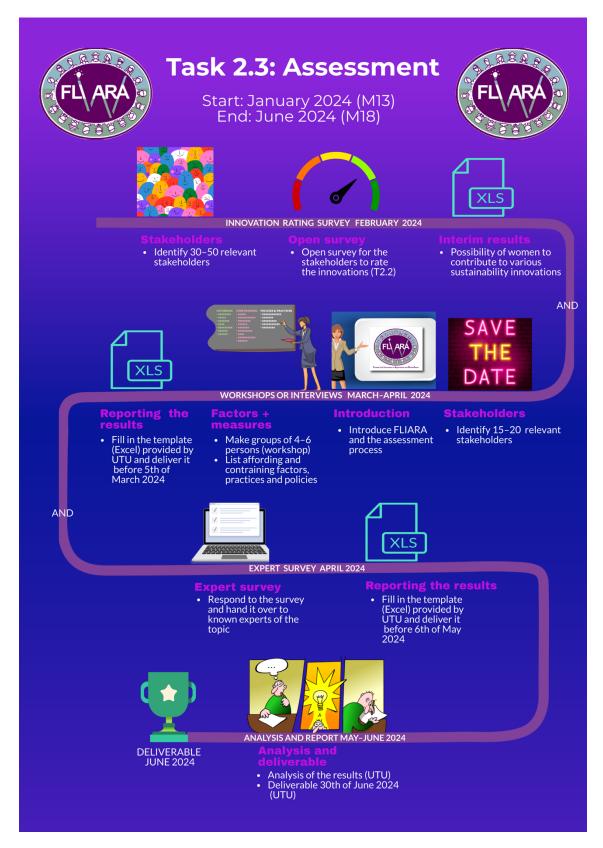


Figure 15. The research process in Task 2.3.



STAKEHOLDERS AND INTERVIEWS/WORKSHOPS

Different types of areas host different types of relevant stakeholders. If the region is, for example, a rural village, the <u>relevant stakeholders</u> having capacities to plan for the future of the village may include local farmers and entrepreneurs, local policy makers, active citizens as well as representatives of various NGOs, development or advisory organisations, research and educational organisations and LEADER groups, but also representatives of regional or national administration and policy making having intimate knowledge of the village. In another type of a region, another set of stakeholders could play a prominent role. Diversity of stakeholders results in diversity of views and experiences.

Altogether 180 stakeholders and expert participated in the <u>ranking</u> of the T2.2. innovations. The task of the respondents was to assess the possibility of women to contribute to the various sustainability innovations with a 5-point scale: -2 extensive obstacles for women to contribute, -1 some obstacles for women to contribute, 0 difficult to say or no gender specific aspects, +1 some possibilities for women to contribute, +2 extensive possibilities for women to contribute. The purpose of the exercise was to rank the innovations to be able to identify the most promising and the most challenging ones for further analysis. As the innovations were different in each country, the rating did not result in universal outcomes.

Once the most promising and most challenges sustainability innovations were identified, it became possible to assess them. This took place in workshops or interviews with the stakeholders and experts. Table 2 describes the group of 124 stakeholders who were interviewed or participated the workshops. As the table shows, there is a wide diversity of stakeholders which yield very interesting and fruitful results. There was a good set of stakeholders from all regions and the most important indicator of rural context – type of the area – showed adequate representation of rural areas close to city (24%), rural villages (40%) and remote rural areas (36%). About 70% of the stakeholders were women and 30% were men. Regarding the organisational background, 13 types or groups were represented and several actor groups that are important for rural development were well represented (e.g. farmers and entrepreneurs, educational organisations, LEADER groups, local policy makers and various NGOs). As such, the profile of the informants is well balanced.

The objective of the exercise was to identify <u>possibilities and obstacles</u> that women have in contributing to specific sustainability innovations identified in T2.2. Each group in the workshop or each interviewee assessed at least one 'promising' (high rank) and one 'less promising' (low rank) sustainability innovation. This setting was expected to produce a more realistic view of their possibility than choosing just cases that are less challenging to realise. For the positive and easy cases, the informants were asked to outline <u>reasons</u> for the existence of the (positive) possibilities and define <u>practices and policies</u> through which the promise could be realised. For the negative and difficult cases they had to explain why the difficulties exist and how the obstacles could be removed by some practices or policies. In all cases, the results were lists of bullet points. The target number



of innovations to be assessed was 10 for each region: 5 promising/easy ones and 5 difficult ones.

About 35% of the involved stakeholders participated in personal interviews and 65% participated in workshops. Further on, 54% participated online and 46 % were physically present. The first event was organised 30th of January 2024 and the last one 28th of March 2024.

Table 2. Profile of the stakeholders.

	Count	%
Country and region:		
Czech Republic: Kyjov area	15	12
Finland: Kainuu LEADER region	8	6
Germany: Rhinluch/Havelluch	10	8
Ireland: Connemara region	5	4
Italy: Rural villages of Riviera dei Cedri	25	20
The Netherlands: Alblasserwaard	2	2
Slovenia: LAG Scre Slovenije	11	9
Spain: Canary Islands	31	25
Sweden: Växjö municipality	17	14
Type of the area in which stakeholder role is exerci	sed:	
Rural area close to city	30	24
Rural village	50	40
Remote rural area	44	36
Gender:		
Female	87	70
Male	37	30
Organisation represented:		
Development or advisory organisation	8	6
Educational organisation	15	12
Farmer or entrepreneur	25	20
LEADER group	11	9
Local policy maker	8	6
NGO with civic focus	3	2
NGO with economic focus	0	0
NGO with environmental focus	2	2
Other organisation	4	3
Private person	32	26
Professional organisation	3	2
Regional or national administration	7	6
Research organisation	5	4
TOTAL	124	100

EXPERT SURVEY

As a final step, a survey was conducted to assess the importance of 18 measures in supporting women's contributions to the sustainability innovations. These measures were obtained from the analysis of the workshop data and – according to the analysis – through these measures the possibilities to contribute and the obstacles for the contribution could



be most extensively affected. For each measure the importance was assessed with a five-point Likert-type scale: not at all important, slightly important, moderately important, important, extremely important. In addition there was an open question on the actions: for example, for the empowerment and encouragement to innovate it was asked 'what kind of empowerment and encouragement is needed'.

The survey was primarily targeted to FLIARA consortium experts who had been working with the female innovators in Work Package 3. They were also asked to circulate the survey invitation to relevant experts in their networks. As a result, 63 experts responded (Table 3). Again, all types of rural areas were covered. About two thirds of the respondents were women and one third were men. About 41% of the informants represented research organisations which was the target group of experts. Also educational organisations had an extensive representation.

Table 3. Profile of the experts.

	Count	%
Country:		
Czech Republic	4	6
Finland	3	5
Germany	2	3
Ireland	3	5
Italy	8	13
The Netherlands	2	3
Slovenia	15	24
Spain	17	27
Sweden	9	14
Type of the area in which stakeholder role is exercis	sed:	
Rural area close to city	26	41
Rural village	14	22
Remote rural area	23	37
Gender:		
Female	41	65
Male	22	35
Organisation represented:		
Development or advisory organisation	1	2
Educational organisation	15	24
Farmer or entrepreneur	3	5
LEADER group	0	0
Local policy maker	2	3
NGO with civic focus	2	3
NGO with economic focus	0	0
NGO with environmental focus	2	3
Other organisation	2	3
Private person	2	3
Professional organisation	3	5
Regional or national administration	5	8
Research organisation	26	41
TOTAL	63	100



ANALYSIS

The data, consisting of open text answers, was stored in excel files and – in most cases – analysed by means of <u>conventional content analysis</u>, which is the only feasible way to compress a large number of open (text) responses (Hsieh and Shannon 2005). Conventional content analysis means that the categories will be iterated and decided from the data (no predefined categories). The coding was cross-checked, i.e. it was done by one researcher and checked by another, and the conflicting cases were discussed and decided together.

The total number of innovations that were assessed in the workshops and interviews was 100. For these, 152 possibilities to contribute by women and 137 obstacles were identified. Further on, 333 measures were listed for exploiting the possibilities and removing the obstacles. Participants of the expert survey gave 1,134 ratings for the 18 measures and identified 546 actions were specified to facilitate them.



3. RESULTS

3.1 POSSIBILITIES AND OBSTACLES FOR WOMEN TO INNOVATE

The starting point of the assessment was the set of 100 sustainability innovations. About half (53%) of these represented the most promising and easy cases for women to contribute and the other half (47%) included the most difficult cases where women had obstacles for their contribution. As much as 87% of the innovations were rural innovations and only 17% were farm innovations.

Based on the assessment, women seemed to have most extensive possibilities to contribute to environmental and social innovations (Figure 16). In these categories possibilities dominated obstacles quite clearly (about 3/4 vs. 1/4). In economic-technological innovations there were more obstacles than possibilities (58% vs. 42%). The most challenging type of innovation was political: here 3/4 of the identified topics featured obstacles and only 1/4 featured possibilities.

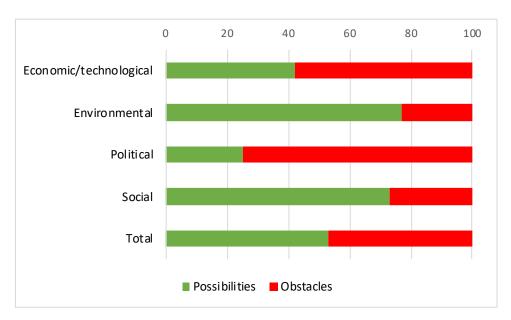


Figure 16. Possibilities and obstacles for women's contribution to sustainability innovations by type of the innovation, %.

Among the most common types of sustainability innovations that were assessed, education and local development were domains in which there were extensive possibilities for women's contributions (Table 3). The most extensive obstacles were found in public policy as well as agriculture and food. The domains of business, public services and energy also hosted extensive obstacles among the less common innovations.

Noteworthy is that there were striking differences also among the topics of the innovations (Table 3). Renewal of rural image, reform of educational curriculum as well as adoption of sustainable lifestyles and practices included a lot more possibilities than obstacles for women's innovations. At the other extreme, sustainable farming models,



new ways to organise local development and novel organisation of communality were dominated by obstacles instead of possibilities. Among the rarer types of innovations, the shares of possibilities and obstacles varied a lot.

The results – though not representative universals but rather insights – suggest that there are striking differences among various types of sustainability innovations in terms of their accessibility for women's participation and contribution. 'Soft' innovations not dealing with power and money are more accessible for women than those dealing with these aspects.



Table 3. Possibilities and obstacles for women's contribution to sustainability innovation by domain and topic of the innovation, %.

Domain of innovation	Possibilities	Obstacles	Total
Local development	67	33	100
Agriculture and food	47	53	100
Education	75	25	100
Public policy	40	60	100
Business	20	80	100
Energy	40	60	100
Public services	20	80	100
Culture	75	25	100
Infrastructure	50	50	100
Democracy	0	100	100
Lifestyles	100	0	100
Cooperation	0	100	100
Finance	0	100	100
Landscape and nature	100	0	100
Welfare	50	50	100
Housing	0	100	100
Tourism	100	0	100
Topic of innovation	Possibilities	Obstacles	Total
Adoption of sustainable practices and lifestyles	60	40	100
New ways to organise local development	33	67	100
Novel organisation of communality	44	56	100
Sustainable farming models	22	78	100
Reform of educational curriculum	75	25	100
Renewal of rural image	88	13	100
New ways to involve people	50	50	100
Adoption of new business models	60	40	100
Organisation of concerted action	50	50	100
Setting up renewable energy facilities and communities	25	75	100
Novel funding models	33	67	100
Novel products and services	100	0	100
Preservation of local services	67	33	100
Promotion of nature conservation	67	33	100
Provision of attractive housing possibilities	33	67	100
Adoption of fact-based policy making	50	50	100
Application of new technology	0	100	100
New ways to increase human welfare	50	50	100
Promotion of local food and short food chains	100	0	100
Provision of rural livelihoods and employment	0	100	100
New ways of communication	0	100	100
Provision of new competencies for people	100	0	100
Reorganisation of local services	100	0	100
Total, %	48	52	100
Total, n	48	52	100

NOTE: Higher share in each domain or topic highlighted.

