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Synergy and Empowerment Concept

Based on good practices shared and implemented in the Interreg BSR project EmpInno



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Synergy and Empowerment Concept – Food

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EmpInno – S3-Empowering for Innovation and Growth in Medium-Sized Cities and Regions

To turn the Baltic Sea Region (BSR) into Europe's most dynamic, innovative and competitive economy of the continent, the regions need to apply and constantly improve their Research and Innovation Strategies for Smart Specialisation (RIS3). Since 2016 the Interreg BSR project EmpInno supported partner organisations from twelve regions in Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Poland and Sweden to foster the implementation and improvement of RIS3. The project provided strategy owners, strategy implementers and other innovation actors with resources to better work with the RIS3 approach and boosted cooperation and knowledge exchange between stakeholders within and beyond the partner regions.

The partners developed and implemented numerous R&D transfer workshops, matchmaking and networking events as well as training formats. By doing so they provided companies, universities and other actors with knowledge and resources to implement innovative and competitive ideas. Furthermore, EmpInno helped to improve and update regional smart specialisation strategies by transferring experiences and recommendations to regional authorities as well as strategy implementers to adapt and use the RIS3 for the benefit and growth of the region.

Further information: www.empinno.eu





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Introduction

Short description of the BSR food sector

The Baltic Sea Region (BSR) is geographically diverse - covering areas from the Tatra Mountains to the Northern Arctic Circle. There are different climatic zones, and hence varying food economies. The lowland areas of the southern part of the region have specialised in agricultural production intended mainly for export. Large afforestation of the northern regions resulted in its specialisation in the field of forest production and processing. The mild climate of the western part of the BSR allowed the development of meat and dairy production and at the same time became a center of trade between the agricultural east and west supplying finished products. All EU countries in the BSR are experiencing a structural transformation in agriculture - the number of farms is decreasing while farm size is increasing. Overall, the acreage of agricultural land remains fairly stable. In Germany, Denmark, and Sweden the structural transformation from many small farms to fewer, larger farms has come the furthest, but rate of transformation accelerated in Poland and the Baltic states during more recent years.

Main goals and challenges of the Food Industry in the BSR Region to reach RIS3 priorities

National / regional innovation strategies for smart specialisation (RIS3 strategies) are integrated, local economic transformation programs that aim to implement five important assumptions:

- focus policy support and investments on key national/regional priorities, challenges and needs for knowledge-based development.
- use of each country/region's strengths, competitive advantages and potential for excellence.
- supporting technological and practical innovation in order to stimulate private sector investment.
- get stakeholders fully involved and encourage innovation and experimentation.
- they are evidence-based and include sound monitoring and evaluation systems.

The key factor in the success of this strategy is the integration and coordination of the food sector

activities undertaken in the Baltic Sea Region between regional and local authorities and SMEs and business environment institutions. Without this integration, it will be difficult to achieve specific target levels.

Many regions and countries of Baltic Sea Region have recognised the importance of enhancing their food production performance and strengthening their position in value chains. Similar assumptions are also noticeable at the level of the entire European Union. EU members aim at accelerating the transition to agri-food production that is more knowledge- and technologyintensive. This is particularly evident in EU countries and regions that have strong interests in agri-food and have identified it as one of their smart specialisation priorities. As of 2016, a total of 85 EU regions indicated agri-food as one of their key investment areas under smart specialisation and a total of over 270 agri-food related RIS3 priorities were encoded in the Eye@RIS3 database. The most prominent priorities were new agrifood technologies (53 countries and regions) followed by agri-food and tourism (49 countries and regions) and food with higher added value (34 countries and regions).

It is important to understand what exactly different stakeholders offer and demand in terms of services, products, research, testing, demonstration, production and logistics. By mapping complementarities, similarities or equivalencies, regions can identify their current competitors and collaborators as well as their potential future partners. More work needs to be done to explore and map companies, research centers (including universities), clusters and networks as institutions creating business support tools as well as SMEs, R&D institutions and local stakeholders as implementing actors that take an active part in supporting the RIS3 implementation.