Altogether, 152 specific possibilities and 137 obstacles were identified for women's contributions to these sustainability innovations. Possibilities and obstacles were abstracted into a smaller number of categories by means of content analysis (Figure 17). The most common reason why women have extensive possibilities was assessed to derive



from their extensive networks (16%) followed by the fact that women have a good educational background (14%). Women also appreciate soft and social values which makes some innovations more easily accessible for them. Because of their networks and care duties, women often also have good ground level knowledge of the local places and communities. Positive attitude for change and novelty was also quite a common reason for the existence of the possibilities. These five topics covered as much as 71% of the reasons why women have extensive possibilities which indicates that there are few important qualities that enhance women's possibilities to contribute but that there is no single supreme reason. Less common but still important reasons in some cases were good capability to organise things, valuation of good work life balance, good communication competences and an intimate relationship with children and young people. The profile of supporting factors also shows that many kinds of things play a role, especially pro-change and pro-communality values, attitudes, networks and competences.

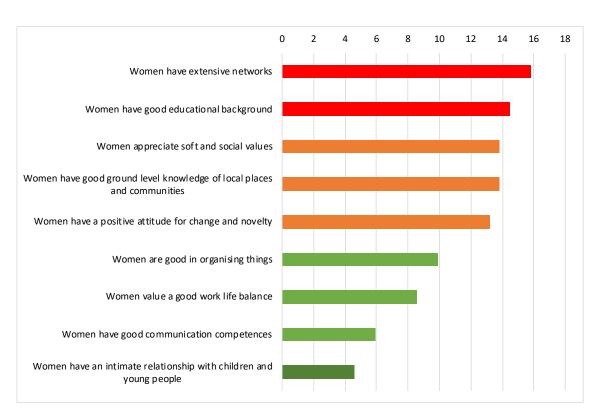


Figure 17. Why are there extensive possibilities for women to contribute to sustainability innovations, %.

The list of constraining factors is presented in Figure 18. The most common obstacle for women's contribution to sustainability innovations was the lack of demand for such innovations (12%). Supply without demand is a dead end. Also lack of equality among genders and social groups was quite a common obstacle (11%). Other quite common obstacles included lack of capital, networks, courage and risk taking, infrastructure as well as lack of knowledge and competence. These seven factors covered 65% of the obstacles. The rarest reasons were related to the lack of vision, leadership, motivation, time, cooperation and involvement. As such, the portfolio of reasons for the obstacles was more diverse than the portfolio of reasons for the possibilities. Just as with the case of the



possibilities, there was no single supreme reason. Reframing the results, constraining factors were related to 'internal' attitudes, networks and competences but also to 'external' factors (demand for novelty, equality, availability of capital, infrastructure, time resources).

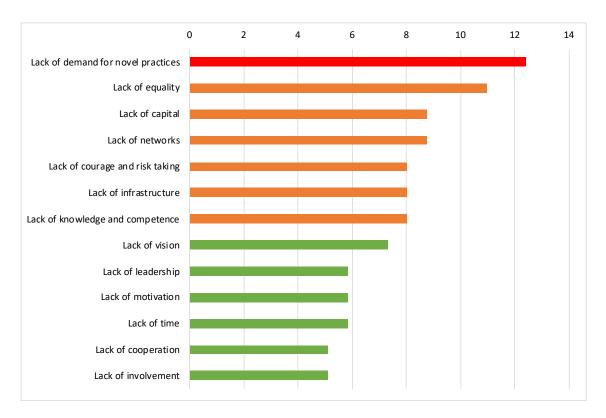


Figure 18. Why are there extensive obstacles for women to contribute to sustainability innovations, %.

The profile of supporting and constraining factors was partly different in different types of areas (Table 4). For example, rural areas close to city were profiled by the possibility based on women's extensive networks and remote rural areas by their appreciation of soft and social values. Rural villages were profiled both by supporting and constraining factors: women's good ground level knowledge and good communication competences were found especially useful in these types of areas which suffered from the lack of equality and capital more often than other types of areas. The differences between the types of areas were however not significant.



Table 4. Specific possibilities and obstacles for women's contribution to sustainability innovation by type of the area, %.

	Type of the region				
	Rural area		Remote rural		
Possibilities and obstacles	close to city	Rural village	area	Total	
Possibilities:					
Women have extensive networks	11	6	6	8	
Women have good educational background	9	6	8	8	
Women appreciate soft and social values	6	6	10	7	
Women have good ground level knowledge of local places and communitie	. 8	9	5	7	
Women have a positive attitude for change and novelty	9	4	5	7	
Women are good in organising things	3	6	8	5	
Women value a good work life balance	7	6	0	4	
Women have good communication competences	1	9	2	3	
Women have an intimate relationship with children and young people	1	0	6	2	
Obstacles:	_				
Lack of demand for novel practices	6	4	6	6	
Lack of equality	2	9	6	5	
Lack of capital	4	9	1	4	
Lack of networks	7	3	1	4	
Lack of courage and risk taking	5	3	3	4	
Lack of infrastructure	3	0	8	4	
Lack of knowledge and competence	3	6	3	4	
Lack of vision	4	3	3	3	
Lack of leadership	0	6	4	3	
Lack of motivation	2	3	4	3	
Lack of time	4	1	2	3	
Lack of cooperation	2	0	4	2	
Lack of involvement	2	3	2	2	
Total, %	100	100	100	100	
Total, n	127	69	93	289	

NOTE: Highest share in each type highlighted.

Based on the results, different types of sustainability innovations had different profiles of supporting and constraining reasons (Table 5). The most common reason for women's contribution to economic-technological innovations was a supporting reason: their good ground level knowledge of local places and communities (9% of all reasons). For the environmental innovations the most common reason was also an affording one: women's good educational background. For the political innovations the most common reason was a constraint: the lack of networks. For the social innovations there were several common supporting reasons: positive attitude for change and novelty, extensive networks and appreciation of soft and social values. These profiles partly explain why specific types of innovations were profiled with more possibilities and some others with more obstacles. In a broad sense, the <u>fit between the resources possessed by women differs among the types of innovations</u>.



Table 5. Specific possibilities and obstacles for women's contribution to sustainability innovation by type of the innovation, %.

	Type of innovation				
Possibilities and obstacles	Economic/ technological	Environmental	Political	Social	Total
Possibilities:					
Women have extensive networks	3	14	6	12	8
Women have good educational background	6	17	4	8	8
Women appreciate soft and social values	4	14	1	11	7
Women have good ground level knowledge of local places and communities	9	11	1	8	7
Women have a positive attitude for change and novelty	4	0	1	15	7
Women are good in organising things	3	9	4	6	5
Women value a good work life balance	7	3	3	4	4
Women have good communication competences	4	6	3	1	3
Women have an intimate relationship with children and young people	0	3	0	6	2
Obstacles:					
Lack of demand for novel practices	7	6	6	5	6
Lack of equality	8	3	6	3	5
Lack of capital	7	0	6	2	4
Lack of networks	2	0	10	3	4
Lack of courage and risk taking	4	0	6	3	4
Lack of infrastructure	6	0	4	3	4
Lack of knowledge and competence	6	6	6	0	4
Lack of vision	8	0	3	1	3
Lack of leadership	3	3	6	0	3
Lack of motivation	1	3	6	2	3
Lack of time	3	0	4	2	3
Lack of cooperation	2	0	7	0	2
Lack of involvement	1	3	4	2	2
Total, %	100	100	100	100	100
Total, n	89	35	68	97	289

NOTE: Highest share in each type highlighted.

<u>Different domains of sustainability innovations also had different profiles of supporting and constraining reasons</u> (Table 6). For example, the most common supporting or constraining reason for women's contribution to agriculture and food sustainability innovations was a constraint: lack of demand for novel practices. For the business innovations the most common constraint was lack of capital. For the innovations in local development there was a clear supporting reason: appreciation of soft and social values. In some domains there were only a few observations, but for the rest the results provide some hints around <u>which strengths could be utilised and promoted</u> while trying to increase women' contribution to specific kinds of sustainability innovations – and <u>which kinds of</u> weaknesses or obstacles should be removed.



Table 6. Specific possibilities and obstacles for women's contribution to sustainability innovation by domain of the innovation, %.

	Domain of innovation								
	Agriculture								
Possibilities and obstacles	and food	Business	Cooperation	Culture	Democracy	Education	Energy	Finance	Housing
Possibilities									
Women have extensive networks	6	0	0	13	0	14	9	0	0
Women have good educational background	6	0	0	7	0	28	0	0	0
Women appreciate soft and social values	0	0	0	13	0	10	0	0	0
Women have good ground level knowledge of local places and communities	6	8	0	13	0	3	0	0	0
Women have a positive attitude for change and novelty	9	0	0	0	0	10	9	0	0
Women are good in organising things	0	0	0	20	0	3	0	0	0
Women value a good work life balance	0	0	0	0	0	7	0	0	0
Women have good communication competences	3	0	0	0	0	0	18	0	0
Women have an intimate relationship with children and young people	0	0	0	7	0	10	0	0	0
Obstacles									
Lack of demand for novel practices	22	0	25	0	13	3	9	0	0
Lack of equality	13	8	50	0	25	7	18	0	0
Lack of capital	0	42	0	0	0	0	0	27	0
Lack of networks	3	17	0	13	0	0	0	0	0
Lack of courage and risk taking	6	8	25	0	0	0	0	18	0
Lack of infrastructure	0	0	0	0	0	0	0	0	40
Lack of knowledge and competence	3	8	0	0	0	0	9	18	0
Lack of vision	0	8	0	7	13	0	0	27	40
Lack of leadership	6	0	0	0	13	0	9	0	20
Lack of motivation	3	0	0	0	0	0	9	0	0
Lack of time	6	0	0	7	13	3	0	9	0
Lack of cooperation	3	0	0	0	25	0	0	0	0
Lack of involvement	3	0	0	0	0	0	9	0	0
Total, %	100	100	100	100	100	100	100	100	100
Total, n	32	12	4	15	8	29	11	11	5

NOTE: Highest share in each domain highlighted.

	Domain of innovation								
Possibilities and obstacles	Infra- structure	Landscape and nature	Lifestyles	Local development	Public policy	Public services	Tourism	Welfare	Total
Possibilities									
Women have extensive networks	12	0	18	9	12	0	0	25	8
Women have good educational background	6	20	6	9	4	5	0	0	8
Women appreciate soft and social values	6	20	6	14	8	5	0	0	7
Women have good ground level knowledge of local places and communities	12	40	12	7	4	10	33	0	7
Women have a positive attitude for change and novelty	12	20	18	7	8	0	0	0	7
Women are good in organising things	0	0	12	10	4	0	33	0	5
Women value a good work life balance	6	0	24	1	4	14	0	25	4
Women have good communication competences	0	0	6	4	4	0	33	0	3
Women have an intimate relationship with children and young people	0	0	0	3	0	0	0	25	2
Obstacles									
Lack of demand for novel practices	6	0	0	4	4	5	0	0	6
Lack of equality	0	0	0	0	0	5	0	25	5
Lack of capital	0	0	0	3	8	0	0	0	4
Lack of networks	0	0	0	6	12	0	0	0	4
Lack of courage and risk taking	0	0	0	3	0	14	0	0	4
Lack of infrastructure	12	0	0	6	8	5	0	0	4
Lack of knowledge and competence	12	0	0	0	8	10	0	0	4
Lack of vision	6	0	0	0	4	0	0	0	3
Lack of leadership	0	0	0	1	4	5	0	0	3
Lack of motivation	0	0	0	3	4	14	0	0	3
Lack of time	0	0	0	0	0	10	0	0	3
Lack of cooperation	6	0	0	4	0	0	0	0	2
Lack of involvement	6	0	0	6	0	0	0	0	2
Total, %	100	100	100	100	100	100	100	100	100
Total, n	17	5	17	70	25	21	3	4	289

NOTE: Highest share in each domain highlighted.

Further on, <u>different topics of sustainability innovations had different profiles of supporting and constraining reasons</u> (Table 7). Good educational background was the most important supporting factor for their contribution to the adoption of fact-based policy making, reform of educational curriculum and adoption of sustainable farming models, for example. Among the obstacles for women's contribution, the lack of demand



for novel practices was the main constraint for several innovations: adoption of new business models, preservation of local services, renewal of rural image and adoption of sustainable farming models. If a certain kind of sustainability innovation was aimed for, this analysis may shed some light on what to emphasise and what to tackle. Taking into account the small number of observations in some cases, there were no single superior causes behind the possibilities and obstacles but rather specific profiles of them.

Table 7. The most common specific possibilities and obstacles for women's contribution to sustainability innovation by topic of the innovation, %.

Topic of innovation (n)	Most common possibility	Most common obstacle
Adoption of fact-based policy making (7)	Women have good educational background 14%	Lack of networks 29%
Adoption of new business models (20)	Women have a positive attitude for change and novelty 15%	Lack of demand for novel practices 20%
Adoption of sustainable practices and lifestyles (22)	Women have extensive networks 14%	Lack of knowledge and competence 18%
Application of new technology (8)		Lack of knowledge and competence 25%
New ways of communication (1)		Lack of time 100%
New ways to increase human welfare (8)	Women value a good work life balance 38%	Lack of equality 13%
New ways to involve people (14)	Women appreciate soft and social values 21%	Lack of equality 21%
New ways to organise local development (29)	Women appreciate soft and social values 7%	Lack of networks 14%
Novel funding models (8)	Women have good communication competences 13%	Lack of capital 25%
Novel organisation of communality (25)	Women have an intimate relationship with children and young people 8%	Lack of courage and risk taking 12%
Novel products and services (13)	Women have good ground level knowledge of local places and communities 23%	
Organisation of concerted action (9)	Women are good in organising things 33%	Lack of involvement 11%
Preservation of local services (11)	Women value a good work life balance 27%	Lack of demand for novel practices 9%
Promotion of local food and short food chains (3)	Women have good ground level knowledge of local places and communities 67%	
Promotion of nature conservation (12)	Women appreciate soft and social values 25%	Lack of leadership 17%
Provision of attractive housing possibilities (18)	Women have extensive networks 11%	Lack of infrastructure 17%
Provision of new competencies for people (1)	Women have extensive networks 100%	
Provision of rural livelihoods and employment (3)		Lack of capital 67%
Reform of educational curriculum (21)	Women have good educational background 38%	Lack of equality 10%
Renewal of rural image (27)	Women have extensive networks 22%	Lack of demand for novel practices 4%
Reorganisation of local services (6)	Women have a positive attitude for change and novelty 33%	
Setting up renewable energy facilities and communities (10)	Women have good communication competences	Lack of equality 20%
Sustainable farming models (13)	Women have good educational background 15%	Lack of demand for novel practices 23%

3.2 MEASURES TO PROMOTE WOMEN'S CONTRIBUTION

STAKEHOLDER VIEWS

The stakeholders listed 333 measures that could be used to increase women's contributions to the selected sustainability innovations either by exploiting the possibilities or by removing the obstacles. By means of conventional content analysis these were abstracted into 18 categories (Figure 19).

The most common and thus promising measure was organisation of platforms for cocreation and co-operation (16%). These platforms are needed, for example, for asking community what they want, getting feedback, engaging people, coordinating events,



getting funding, exchanging experiences, establishing organisations, influencing politics, getting to know each other, organising local markets, getting support and advice and much more (see Annex 1).

Provision of information about alternatives, examples and good practices was also considered important (13%). These could be for example awareness, educational or advertising campaigns about sustainability topics and livelihood options in rural areas. Especially farming and living in rural areas need more positive visibility to emphasise the importance of local food production and sustainability practices. A lot of work is being done e.g. in various projects, but the results should more accessible and easily available for the others to take up.

Despite rather high level of general education, there were still needs that asked for more input (10% of the measures). On the one hand, there is a need for adoption of new methods and practices: workshops in schools, cooperative learning actions, storytelling initiatives, intergenerational learning, lifelong learning and 'alternative' learning methods. On the other hand, there is also a need for new contents or emphasis of specific contents: sustainability, getting rid of stereotypical thinking, entrepreneurship, project management and innovation, to name but a few.

The rank number four was taken by the adoption of equality of genders and social groups in all roles and activities (8%). Within this category, many diverse issues should be addressed. Combating gender stereotypes, doubts and norms that distinguish between genders in many fields of the society was considered important. Having women in leading positions was also important but asks for a change. In some instances, gender quotas might help.

Promotion of vision-based and goal-oriented actions and policies took the fifth place with a 7% share of the measures. It is a question of mindsets and attitudes that observes the value of visions as guiding stars and long-term commitment to common development goals in various policies that are based on holistic understanding of the reality and the topic at hand.

These five measures covered 54% of all proposed measures. The next most common or promising measures were provision of adequate local services and facilities including internet connection (6%), empowerment and encouragement to innovate (6%) as well as provision of incentives and support for entrepreneurship (5%). In addition, there was a long list of less common measures: adoption of place-based policies, provision of finance and subsidies, organisation of platforms to provide visibility for innovative persons and their insights, strengthening of support networks to allow involvement, genuine involvement of young people that have an impact, provision of communal spaces, promotion of flexible work life, promotion of innovations by means of projects, simplification of bureaucracy and regulation as well as adoption of welcoming policies and openness (Figure 19; Annex 1).

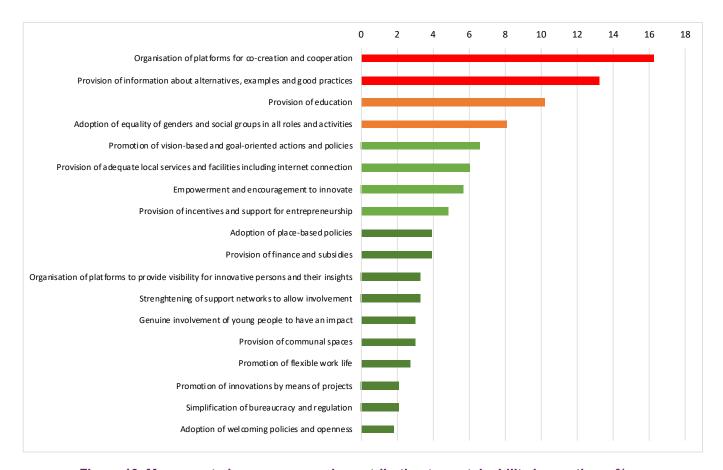


Figure 19. Measures to increase women's contribution to sustainability innovations, %.

The measures could be divided into four categories by taking a still higher level of abstraction. By then, the most common type of measures was 'networks' (35%), including organisation of platforms for cooperation, adoption of equality, strengthening support networks, involvement of young people, provision of communal spaces and adoption of welcoming policies. The second place was shared by 'knowledge' (23%) and 'prerequisites' (23%). 'Knowledge' included provision of information and provision of education. 'Prerequisites' included promotion of vision-based policies, provision of local services and facilities, adoption of place-based policies, promotion of flexible work life, provision of development projects and simplification of bureaucracy. 'Incentives' was on the fourth place (18%) and included empowerment and encouragement, provision of incentives for entrepreneurship, provision of finance and subsidies as well as organisation of visibility platforms for innovators. From this perspective, effective generic measures to promote women's contribution to sustainability innovations are related to networks, knowledge, prerequisites and incentives.

There were quite significant differences in the importance of the measures among different types of rural areas (Table 8). The most promising measure in rural areas close to city was provision of adequate local services and facilities including internet connection (21% of all proposed measures). To be able to innovate in these areas there should be a competitive operating environment compared to the adjacent cities. The gravity of the city may also have pulled services from the adjacent rural areas. Projects (14%) as well as finance and subsidies (11%) were also much more important in these



areas than in other types of areas. Rural villages were profiled by the importance of platforms for co-creation and cooperation (20%). This could hint that their rich local fabric is underutilised as a nest for female-led innovations. Remote rural areas were profiled by the importance of provision of alternatives, examples and good practices (16%). These areas are often dominated by primary sector employment and path dependent developments which is why diversification of thought and action is in demand. Summing up, effective measures that could increase women's contributions to various sustainability innovations were characterised by overcoming the urban challenge and appeal in rural areas close to city, by exploiting the rich social fabric in rural villages and by the need of new ideas and new alternatives in remote rural areas.

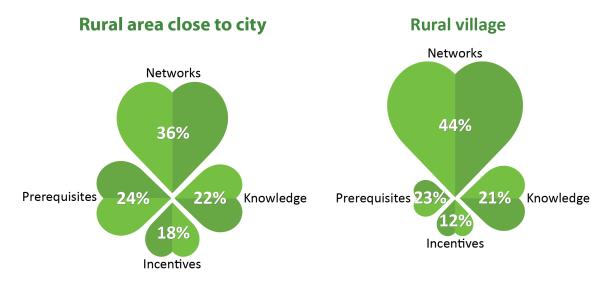
Table 8. Measures to increase women's contribution to sustainability innovations by type of the area, %.

	Type of the region			
	Rural area close to Remote rural			
Measure	city	Rural village	area	Total
Organisation of platforms for co-creation and cooperation	12	20	11	16
Provision of information about alternatives, examples and good practices	2	8	16	13
Provision of education	2	13	10	10
Adoption of equality of genders and social groups in all roles and activities	4	7	7	8
Promotion of vision-based and goal-oriented actions and policies	0	4	5	7
Provision of adequate local services and facilities including internet connection	21	7	7	6
Empowerment and encouragement to innovate	3	5	7	6
Provision of incentives and support for entrepreneurship	4	2	5	5
Adoption of place-based policies	2	4	5	4
Provision of finance and subsidies	11	3	5	4
Organisation of platforms to provide visibility for innovative persons and their insigh	t 3	1	5	3
Strenghtening of support networks to allow involvement	1	4	5	3
Genuine involvement of young people to have an impact	8	7	3	3
Provision of communal spaces	3	4	3	3
Promotion of flexible work life	7	0	3	3
Promotion of innovations by means of projects	14	3	1	2
Simplification of bureaucracy and regulation	1	4	1	2
Adoption of welcoming policies and openness	0	2	1	2
Total, %	100	100	100	100
Total, n	91	91	151	333

NOTE: Highest share in each group highlighted.

Different types of areas had different profiles also at the higher level of abstraction (Figure 20). Measures to promote women's contribution to sustainability innovations – and thus to resolving sustainability problems – were profiled by, especially, networking in rural villages as well as by knowledge and incentives in remote rural areas. Decent prerequisites were equally important in all types of areas. Notwithstanding these profiles, all kinds of measures were needed in all types of areas.





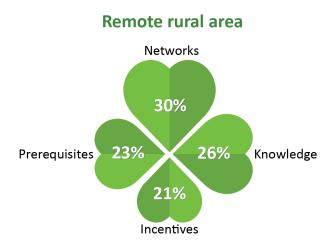


Figure 20. Measures to increase women's contribution to sustainability innovations by type of the area, %.

Effective measures differed also among the types of innovations. Regarding the four types of innovation, organisation of platforms for co-creation and cooperation was the most common and efficient measure to promote all four types of innovations in the assessments (Table 9). For economic-technological innovations also provision of information and provision of education were equally important, which was also the case for provision of information in social innovations. The main 'exceptions' in the general profile are the importance of incentives and support for entrepreneurship (10% vs. average share 5%) in the case of environmental innovations as well as equality (12% vs. 8%) and place-based policies (8% vs. 4%) in the case of political innovations. As a conclusion, if the most often proposed measures are employed in the promotion activities, they are not sensitive to the type of innovation but are helpful with all types of innovations.



Table 9. Measures to increase women's contribution to sustainability innovations by type of the innovation, %.

	Type of innovation				
	Economic/				
Measures	technological	Environmental	Political	Social	Total
Organisation of platforms for co-creation and cooperation	13	22	19	15	16
Provision of information about alternatives, examples and good practices Provision of education	13 13	15 5	10 10	15 9	13 10
Adoption of equality of genders and social groups in all roles and activities	7	7	12	7	8
Promotion of vision-based and goal-oriented actions and policies	8	10	6	5	7
Provision of adequate local services and facilities including internet connection	9	2	3	7	6
Empowerment and encouragement to innovate	5	5	4	8	6
Provision of incentives and support for entrepreneurship	7	10	4	2	5
Adoption of place-based policies	3	0	8	4	4
Provision of finance and subsidies	4	7	0	5	4
Organisation of platforms to provide visibility for innovative persons and their insights	4	2	5	2	3
Strenghtening of support networks to allow involvement	3	0	5	4	3
Genuine involvement of young people to have an impact	1	5	4	4	3
Provision of communal spaces	0	2	4	5	3
Promotion of flexible work life	5	0	3	2	3
Promotion of innovations by means of projects	2	2	1	3	2
Simplification of bureaucracy and regulation	2	5	3	1	2
Adoption of welcoming policies and openness	2	0	0	4	2
Total, %	100	100	100	100	100
Total, n	104	41	78	110	333

NOTE: Highest share in each type highlighted.

Different types of innovations asked for different measures also at the higher level of abstraction (Figure 21). Measures to promote women's contribution to <u>economictechnological sustainability innovations</u> were profiled by prerequisites and knowledge, <u>environmental innovations</u> by incentives, political innovations by networks and social <u>innovations also by networks</u> compared to the average of all types of innovations.



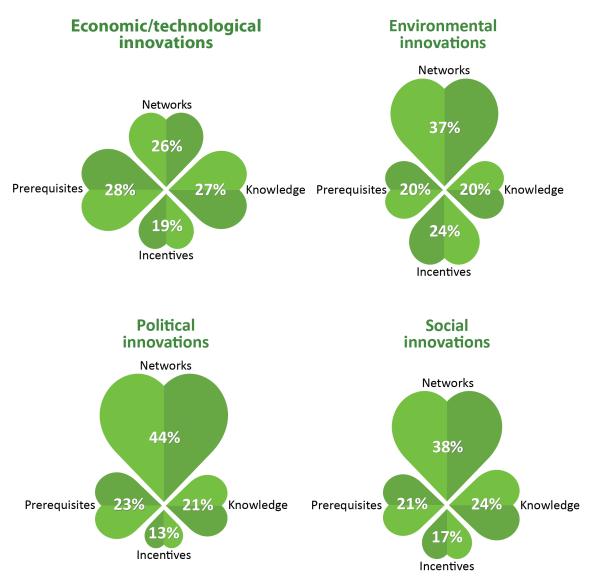


Figure 21. Measures to increase women's contribution to sustainability innovations by type of the innovation, %.

The most common of the proposed measures for each domain of innovation is presented in Table 10. If there were several measures with the same rank, the most logical was chosen. Provision of ideas and alternatives was considered the most effective measure for several domains: agriculture and food, business, finance, infrastructure, lifestyles and welfare. Organisation of platforms for co-creation and cooperation was also a common measure to promote several kinds of innovations related to democracy, energy and local development. The most effective measure to promote all the remaining types or domains of innovation had a uniquely most efficient measure. This means that beyond the couple of broadly effective measures (information and platforms) there are specific measures to promote specific kinds of innovations when it comes to women's contribution to them.



Table 10. The most common measures to increase women's contribution to sustainability innovations by domain of the innovation, %.

Domain of innovation (n)	Most common measure
Agriculture and food (25)	Provision of information about alternatives, examples and
Agriculture and food (35)	good practices 26%
Pusiness (21)	Provision of information about alternatives, examples and
Business (21)	good practices 19%
Cooperation (7)	Provision of finance and subsidies 29%
Culture (14)	Empowerment and encouragement to innovate 14%
Democracy (17)	Organisation of platforms for co-creation and cooperation 24%
Education (35)	Provision of education 23%
Energy (10)	Organisation of platforms for co-creation and cooperation 40%
Finance (13)	Provision of information about alternatives, examples and
rillance (13)	good practices 23%
Housing (3) Simplification of bureaucracy and regulation 33%	
Infrastructure (13)	Promotion of vision-based and goal-oriented actions and
initastructure (13)	policies 23%
Landscape and nature (6)	Promotion of innovations by means of projects 17%
Lifestyles (18)	Provision of adequate local services and facilities including
Lifestyles (10)	internet connection 28%
Local development (87)	Organisation of platforms for co-creation and cooperation 25%
Public policy (35)	Organisation of platforms for co-creation and cooperation 23%
Public services (12)	Promotion of flexible work life 25%
Tourism (4)	Provision of information about alternatives, examples and
Tourisiii (4)	good practices 50%
Welfare (3)	Provision of incentives and support for entrepreneurship 67%

Table 11 summarises the findings by topic of innovation. If there were several measures with the same rank, the most logical was chosen. Provision of information and organisation of platforms for cooperation were again widely effective measures across several topics of innovation. Provision of information about alternatives, examples and good practices was assessed to work out well for innovations concerning novel products and services, local food and short food chains, reform of educational curriculum, renewal of rural image and reorganisation of local services. For these, new external ideas are in demand. Organisation of platforms for co-creation and cooperation was the most promising measure to promote women's contribution to new ways to involve people, new ways to organise local development, novel organisation of communality, organisation of concerted action, provision of attractive housing possibilities as well as setting up renewable energy facilities and communities. Novel things need a ground to germinate and grow.

Besides the two broadly effective measures there were others with narrower impact. Provision of education was deemed to be effective for promoting adoption of new business models, application of new technology, new ways of communication and provision of new competences for people. Vision-based and goal-oriented policies and actions were effective in the adoption of sustainable practices and lifestyles as well as in the adoption of sustainable farming models. About 3/4 of the topics were covered by these four measures (information, cooperation platforms, education, vision-based action) as the



most effective means to increase women's contribution to the innovations. All other topics of innovations had one specific most effective measure beyond those mentioned above.

Table 11. The most common measures to increase women's contribution to sustainability innovations by topic of the innovation, %.

opic of innovation (n)	Most common measure
	Organisation of platforms to provide visibility for innovative persons
Adoption of fact-based policy making (9)	and their insights 22%
Adoption of new business models (20)	Provision of education 25%
Adoption of sustainable practices and lifestyles (28)	Promotion of vision-based and goal-oriented actions and policies 18%
Application of new technology (7)	Provision of education 29%
New ways of communication (1)	Provision of education 100%
New ways to increase human welfare (10)	Provision of adequate local services and facilities including internet connection 30%
New ways to involve people (29)	Organisation of platforms to provide visibility for innovative persons and their insights 17%
New ways to organise local development (34)	Organisation of platforms to provide visibility for innovative persons and their insights 24%
Novel funding models (13)	Provision of incentives and support for entrepreneurship 23%
	Organisation of platforms to provide visibility for innovative persons
Novel organisation of communality (22)	and their insights 32%
Novel products and services (12)	Provision of information about alternatives, examples and good practices 25%
Organisation of concerted action (13)	Organisation of platforms to provide visibility for innovative persons and their insights 38%
Preservation of local services (10)	Promotion of flexible work life 30%
Promotion of local food and short food chains (6)	Provision of information about alternatives, examples and good practices 17%
Promotion of nature conservation (14)	Adoption of equality of genders and social groups in all roles and activities 29%
Provision of attractive housing possibilities (11)	Organisation of platforms for co-creation and cooperation 36%
Provision of new competencies for people (2)	Provision of education 50%
Provision of rural livelihoods and employment (6)	Adoption of place-based policies 33%
Reform of educational curriculum (23)	Provision of information about alternatives, examples and good practices 17%
Renewal of rural image (36)	Provision of information about alternatives, examples and good practices 19%
Reorganisation of local services (4)	Provision of information about alternatives, examples and good
()	practices 50%
Setting up renewable energy facilities and communities (9)	Organisation of platforms for co-creation and cooperation 33%

The research process in Work Package 2 has maintained a link between the sustainability problems, visions, innovations and measures (Figure 1). It is therefore possible to show the incidence of the measures and the original sustainability problems. Figure 22 indicates the sustainability problems that each of the measures most effectively combats. For example, adoption of equality of genders and social groups in all roles and activities appeared to be most often connected to inefficient, distant and/or bureaucratic policies. Adoption of place-based policies could address lack of economic diversification, restructuring and jobs, adoption of welcoming policies and openness could alleviate the lack of social capital, cohesion and communality and so on. The whole set of measures to promote women's contribution to sustainability innovations had most extensive



interface with selective population decline and lack of economic diversification as well as lack of infrastructure and lack of social capital which are all very common rural problems. Observing the link between the measure and the sustainability problem may assist policy design and targeting of the actions.



Figure 22. Which sustainability problem does each measure combat most effectively.



EXPERT VIEWS

The results of the stakeholder engagements were still validated and calibrated by experts who had been working with rural gender and sustainability issues. Their first task in the survey was to rate the 18 measures that came up in the stakeholder workshops and interviews. The results are shown in Table 12.

Based on the assessment of 63 experts, the 'most important measure to add women's contributions to sustainability innovations' was simplification of bureaucracy that had an average score 4.16 (scale 1 = not at all important ... 5 = extremely important). This was followed by provision of finance and subsidies (4.13), provision of adequate local services and provision of education. It seems that the perspective of experts is heavily coloured by public funding as a mean to increase women-led farm and rural innovations.

The least important measures in the expert assessment were promotion of innovations by means of projects (3.49), adoption of welcoming policies and openness (3.60) and promotion of vision-based and goal-oriented actions and policies (3.63).

Table 12. Rating of the measures to add women's contributions to sustainability innovations by type of the area, scale 1–5.

Measure	Rating
Simplification of bureaucracy and regulation	4.16
Provision of finance and subsidies	4.13
Provision of adequate local services and facilities including internet connection	4.08
Provision of education	4.06
Provision of information about alternatives, examples and good practices	4.06
Genuine involvement of young people to have an impact	4.05
Empowerment and encouragement to innovate	4.03
Promotion of flexible work life	4.03
Provision of incentives and support for entrepreneurship	4.03
Adoption of equality of genders and social groups in all roles and activities	3.94
Provision of communal spaces	3.91
Strenghtening of support networks to allow involvement	3.89
Organisation of platforms for co-creation and cooperation	3.87
Adoption of place-based policies	3.81
Organisation of platforms to provide visibility for innovative persons and their insights	3.63
Promotion of vision-based and goal-oriented actions and policies	3.63
Adoption of welcoming policies and openess	3.60
Promotion of innovations by means of projects	3.49

There were some striking differences between the expert and stakeholder views (Figure 23). Both assessed the most efficient measures to promote women's contribution to rural sustainability innovation albeit with different method (workshop/interview vs. survey and open question vs. closed question). First, the experts assessed simplification of bureaucracy to be the most important and effective measure whereas the stakeholders placed it second to last among 18 measures. Provision of finance and subsidies, involvement of young people and promotion of flexible work life were also ranking much higher in the expert views than in the stakeholder views. At the other extreme, the experts



considered platforms for cooperation, vision-based policies and equality to be less important and effective than the stakeholders.

Taking a higher level of abstraction, the stakeholders considered networks as by far most important category of measures to promote women's contribution to sustainability innovations, followed by prerequisites, knowledge and incentives. The experts considered knowledge as the most important category of measures, followed by incentives, networks and prerequisites.

There could be many reasons for these differences. Two thirds of the experts came from research and educational organisations who probably had a rather broad knowledge and experience compared to the stakeholders, half of whom were entrepreneurs and private persons. The experts tend to have an intimate relationship with public development policy, administration and finance that represent familiar interventions in the rural world for them. Then there is a possibility of category error where the experts simply do not understand the rural realities. Finally, we are still playing with rather small numbers. A different sample of stakeholders or experts might bring about different results, at least to a certain extent. Anyhow, such significant differences suggest that the most effective means to promote female-led farm and rural innovations should be assessed from many different perspectives to end up with an effective set of measures.

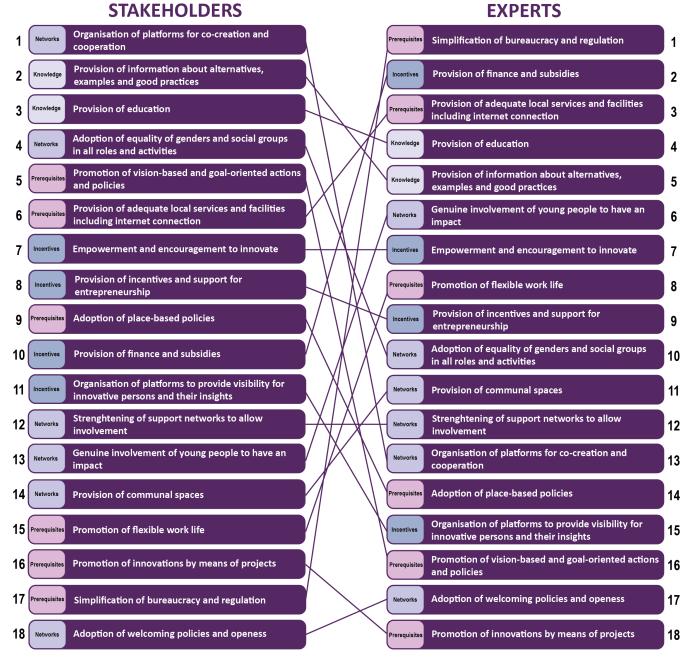


Figure 23. Assessment of the importance of 18 measures in promoting women's contribution to rural sustainability innovations.

The experts were asked to give examples for each of the 18 measures. Open answers (n=546) were categorised by means of conventional content analysis without predefined categories (Table 13). Some of the measures got clear focus in how to increase women's contribution to sustainability innovations. As much as 67% of the experts considered adequate basic local services to include <u>broadband access</u>, <u>shop</u>, <u>school and transport</u>. 54% of the respondents suggested that more equality is needed in the <u>leading positions</u>. 45% argued that <u>clearly focused vision-based and goal-oriented</u> policies are needed. 44% proposed that <u>access to diverse networks</u> should be the focus in the organisation of platforms for co-creation and cooperation. Further on, <u>examples of successful and</u>



<u>unsuccessful practices</u> (39%), <u>resources</u> to make involvement possible (38%) and <u>easily accessible funding</u> (38%) were popular specifications of the measures. The examples may inspire and guide design and specification of policies that encourage women's contributions to farm and rural sustainability innovations.

Table 13. Examples of measures to add women's contributions to sustainability innovations by type of the area, %.

		What kind of education is needed? (n=34)	%	Which kinds of platforms to provide visibility for	
		Accessible education	35	innovative persons and their insights are	
		Innovation-specific education	21	needed? (n=41)	%
		Entrepreneurial education	12	New networks and organisations to expose	
		Life-long education	12	entrepreneurial narratives	33
		Sustainability education	9	Better communication about the existence of platform	19
		Accessible education for rural residents	6	Digital platforms to expose entrepreneurial narratives	
In which roles and activities more equality of		Management education	6	Mainstream platforms to highlight entrepreneurial	
genders and social groups is needed? (n=41)	%	What kind of finance and which kinds of		role models	15
Leading positions	54	subsidies are needed? (n=29)	%		11
Traditional male sectors and jobs	20	Easily accessible funding	38	Platforms combining visibility and business	11
Family and care activities	10	Funding for community investments	17	Platforms highlighting co-operative innovations	7
Innovative activities	7			rather than individuals	
All roles and activities	5	Startup funding	14	What kind of flexibility in work life is needed?	
No actions needed	2	Application of social and environmental criteria in func		(n=30)	%
Small-scale businesses and initiatives	2	Financing of risky and novel projects	10	- Many kinds of possibilities for combining family life	33
What kind of place-based policies are needed?		Long-term funding instead of projects	7	and work life	33
(n=33)	%	Clearly targeted funding for innovations	3	Legitimacy of remote work	27
Tailored place-based policies	36			Freedoms in choosing working hours	23
Demographics-based policies	21	What kinds of incentives and what kind of support		Possibilities to participate work life through	
Empowering policies	15	is needed for entrepreneurship? (n=25)	%	- accessible child care	10
Support for small-scale local actions	9	Innovation-specific support	28		
Education policies	6	Support for startups	20	Possibilities to combine salaried work and	7
Participatory budgeting	6	Support for entrepreneurial education	16	entrepreneurship	
Reversal of centralisation trend	6	Funding with minimal bureaucracy	8	What kind of projects to promote innovations are	
		Promotion of entrepreneurship	8	needed? (n=25)	%
Which kinds of welcoming policies and what kind	0/	Support for social security	8	Projects with long-term impacts and follow-up measure	32
of openness is needed? (n=28)	%	Access to networks	4	Clearly focused projects	28
Access to networks	18	Access to networks	4	Co-operative projects	16
Openess for new practices	18			Capacity building projects	12
Possibilities for participation	18	Peer to peer support	4	Project-based communal events	4
Openess for new residents	14			Transformative projects	4
Social events to integrate people	14	What kind of information about alternatives,		Women-led projects	4
Access to housing and services	7	examples and good practices is needed? (n=23)	%	What kinds of vision-based and goal-oriented	
Support for remote work	7	Examples of successful and unsuccessful practices	39	actions and policies are needed? (n=22)	%
Less rural bureaucracy	4	Holistic information accessible via many channels	30	Clearly focused policies	45
What kind of empowerment and encouragement		Examples from other regions	17	Actions that support equality	14
is needed? (n=37)	%	Better search systems for existing databases and	_	Presentation of inspiring alternatives	14
Crediting women's innovations	19	publications	9	Place-based policies	9
Capacity building programmes	16	On-site access to diverse case examples	4	Support for small-scale innovations and businesses	9
More emphasis on empowerment	14	· · · · · · · · · · · · · · · · · · ·	_	Innovation competitions and prizes	5
Promotion of entrepreneurship	14	What kind of simplification of bureaucracy and	۰,		5
Support for non-economic objectives	14	regulation is needed? (n=30)	%	Reform of political thinking	5
Entrepreneurial education	8	Simple financing processes	33	What kinds of local services and facilities are	
Networking platforms	5	Better online systems	20	needed? (n=30)	%
Relief from care roles	5	Radical simplification	20	Adequate basic services (broadband, shop, school,	67
Demolishing discrimination	3	Short decision times	10	transport)	01
Encouragement to accept failures	3	Simplified rules for small actors	7	Business services	13
What kind of involvement of young people is		Flexibility in funding management	3	Cultural and recreation services	10
needed? (n=32)	%	New competences to manage complexity	3	Affordable housing options	3
Resources to make involvement possible	38	Simple procurement processes	3	Facilities for communality	3
·	25	Which kinds of support networks are needed to		Publicly funded services instead of self-	
Extensive involvement of young people Information about possibilities to influence	25	allow involvement? (n=23)	%	organised/paid ones	3
·		Business networks	30		
Genuine decision power to young people	10	Empowerment networks	17	Which kinds of communal spaces are needed?	0/
Which kinds of platforms for co-creation and		'		(n=31)	%
cooperation are needed? (n=32)	%	Peer networks	17	Communal business hubs	35
Access to diverse networks	44	Topic-based networks	17	Communal spaces in rural locations	19
Platforms for exchange of information and experience		National networks	9	Shared communal spaces for all social groups	19
Institutional, stable platforms for networking	22	Care relief networks	4	Shared communal spaces for all ages	16
Informal networks	9	Local networks	4	Spaces for informal gathering and networking	10
Total	100	Total	100	Total	100



4. SUMMARY

This report summarises the results of a third step in the research and innovation journey of Work Package 2: Foresight and trend analysis. During the first step (Task 2.1), a set of sustainability problems were identified after which positive visions were designed to address them. During this second step (Task 2.2), a set of sustainability innovations were identified to realise the visions and, at the same time, address the sustainability problems in nine different rural contexts. This final step aimed to identify measures to promote women's contribution to the sustainability innovations in farm and rural domains. The results are based on stakeholder workshops and interviews as well as on expert surveys in nine regions across Europe.

Some types of innovations seemed to be more possible for women than some others. In environmental and social innovations there were more possibilities than obstacles, whereas in economic-technological and especially political innovations the case was vice versa. At a more detailed level of analysis, renewal of rural image, reform of educational curriculum as well as adoption of sustainable lifestyles and practices included a lot more possibilities than obstacles for women's innovations. At the other extreme, sustainable farming models, new ways to organise local development and novel organisation of communality were dominated by obstacles instead of possibilities. In general, 'soft' innovations not dealing with power and money are more accessible for women than those dealing with these aspects.

The most common reason why women have extensive possibilities was assessed to derive from their extensive networks followed by the fact that women have a good educational background. The most common obstacles included lack of demand for novel practices, lack of equality, lack of capital and lack of networks. There were no striking differences in the affording and constraining factors among different types of areas.

The most efficient measures to increase women's contribution to sustainability innovations in the stakeholder view included organisation of platforms for co-creation and cooperation and provision of information about alternatives, examples and good practices. At a higher level of abstraction four types of measures were needed: networks (35%), knowledge (23%), prerequisites (23%) and incentives (18%). Each of the measures had a specific relationship with the sustainability problems to be removed through the innovations.

There were quite significant differences in the effective measures among different types of areas. Rural areas close to city were most in the need of adequate local services and facilities including internet connection. Rural villages needed most platforms for cocreation and cooperation whereas remote rural areas needed information about alternatives, examples and good practices.

The experts who had studied rural innovation and gender issues gave a very different rating of important measures compared to the stakeholder view. Experts considered simplification of bureaucracy and regulation as well as provision of finance and subsidies as the most important ways to promote women's contribution to sustainability



innovations, whereas e.g. organisation of cooperation platforms and adoption of vision-based policies and action had a very low rank in the expert view.

Taking a higher level of abstraction, the stakeholders considered networks as by far most important category of measures to promote women's contribution to sustainability innovations, followed by prerequisites, knowledge and incentives. The experts considered knowledge as the most important category of measures, followed by incentives, networks and prerequisites. Confusing differences may have many reasons but certainly suggest that measures to promote women's contribution to farm and rural sustainability innovations deserve more attention and analysis.



5. SUMMARY OF THE FORESIGHT ANALYSIS

The research process in the foresight analysis of Work Package 2 had many steps, employed many methods and involved many stakeholders and experts (Figure 24). Altogether 577 persons participated in the process, some of them several times, and 5,626 data elements were obtained for the analysis.

SUSTAINABILITY PROBLEMS AND VISIONS THAT REMOVE THE PROBLEMS 93 stakeholders in workshops and interviews 109 sustainability visions 322 sustainability problems and 762 vision elements SUSTAINABILITY INNOVATIONS THAT REALISE THE VISIONS 117 stakeholders in workshops and interviews 747 sustainability 2,627 causes for the innovations sustainability innovations MEASURES TO INCREASE WOMEN'S CONTRIBUTION TO SUSTAINABILITY INNOVATIONS 124 stakeholders in workshops and interviews 180 stakeholders in survey 152 possibilities and 137 333 measures to increase Ranking of 747 obstacles for women's women's contributions to innovations contributions to sustainability innovations sustainability innovations 63 experts in survey 546 measures to increase women's contributions to sustainability innovations

Figure 24. FLIARA foresight process.

The research process was explorative throughout. The objective was to achieve a rich understanding of the field where various types of rural areas with their diverse sustainability challenges set the scene. Following on from this, women with their contributions to sustainability innovations try to resolve challenges. The findings may not



be generalised beyond the scope and data limitations of this study, but they may serve some insights and food for thought for those who are engaged with rural, sustainability and gender issues in various fields, such as: politics, administration, education, business or community affairs. It is not so much if the problems or innovations or measures are 'correct' ones, but rather that they have causal relationships that can be utilised in the combat against sustainability problems.

One key area of interest was related to the needs and possibilities of different types of rural areas. Indeed, they had some universals and some peculiarities. Each type of area hosted a large diversity of sustainability problems that were addressed by many kinds of visions, innovations and measures. However, rural areas close to city were pressed by the vicinity of urban areas: urban bias dominated rural sustainability discourses and solutions and there was a lack of social capital as part of the people had jobs and hobbies in the city (Figure 25). These areas were considered losers in the policy field between strong urban and rural policies. Visions that removed the problems were characterised by counteracting urban pull and recovering infrastructure as well as rich social fabric.

Sustainability was the cutting edge of innovations that made the visions come true: sustainable practices, lifestyles and farming models were in high demand. The causes underlying the innovations were profiled by sustainability matter: sustainable and proenvironmental behaviours and lifestyles. Women living in these areas had extensive networks (possibly rural and urban), good education and pro-change attitude, but there was either no demand for the novel tenders or they had no courage to make reforms. The measures to promote women's contributions to the innovations were profiled by dual themes: provision of local services and facilities to rehabilitate what the urban pull had possibly taken away and establishment of platforms for co-creatin and cooperation to overcome the lack of demand for novel actions, to collect steam to overcome lack of courage and to combat the lack of social capital.



SUSTAINABILITY PROBLEMS AND VISIONS THAT REMOVE THE PROBLEMS

Sustainability problems Vision elements • Urban and/or growth bias in • Environmentally friendly land, sustainability discourses and forest and water management solutions 11% 7% • Inefficient, distant and/or • Adequate infrastructure for bureaucratic policies 10% mobility, housing, business and • Lack of social capital, cohesion leisure activities 5% • Rich social fabric for and communality 8% interaction: events, gatherings, open doors, workshops, fairs, cocktails 5% SUSTAINABILITY INNOVATIONS THAT REALISE THE VISIONS Causes underlying innovations Sustainability innovations Adoption of sustainable To add knowledge 8% practices and lifestyles 11% • To adopt sustainable and • Sustainable farming models pro-environmental behaviours 7% 10% New ways to organise local • To develop infrastructure for development 8% sustainable lifestyles 6%

MEASURES TO INCREASE WOMEN'S CONTRIBUTION TO SUSTAINABILITY INNOVATIONS

*	Possibilities and obstacles	Measures
	Women have extensive networks 11% Women have good educational background 9% Women have a positive attitude for change and novelty 9% Lack of networks 7% Lack of demand for novel practices 6% Lack of courage and risk taking 5%	 Provision of adequate local services and facilities including internet connection 21% Promotion of innovations by means of projects 14% Organisation of platforms for co-creation and cooperation 12%

Figure 25. Profile of the rural areas close to city, % of the elements in each topic.

Rural villages featured several storylines (Figure 26). First, they had environmental concerns (unsustainable land management practices) that were tackled by visions of environmentally friendly land, forest and water management practices as well as easy access to land and nature; the most common category of innovations was promotion of sustainable practices and lifestyles.

Second, rural villages were lacking social capital communality. Consequently, novel organisation of communality and new ways to involve people were among the most common innovations that aimed at adding communality. Most common possibilities for women to contribute to the innovations were favourable to intervene communality: good ground level knowledge, good communication competences and extensive networks. The



by far most common measure to promote women's innovations was related to the organisation of platforms for co-creation and cooperation.

The third thread in the future story of rural villages was related to economy and infrastructure. Lack of infrastructure, facilities, local services, amenities and activities was one of the most common problems. The visions suggested e.g. diversified tourism as a solution to remove these problems and improvement of the competitiveness of local businesses was one of the underlying causes of the innovations. Relatedly, lack of capital was one of the most important obstacles for women's interventions.

Fourth, adding knowledge was the most common underlying cause of the innovations and provision of education as well as provision of alternatives, examples and good practices were among the top-3 most effective measures.



SUSTAINABILITY PROBLEMS AND VISIONS THAT REMOVE THE PROBLEMS



MEASURES TO INCREASE WOMEN'S CONTRIBUTION TO SUSTAINABILITY INNOVATIONS

Possibilities and obstacles Measures	
Women have good ground level knowledge of local places and communities 9% Women have good communication competences 9% Women have extensive networks 6% Lack of equality 9% Lack of leadership 6% Organisation of plate co-creation and coordinate conversed and coordinate conversed and coordinate conversed and coordinate coordin	peration ion 13% ation about

Figure 26. Profile of the rural villages, % of the elements in each topic.

Remote rural areas also had some unique characteristics (Figure 27) that manifested an intertwined evolution of structure and agency. Societal progress has come along with unfavourable structures and developments in remote rural areas: there is a lack of infrastructure, facilities, local services, amenities and activities as well as selective population decline comprising a reinforcing downward spiral. Consequently, the visions included antidotes: adequate infrastructure and novel, need-based and objective-driven funding models to overcome the challenges. Local paradigm took over in the visions.

An extensive reform was proposed to take place through the innovations. Local development should be organised in new ways, communality should be organised in novel ways and local services should be reorganised. Both visions and causes underlying



the innovations emphasised the need of novel, need-based and effective funding models and adoption of new practices.

Women living in these areas have possibilities to contribute to this extensive reform. They have a good education, and they are good in organising things. The lack of infrastructure and lack of demand for novel practices may resist their intentions to facilitate necessary reforms to address the sustainability problems. The recipe that could exploit the possibilities and overcome the obstacles for women's contributions included information about alternatives, platforms for cooperation and education. These could provide the ultimate keys to stop and reverse the downward spiral.

SUSTAINABILITY PROBLEMS AND VISIONS THAT REMOVE THE PROBLEMS



MEASURES TO INCREASE WOMEN'S CONTRIBUTION TO SUSTAINABILITY INNOVATIONS

Possibilities and obstacles	Measures
 Women appreciate soft and social values 10% Women have good educational background 8% Women are good in organising things 8% Lack of infrastructure 8% Lack of demand for novel practices 6% Lack of equality 6% 	 Provision of information about alternatives, examples and good practices 16% Organisation of platforms for co-creation and cooperation 11% Provision of education 10%

Figure 27. Profile of the remote rural areas, % of the elements in each topic.



The gender issues played a varying role in various stages of the process. Inequality in a broad sense (gender, social or regional) ranked quite high among the sustainability problems (6/27). Gender equality comprised only 0.8% of the vision elements (rank 41/60), however. 'Reform of gender roles' had a share of 0.8% in the sustainability innovations and ranked last among 25 topics of innovation. Among the causes underlying the innovations it had a marginal share of 0.04%. The measures in turn were targeted for women. So it seems that based on the stakeholder view gender is not an issue as such in tackling farm and rural sustainability problems with innovations. Still there were certain types of innovations that were challenging for women to contribute to (political and economic-technological) and there was a long list of specific challenges including lack of equality, capital, networks, courage, knowledge, leadership and much more. So, there is work to be done but it should be targeted and specific rather than imprecise and general.

The flow of the process in teasing out measures to increase women's contributions to sustainability innovations provides one possible generic model for policy design in tackling rural sustainability problems. By connecting the problems, visions, innovations and measures it becomes possible to assess the capacity of the measures to remove the original problems that were the starting point of the process. These types of futures exercises could improve targeting of rural, sustainability and gender policies.



REFERENCES

Hsieh, H.-F. & Shannon, S.E. 2005. Three approaches to qualitative content analysis. Qualitative Health Research 15 (9), 1277–1288.

Slaughter, R. A. 1993. Futures concepts. Futures 25, 289–314.

ANNEXES

Annex 1. Measure to increase women's contributions to farm and rural sustainability innovations.

Adoption of equality of genders and social groups in all roles and activities

Combating gender stereotypes around women-owned businesses

Community participation - needs diversity of participation - not just women - all genders, migrants etc

Companies can recruit more women into roles with more use of technological application

Doubt and social norms still an issue for women. Need to target different groups e.g. women and older generation and help address cultural barriers.

Gender based "cigar clubs" and "brother networks" will be abolished

Gender equality is needed so that women do not have to do both sallaried work and domestic work.

Gender networks and engaging women in the decision-making, on different levels, local, regional, national. Sometimes, there is no acceptance or space for innovations that are more diversified or take other goals into consideration

Get bodies like Bord lascaigh Mhara (Seafood Development Agency) involved in driving this and create roles for women on the board and also within the industry.

Girls and boys should help in an equal manner with domestic tasks such as cleaning and cooking. Cook together with children.

Have women propose political programs that are more engaging for everyone

Inclusive policies: Implement policies that promote inclusivity, ensuring that marginalized groups within the community have equal access and opportunities to participate in social insertion projects, fostering a sense of equity.

Involve women of all ages who actually live here throughout the year in local political life. More women should be active in local administrative bodies. Perhaps more positive discrimination should be implemented in this regard. Increase services so that young people including women have more reasons to stay or come back after their studies.

It would be important to change the language around different roles and how it is advertised e.g. chairperson not chairman

Jobs in logistics, lorries, police, defence and water management can be more open to women

Make people understand why men dominated over women

Mandatory quotas for women/number of women in various committees, bodies, and leadership positions; Encouragement campaigns, promotion of women.

More women technicians are taking on the role of technology trainers in education and agriculture.

New perspectives through participation in decision-making

Organize games to fight gender stereotypes. Boys and girls should play all games. For instance little boys can play with dolls and girls can play with lego or little trucks.

People on the street and those without a stable job or reputation should also be approached by the municipality to give their voice and present their wishes.

Removal of 'glass ceilings' and brotherhood networks

The potential could be realised by recruiting more female drivers.

There could be an initiative to set a quota on the amount of women working in the festivals.

There should be more attention to gender issues in schools and also in the textbooks used. For example, when studying Juvenal, a Latin poet, make it clear that his statements about women are wrong and contextualize them in that historical period

Through promoting the benefits of such innovation for the environment and broader welfare, we can encourage greater interest in involving women in these topics; Breaking stereotypes about what is considered 'feminine' and 'masculine,' which begins with education at all levels (in kindergarten, at home, in high school etc.);

Use a community dialogue process. Community dialogue builds pot of people to tap into.

Women need to be reimbursed for their work, because sometimes there is a tacit expectation that women do things for free

Adoption of place-based policies

Changes in zoning plans

Due to the ongoing 'communalisation' (closing of local administrative structures aiming for more efficiency of large area administration), nowadays, villages feel abandoned because they are just districts of distant town. The formerly self-administered ("when we still had a major"), have little to no say in the "city" council. There identities, needs and specific challenges and opportunities are systematically overlooked.

Go to community for ideas and build programme around this.

Having a driver is key. Simple to do, especially in areas where tradition and precedent exists.

Implement the activities of the Biodistrict "Baticòs Bio Distretto dell'Alto tirreno Cosentino" also by increasing its visibility. School canteens should be supplied with products from farmers belonging to the Biodistrict. The agreement for the supply of school canteens will be signed by the Biodistrict

Incentive school canteens to use local food and teach children about short and sustainable supply food chains.

Local development should support the vitality of rural areas

Municipalities and parishes should promote bottom-up decision-making processes

Not a gender issue sometimes it is the wider systems e.g. if the government were to provide housing and then have a stipulation that the people must contribute to the local economy.

Problem when this process weak e.g. SICAP (Social Inclusion and Community Activation Programme) developed elsewhere but not locally tailored

Provide resources - space, funds etc. Tap into existing resources - Use a local centre. Make it accessible and doable - e.g. Digital provides remote access.

The rules can be discussed and analyzed and there is space for interpreting them differently, but that requires that policy-makes sit down and work on the application of the rules

There are muncipalities in Sweden that actively work on procurment rules and make it possible to involve more local business in the process within the same legal framework. Sustainability could be included through that process.

Adoption of welcoming policies and openness

Better integration of newcommers into rural activities; Supporting knowledge exchange, experinces transfer;

District organizes "Returnee Days"; in addition, companies are looking for employees

Organizing activities together and including people

Participation on behalf of the villages is hardly possible. The umbrella Municipality has only limited room to allow for village specificities. Decisions are made on the higher levels (and often by newcomers moving into the rural area outside the metropolitain area of Berlin. Mutual interests and motivation differ often between newcomers and traditional dwellers which causes conflicts in the neighbourhoods and frustrations of those that feel like have no say anymore. New measures of participation and integration are needed for the policy and administrative decision making in these new, large scale district structures in rural areas of Eastern Germany.

Rural areas need to actively work to be more attractive as residential areas.

Welcoming everyone

Empowerment and encouragement to innovate

Women in transporation and farming sectors are newcomers and they can see other aspects than those traditionally taken for granted

Agnkowledgemnt and encourative due to incentives for volunteering (Stendal Volunteer Card)

Also empowerment and reassurance of women.

Asking women farmers and villagers how they would like to use technology in their work and inviting them to give advice can help change cultural norms.

Awakening is important for greater involvement of residents in community development

Bringing these women to the forefront in marketing and branding

Chain of value control: Empowering women with the ability to control and influence the value chain enhances their decision-making capacity and strengthens their role in agricultural innovations.

Citizen science is a good analogy. To make the mindset change needed accessible you need a varied approach. It also needs follow on. e.g. citizen science can have set goals and need to consider what next and steps to realise further outcomes after initial steps are reached. Engagement in things like citizen science can have a captive audience, it needs follow up to build on momentum and resources. Innovation voucher example, for example the focus can be on creating 'protoypes'

Courageous approch to marketing

Education and local participation is key, 'Build it they will come' idea.

Encouragement, empowerment

Giving responsibility and also space when needed

Inclusive policies: developing and implementing policies that specifically address the inclusion of women in market activities, fostering an environment that supports and encourages their active involvement in workshops and dynamic events.

It takes small steps and a slowly but steadily developing sense of self-efficacy and ownership; then larger projects can also be tackled gradually; Success brings a lot, but failure also leads many to quickly throw the towel, if voluntary commitment is not rewarded, e.g. with the high effort of applying for subsidies, due to the competition or the major hurdles in the application

Mentorship programmes for rural women entrepreneurs: Implementing structured mentorship programmes specifically designed for women in rural areas. These programmes should be facilitated by experienced women, providing mentorship to aspiring rural women entrepreneurs. This initiative aims to address the lack of motivation by offering guidance and support from relatable mentors.

Social and economic pressure to innovate

Support of organizers and personalities who are key persons for the realization (generational change)

Taking women seriously. Noticing opportunities to influence and getting excited to join

Utilize the current protests to achieve specific systemic solutions. In Slovenia, women are well represented in rural protests; promotion of women stewardship.

Genuine involvement of young people to have an impact

Eco days could be promoted through social media to attract more young people.

Facilitating young women to participate (participating remotely, child rearing)

Involving young people in development activities, learning by doing

Municipalities should organize more eco days together with environmental associations/movements and involving schools. If children are involved also their mothers and the entire family is involved so such days can be more successful.

Must involve women from a young age as girls. Increases possibility of them moving back to the rural area

Need established person e.g. local councillor as an advocate or measures to get young people/young women to the policy table.

Organize local economies to prevent young people from leaving to contrast depopulation

Organize more events for young people and establish places such as cultural centers where young people could meet so that they have more reasons to stay and be inspired to be active in public/political life of the area and make it more sustainable.

Organize projects in schools in which students are are asked to carry out concrete actions related to sustainability issues

Working with children to shape a new mentality

Organisation of platforms for co-creation and cooperation

"Social media filters" through the collective construction of an ethical code; create spaces to encourage aggregation

A platform or application administrator is needed to ensure platform updates and coordinate volunteers; Systematic coordination of activities that underlie such a platform or agon:

A route and channel for local residents to give feedback should be more accessible and open, especially for busy working mothers and young mothers.

Ask community what they want. Ideas emerge, then can find best/top ones through the process.

Campaigns, new formats, incentives to organize something together in the village

Carry out group activities to facilitate dialogue between women

Citizens can discuss promising locations and ask about the rules and plans for them, such as a centre for visitors, information and community development.

Community dialogue process no longer strong. Community dialogue process e.g. Forum Connemara operates like this.

Community engagement programs: Develop and implement programs that actively involve the community in the planning and execution of social insertion projects, ensuring their active participation.

Connecting schools with existing active gardening associations and individuals who already have expertise to implement such activities;

Creating connections between rural and urban (peri-urban) areas: Facilitating communication and collaboration between rural and urban communities fosters a shared understanding of environmental issues, leveraging the strengths of both contexts.

Designated person for coordinating events (e.g., at the Tourist Information Center, municipality)

Development of collaboration with municipalities and schools

During such festivities groups of volunteers could be organized to go and clean the beach or forests or other public areas. These could become fun activities organizes in teams. Municipalities and organizing committees could establish prizes for those teams who manage to grab more rubbish so that people are motivated to get involved.

Ensuring a reliable source of funding and qualified coordinators or leaders of activities in community gardens;

Establishment of innovation and co-creation forums: Creating platforms such as innovation and co-creation tables, facilitated by governance actors and inclusive of local stakeholders, to foster collaboration. This approach aims to realign priorities and ensure that the roadmaps for community development receive the necessary attention and support.

Exploitation of networks when high-level competence is needed

Facilitate exchange of experience or training on exisiting circular practices

Finding someone to take charge of each development idea

Getting women and men to collaborate to get to know each other better

Highlight nature, culture, social community as soft location factors promote clubs as magnets to the extent that they can maintain their offers in the best possible way Houses that are vacant could be revitalized collectively; Of course, this requires funds, but if it is supported collectively, it may be easier In order to know what the community needs, it must first come together and talk about what it needs; that's usually the first step.

Hub is important to bring these innovators together

Introducing opportunities to participate

It is currently ineffective for individual farmers - the support of co-operations is appropriate

Municipalities should make more use of social networks and use them as modern communication tools

Municipality as a promotor sending invitations and providing facilities

Networking can help, as well as involving all family in the collaborations. More women than before are farmers and sustainable, so perhaps supporting these intitiatives would help.

Networking opportunities: creating platforms for networking and collaboration among women entrepreneurs, enabling them to form connections, share resources, and collectively contribute to the success of markets for agriculture and crafts.

Open aggregation centers where new problems can be brought and addressed

Organisation and facilitation of village workshops in order to enhance concrete exchange about what is specifically needed in the villages. "Go to the villages and ask people what they need and what they can do to achieve it themselves in collaboration with the administrative bodies."

Organize collective kitchens and local markets that are intergenerational and intercultural

Platforms for organizing workshops are needed

Potential of fishery industry to help rural areas. Get bodies like Bord lascaigh Mhara (Seafood Development Agency) involved in driving this and create roles for women on the board and also within the industry. Spin off sea life industry is broader than fishing and need to unpack all of these possibilities. Make connections to the spin-off of the industry where women could also promote this aspect of the industry. For example, sauna and tourism industries.

Professional "support" by economic development and/or established associations is needed in order to bring movers and shakers together. Financial security for the initiators based on 'clever programmes' are needed.

Regular training and exchange of experiences of female mayors and representatives

Responsible persons are not aware of the role of existing civil society networks. They did not understand the existing "engagement centres" for their (political/administrative) purposes. Projects end and are not appreciated. This is not how any company would deal with the internal potential.

Setting up genuine opportunities for cooperation

Take example of local sourced organic produce, local innovator, has 'go collect' system. There are lots of examples, but need a hub/connection space

The collective purchase and ownership of minibuses in each village makes it easier for villagers to organise on-demand minibus operations.

The council should plan more site visits and consultation visits, rather than one consultation meeting, so that busy working mothers and young mothers can participate.

The general trend in Sweden is diminishing grassroot organizing and there is a need of action to change that trend.

The practice that can help is regional and policy-maker stakeholders facilitating meet-up and networking activities.

The very limited number and quality of public consultations should be changed to more open communication with the public, with the municipality explaining more to local residents how their spatial vision would affect their immediate living conditions.

Time adjustment, organizing events at times when the rural population/farmers can participate

Time issue also key to manage – solution around bringing in professional to manage the process/trail.

Using the possibilities of digital methods and reporting

Women should build networks among themselves

Women can form a powerful consumer organisation to motivate the agricultural sector to move faster in defining and achieving sustainability goals.

Women can form localaction groups to ensure that all business parks and commercial buildings have solar panels and clean energy.

Women can influence local political parties, architectural and aesthetic committees, landscape associations, other local committees and the local chamber of commerce to promote the use of more solar and wind energy in privately owned buildings.

Women can persuade their local business partners and leaders to consider using solar and wind energy.

Women, as powerful consumers, can form a unified voice to demand safer and more environmentally responsible food production.

Workshops to share things

Organisation of platforms to provide visibility for innovative persons and their insights

Charismatic, 'people that know people' are needed to drive change and management is key

Driven, open innovative characters are important and success stories encourages others

Entrepreneurial experience-sharing sessions: facilitating sessions where women can share their entrepreneurial experiences, providing a platform for knowledge exchange and inspiration.

Highlight and spotlight women who are successful in this role for example television coverages or online, focus on where the audience are e.g. social media.

Highlighting the achievements of women working in this field.

Key in policy is to be female led with female examples.

Needs some-one to lead, bring key players involved. Key organisation that can drive and lead e.g. bring local players together, i.e. this is community development process. Support women to write books and texts on the local histories

Visibility in specific forums and scientific communication channels: Providing visibility for women in forums and scientific channels allows them to share their insights and knowledge, contributing to increased environmental awareness.

Women can play a greater role as leaders of agricultural organisations, supply chain parties, decentralised authorities and nature and environmental organisations, bringing their ecological views and a balanced perspective.

Women farmers who practice responsible and sustainable farming can be ambassadors to bridge the gap in opinions and bring stakeholders to the table to find solutions.

Promotion of flexible work life

Allowing small buses to be driven by volunteers as well as paid drivers will make the job easier.

By recruiting pensioners, young mothers, women and people at different stages of their lives as drivers, small bus operations can be organised in a flexible way to meet demand.

Changing attitudes about remote work and office work

Encouragement by the employer, e.g. one day per month as a salaried work

Flexible work and working hours

Flexible working hours that take account of family life also allow women to work as bus operators without having to compromise on their family life.

Increasing flexibility of working hours, remote work

Privision of possibilities for place-independence

To improve the attractiveness of the agricultural profession (new models of integrating work and leisure time on farms)

Promotion of innovations by means of projects

CAP (LEADER) and ESF; Justify the green transition through small-scale projects like this one; Showcasing existing successful practices, many of which have been supported with the help of LEADER.

Collaboration that goes beyond regional stakeholders, for example EU projects and national projects.

Combining nature conservation measures with culture is a very promissing tool.

Ethnographic research that would capture the original folklore forms that are currently mixed

Prepare and implement innovative projects, specifically the Center for Technical and Innovative Education in Kyjov

Public-private partnerships: Encourage collaboration between governmental bodies, private enterprises, and local communities to pool resources, expertise, and support for the successful execution of social and environmental projects.

Setting up a project to get started

Promotion of vision-based and goal-oriented actions and policies

All prices must be honest and fair, giving producers sufficient compensation.

But also need softer approach too, a more holistic approach. It is also important to understand where are the mindsets at - young and old. Need to dig into to understand where potential is.

Change of attitudes: more weight to benefits

complex land consolidation

Create a system that invests into diverse industries

Defining a clear vision for rural progress: Establishing a well-defined vision for the progress of rural areas and incorporating gender-inclusive policies that recognise the role of women in generating economic and social advancements. This involves creating a roadmap for sustainable development, emphasising the importance of women's participation in rural business initiatives.

House prices also issue linked to this - planning regulations not only issue. More holistic assessment of issue needed and measures taken.

Long-term vision for rural areas: Establishing a long-term vision that emphasises the economic viability and attractiveness of working in rural areas, aligning with the aspirations and values of the younger generation

Longer term supports are important - needs more than 12 months e.g. up to 4 year funding scheme. Funding can be siloed - needs room for supporting difference, really new innovations like this.

More people appreciate the value of organic food and sustainable production, so they are more willing to pay the corresponding prices.

More research about this topic and policy recommendations

Much of organizing takes place through project form, but the challenge is to go from projects to long-term practices that are integrated into the rural areas/rural businesses. Need to strengthen and update the legislation

Policy adaptation: encouraging policy adaptation to align with current agricultural practices, ensuring that regulations and support mechanisms are in sync with the adoption of innovative techniques like drip irrigation.

Public policies are needed to encourage honest pricing so that companies can adjust their prices.

Public procurement can include more purchases of organic food, enabling more farmers to switch to sustainable and organic farming in response to growing demand. Responsible decision-making

Sustainability needs to be made more tangible and concrete as goal to make it possible to organize it. Women have a lot of experience of organizing through engagement into parenthood, schools, neighbours etc and could help here

The attitude of staff members of the Municipalities needs to change: they need to become members of the cooperation for innovative. So far local politics or high level administrators have not yet grown into the role of a 'comrade' for the local infrastructure endevours. Public servants are used to keep distant to civil society-driven projects. The general geo-political insecurity/instability in Europe could be better connected to sustainable farming and its importance for local resilience.

Unhealthy food should be taxed more, while organic food can be tax free.

Women prefer voltaic and the use of biomass for compostin

Provision of adequate local services and facilities including internet connection

Adequate local services

At the municipal level, arranging smaller transport units, for example, with vans; Multifunctional vehicles (combination of various services such as school transportation, postal services, public transportation).

Blurring municipal lines (daycares etc)

Construct cycling paths so that women feel safe to cycle around the area for instance from Majerá to Cirella, Organize more public systems to rent bicycles or scooters through mobile apps so that more people can move around in a more sustainable way. Local people including women as well as tourists

Creation of community intergenerational housing (even outside one's own family)

Development of digital methods more accessible for the youngsters

Good quality internet connection

Good quality internet connection (optical fibre, 4G, 5G)

Improve wifi/internet connection across the area so that people including women can communicate and stay connected and use apps to access information and different Improving day care. Shared transportation to kids hobbies

Infrastructural support and transport access.

infrastructures should improve. Mobility should be re-organized so that people including young people and women living in remote areas can easily move and meet.

Municipalities could purchase and organize a service of electric busses for people to move around the area.

Integration of emerging technologies: recognising that emerging technologies, such as satellite-based solutions, could mitigate broadband challenges in the future. Implementing policies that actively integrate and leverage these technologies to improve connectivity in rural and remote areas.

Local authorities and public transport companies should communicate more with young mothers and women in general to identify their mobility needs and to distribute the frequency of small buses more in line with their lifestyles.

Local taxi companies and large bus companies can work together to ensure the operation of small buses to fill the gap in meeting mobility demand.

Mobile services

Need for environmental social enterprises is clear

Successful programme for community development: The network programme "Engaged City" has shown to be very effective for the rural hub. Instead of the 'projectitis' (ongoing projectification of financial support programmes) we need the funding of structures." Networks such as the "Engaged City" programme allow communities/community-driven initiatives to shaping their society through solidarity / commitment. These structures of administration, associations, economic development/companies provide the seedbed for emerging local initiatives.

Tailored plans for potential users: developing targeted plans to provide broadband tools based on the needs and potential users of specific rural areas, ensuring that the infrastructure meets the requirements of the local population.

Turning summer cottages into year-round accommodation

Provision of communal spaces

A hub to maintain social contacts

A permanent meeting and information point for mothers and children should be set up, with easy access, where they can also ask and discuss their housing needs.

A place to get together

Ask women to give testimony of how we lived before, for example when there was no internet

Create/develop a culture of trust in which people are given more personal responsibility and trust; the room is open and can be used without consultation;

Important are centres where people can connect and gain inspiration

In design sector terms 'love-in's, but not a support-group type space.

Meeting places

Policy and administration can help to find place and make more spaces available free of charge for encounters.

Promote female meeting spaces for discussion, both in schools and in villages

Provision of education

Also key would be training for women and build skills in the managing of these activities.

Bins must be available in school classrooms for separate waste collection.

carry out interactive workshops in schools; organize (interactive) story telling initiatives

develop cooperative learning actions (including in training courses and schools) aimed at making people understand the social and economic benefits of cooperation

Different platforms that enable education: for example schools taking on sustainability and ecological farmning as a part of their curriculum.

Educating teachers to be equipped with less stereotypical upbringing and education.

Educating women in this area as women are creative and innovative. They need to be brought on board. Colleges and training centres need to target women.

Education about multifunctional agriculture; Trainings for diversification of activities on farms.

Education in schools, intergenerational transfer of knowledge, experinces

Education to use the needed tools

Education, work with the public, planting in greenery

Educational campaigns: implementing educational campaigns to bridge the knowledge gap, providing information on the benefits and techniques of drip irrigation to farmers and livestock keepers.

Educational opportunities for women, life-long learning (financial support for adult education, community colleges)

Inclusion of these topics into the regular school curriculum, either as mandatory subjects or as supplementary courses;

More emphasis can be placed on the development and application of technology in education by encouraging group discussions in which both female and male students work together to analyse problems and come up with practical solutions.

More entrepreneurial and project management education in school

More weight for user role (women) than for technicians role

Often personalities that are good connectors and can easily engage with customers, might not have the professional training in sales.

Older generation also can be an issue and how to educate the older generation. Need to find way to get message to them – women are potential farmers too.

Organise short courses during specific events in the villages or online courses

Organize free and public curses and workshops especially for women to teach them about "smart" solutions and how they could contribute to these. For instance teach them about energy communities and European incentives to organize energy communities or involve them in local food chains that are more sustainable.

Organize guided tours of recycling and alternative energy plants. Organize more "collective work" in class on the issue of sustainability. It is necessary to ensure a continuity in the activities by preparing a Calendar.

Organize laboratories on the topic, also outdoor .

Process of hand-over important to have courses on how to do this, the practical aspects.

Provide professional skills to facilitate gender dialogue

Skills development: Provide training and skill development opportunities within the context of environmental restoration, enhancing the employability of individuals involved in social insertion initiatives

Technology education at all levels

This activity is still developing, but since it is more about data evaluation, it could be entrusted to women

Training and diversification of the sea life industry - hybrid approach to training courses when they have time to attend. Training for women female deck hands to be trained by female trainers.

Training initiatives: implementing targeted training programmes to equip women with the necessary skills and knowledge, enhancing their capacity to actively participate in the dynamic activities of markets for agriculture and crafts.

Training needed e.g. board and how this is made up/operates.

Trainings for the development of innovative products should emphasize not only elements of marketing communication but also market research and development of new

Use more "alternative" educational methods, such as those by Montessori.

Provision of finance and subsidies

Women should educate themselves in listening

Create a support system to scale up women's businesses, for example start hiring personell, or create limited companies.

Environmental sustainability funding is growing and needs to be tapped into.

Financial compensation for voluntary work in co-financed projects.

Grant aid for fishing industries model, similar to ACORNS (peer to peer mentoring). Create grants for women to get involved. Business needs to show women can do this role. Greater funding for diversification. Increase awareness of what is available. Increase in grants for women help overcome barriers, make more a norm.

In these cases of community development and the improvement of the enhancement of social relationships and cooperativeness, it's not just about economic development; the conventional model of support is not effective. "With the usual business support, it won't get any better. What we need is funding of cooperations and coopertativeness."

Provide grants for single/separate mothers

Provide subsidies for elderly care; this would make it possible to hire people to care for the elderly, who are now often cared for by women in the family, and allow them to enter the workforce

Safeguarding rural funding also in the future

Social enterprises have their own challenges - needs strong targeted support

Subsidies

Subsidies focused on water conservation: Implementing targeted subsidies that incentivize and support practices aligned with water conservation. These subsidies can encourage women farmers and irrigation communities to adopt measures that limit cultivation variety according to local water requirements, promoting sustainable water use

Provision of incentives and support for entrepreneurship

Availability of advisory services, micro-loans, meeing centers

Consultation and guidance: establishing support systems for farmers and livestock owners, offering consultation and guidance to address their needs and concerns in implementing drip irrigation systems.

Different management of state-owned agricultural land. Priority allocation to new farmers

Female entrepreneurs already face a lot of obstacles

In relation to having a safe place to fail e.g. in education, it is important to have supportive leaders who guide this way and instil that it okay to fail we can learn from it.

Information about the support services for entrepreneurs

Mentorship.

More incentives and less obstacles for starting entrepreneurship

Participation process, financing to ensure broad participation alongside a strong initiative group; Establish citizens' assemblies (larger communities); financial support programmes for such village shops (including mentoring for the financial administration.)

Performance pressure creates mental health problems and needs to be addressed, a societal problem that women alone cannot tackle. Role-models are important.

Profit not main goal of social enterprise. May not be attractive to all entrepreneurs. Need more security for women to enter into this area - e.g. financial incentives.

Regional actors provide financial support for broad range of specialist consultant and/or councillor services, which can be chosen by the entrepreneur, including mental health

services in addition to business development

Support for hiring the first employeee for female entrepreneurs, easier ways to fire employees

take training courses on business creation

Targeted funding for female entrepreneurs

There are many opportunities in legislation and systematic support of new supplementary activities on farms (e.g., social care activities for the elderly, children) which are often already tasks performed by women

Provision of information about alternatives, examples and good practices

"We need more 'Commitment', which is an attitude. But it's not just volunteering. We need payment for the maintenance of such structures. It's about explaining THE attitude! The new way of thinking has to spread." Learning from good examples at the local level.

Advertising campaigns for urban audiences: Implementing targeted advertising campaigns to reach urban populations, emphasising the value of food production (highlighting aspects like seasonality, environmental impact, and carbon footprint).

Awareness campaigns to overcome the stereotypical notion that supplementary activities are solely the domain of women

Awareness raising activities on permaculture, urban gardening activities could be organised

Awareness raising activities on the impact of poor landscape protection

Creating product narratives: developing small narratives about the product, including its origin, value, and entrepreneurial journey, to establish a connection between consumers and the local producers, fostering appreciation for the product and its story.

Data dissemination on the value of agricultural and rural activities: Providing comprehensive data showcasing the economic and social value of engaging in agricultural and rural activities, aiming to encourage women's involvement and demonstrate the significance of their contributions.

Digital solutions for monitoring various events and activities (apps, platforms)

Educational campaigns: Raise awareness through educational campaigns about the dual benefits of social insertion and environmental recovery, fostering a sense of responsibility and ownership within the community.

Emphasis on health benefits: promoting awareness of the health benefits associated with agricultural products and emphasising the nutritional value and positive impact on community well-being.

Experience and examples of good practice can be used

Greater influx of information on this topic, clearer information, education, awareness, and better understanding of this issue

Green cert - provides an environmental model, could be lessons to learn from here.

If there are funds for circular projects, they must be made more visible and available.

Improved communication between farmers, potential farmers, people living on farms and policymakers, as currently, policymakers are not aware of all the problems

In order to realise the possibilities, development plans or visions should be presented more clearly to local electors and residents, as these documents are poorly understood. Information about existing alternatives

Information about good practices by means of communication and campaigns

Information available about remote learning possibilities

It should be clear what organic food costs, and if cost elements are reasonable to consumers, they will be more persuaded to pay prices that reflect quality.

Lack of funding guide for local initiatives access to buildings that could be used/repurposed

Look to best case examples from abroad - 28 day policy change and other policies that are more business friendly.

Marketing different rural opportunities to entice women to the area

mentorship for teachers; More relevant and up-to-date, not sterotypised depiction of agriculture in learning material, textbooks in schools; Presenting the need for this education to school principals

More information about existing possibilities for part-time entrepreneurship and other non-fulltime forms of entrepreneurship

Organize days in the agritourisms to raise awareness of the seasonality of production by calling it "The vegetable garden of the day"; The schools organize visits to the educational farms located in the area. This requires that the educational farms propose their programs to the educational institutions. Furthermore, it is advisable to generally encourage visits to educational farms with a promotional campaign on social media.

Organize eco days during public festivities and at the same time make public festivities more eco-friendly and sustainable. Patronal days are very important in the area. Religious organizations as well as private companies and volunteering committees that play active roles in the organizations of such festivities should come up with more sustainable strategies to avoid waste and lots or garbage. For instance paper glassed and plates could be used. Things such as bags could be recycled.

Politicians and political parties can ask mothers and women with care responsibilities more about their preferences and wishes for food safety and sustainability.

Provision of examples and good practices

Raising awareness and understaning of agriculture, food production, and fostering connections among all residents (traditional and newcommers).

Storytelling for products: creating narratives that showcase the rich history and stories behind agricultural products, fostering a deeper appreciation for the cultural and historical significance of farming and rural activities.

Sustainable farming needs to be better explained first, with emphasis on that it is not about more work/power, but a different way of doing farming. How we describe sustainable transition matters for who gets involved.

Teach children about where food comes from and how they can make healthy and sustainable food choices. For instance through visits to farm and agrotourisms.

The LEADER and EIP projects already promote this and can do so even more (targeted addressing women, better communication with them);
There is a lot of pressure on community groups/female businesses to realise projects like this. It is also important to make clear there are different ways to diversify and make a trail viable, different opportunities - e.g. cafe, business related to tourist attraction.

They need facilitated access to support in addition to voluntary work. A publically funded guidance service that helps to find suitable support programmes would be able to help

TV-show about young people in reindeer husbandry is a good example

Use example of how trail has been created and learn from it. Show successful practice where there is thinking outside the box. Run an awareness campaign on possibilities Using media

Visbility of good practices through campaigns

Visibility for existing groups: Providing visibility to self-consumption groups allows for recognition and inclusion in relevant discussions and initiatives

Visibility for the value of production: emphasising the importance of local food production through visibility campaigns, showcasing the temporal aspects, environmental impact, and carbon footprint.

Visibility of agricultural product value: Highlighting the value of agricultural products through campaigns and educational initiatives to underscore their significance in meeting societal needs.

Visibility of innovative experiences: showcasing existing innovative experiences in drip irrigation among farmers and livestock owners, highlighting successful cases to build trust and promote adoption.



Simplification of bureaucracy and regulation

Application for funds is very time-consuming, and only few stakeholders have the time and skills to apply. Application support via municipality would help.

Changing the rules: support exists, but overly strict rules reduce its reach to social housing only

Example: Tourist business also can have planning difficulties - need flexible regulation to allow young female entrepreneurs to flourish.

LEADER does a lot, good funding offer, but funding implementation is laborious. "We have done a lot of LEADER but I am tired of it. The administration is so difficult."

Legislative changes towards the support of exclusive processing of waste biomass

Simplification of legal regulations in the field of occupational safety and hygiene for excursion participants

Work towards legislation that enables and encourages access to shore rights. Access to seaweed rights is disjointed ownership. Potential of fishery industry to help rural areas.

Strenghtening of support networks to allow involvement

ask women to make their organizational skills available whenever social and cultural events are promoted

Caring roles need more support, through the public health nurse for example. There is a need to alleviate women from their caring roles.

Expanding lines of action: Broadening the scope and activities of local support groups can enhance their effectiveness and engagement, encouraging more women to contribute and participate in promoting respectful actions and good practices.

In order to increase the employment of women and thus enable them to participate in the workforce, it is necessary to - Create daycare centers, including within companies

Introduction of rural coaching roles: Establishing the role of a rural coach who can dedicate time and energy to guide and support individuals involved in innovative projects. This intermediary figure can bridge the gap between mentors and mentees, ensuring sustained engagement.

Involvement of women in all ages, support networks to allow this (e.g. childcare for young, mobility for seniors)

Organize courses with a psychological team to help women overcome their weaknesses

Provision of opportunities for women to shape their own life and living environment

Single women and parents face issues financially - need specific supports for these groups to overcome their particular issues.

strengthen family welfare

Technology has also changed the possibilities for women. Information and weather instruments means there is much less risk



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