EmpInno (empinno.eu) - an EU-Interreg project aiming at fostering the implementation and improvement of RIS3 in medium sized cities and regions in the BSR – accompanied twelve partner regions in Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Poland and Sweden since 2016 to provide i.a. business support organisations, science parks and universities (so called *innovation intermediaries*) with the needed resources to work with the RIS3 approach and to boost cooperation with SMEs within and beyond the partner regions. The objective of the present Synergy and Empowerment Concept is to identify possible





partners for joint activities, identify suitable business support infrastructures, methods and formats to meet specific needs and challenges of different actors in the food sector of the BSR and to reach RIS3 goals that relate to food economies. All tools, workshops, good practices and methods described in this document are in principle transferable to other cities and regions in the BSR. The target groups for the document are:

- SMEs and local stakeholders through the use of the conducted activities good practices and regional and international clusters and their value chains for identifying possible partners.
- innovation intermediaries such as clusters, innovation agencies or chambers of commerce through use of suitable activities to increase the linkages to their end-users.
- universities, research entities through the use of the conducted activities
- regional or national authorities as strategy owners





1. Smart specialisation Food in the BSR

The following chapter describes current status and specifics of food sector in BSR - defines common challenges and needs for EmpInno related activities and identifies common interests, RIS3-goals and relevant partners.

1.1. Sweden – Östergötland Region

The regional food strategy is based on four pillars: customer and consumer, competitiveness, public procurement and security. The strategy points at the importance of increasing knowledge of Swedish value through training and information aimed at trade, tourism industry, restaurateur and the consumer and at increasing the supply of locally produced food in trade, at the restaurant and at the wholesaler as well as at increasing the flow of information in the value chain from field to fork. When it comes to competitiveness the region strives to ensure that all actors linked to the food sector in Östergötland have a clear focus on growth, that the food sector is an attractive and well-known business sector in Östergötland and that "Vreta Cluster" is a knowledge center for business development in the green industry. Furthermore, it is of crucial importance that region and municipalities have adopted and continuously updated a nutrition and food policy or equivalent. In 2025 publicly procured products shall comprise > 80 per cent of food produced in Sweden. As for security, there is a need to increase awareness of the need for security of supply, to reduce the use of fossil energy in the food chain and to increase consumption of antibiotic-free foods. The main regional engine for this is the " Vreta Cluster" initiative.

Regional strengths:

- very strong complementary skills, e.g. in ICT, logistics and production technologies
- 80% of Östergötland's land surface is used for agriculture and forestry
- efficient logistics
- strengths of cross-sectoral nature while they are expected to lead to growth and more companies in specific niches, they also have great potential to contribute to innovation and competitiveness in many of the region's industries

Main target sectors / areas of application / partners:

- chemical sciences (biochemistry, biotechnology, environmental protection)
- biological sciences (biochemistry, biophysics, biology, biotechnology, ecology, microbiology, environmental protection)
- technical sciences (transportation, production engineering, chemical technology)
- agricultural sciences (agronomy, biotechnology, agricultural engineering, protection and development environment, horticulture, fisheries, food technology and nutrition, animal husbandry)
- medical sciences (biology, medical, medicine)

1.2. Lithuania

Lithuania has great potential for the development of food raw materials and foodstuffs for the country's own needs as well as for export to the rapidly developing European markets. The area has been selected due to the need to respond to such future challenges and trends as insufficient sustainability of the food chain, insufficient sustainability of the use of biological resources in agriculture and food industry, insufficient safety and quality of food, and lack of efficiency in the development and use of raw food. Lithuania has accumulated vast knowledge on sustainable food production including knowledge on agricultural plant and animal genetics and biotechnologies, their growing/farming technologies, crop protection against harmful organisms, rational use of water, balance and migration of nutrients, sustainable use of energy and waste management, use and marketing of information technologies, the sustainable development of the food and beverage industry, and raw food and foodstuffs safety.

Regional strengths:

- great potential for the development of food raw materials and foodstuffs for the country's own needs as well as for export to the rapidly developing European markets
- vast knowledge on sustainable food production





• management of resources of the interior of the earth and waste, renewable energy resources, packaging technologies, and development of non-traditional foodstuffs, balanced feeding stuffs, multipurpose fibres etc.

Main target sectors / areas of application / partners:

- agronomy,
- forest sciences and ecology,
- forestry,
- horticulture,
- animal science and animal husbandry technology,
- veterinary medicine
- public health and security, subcategory food security and safety
- social innovation, subcategory social innovation with regard to environmental issues
- sustainable innovation, subcategories ecoinnovations, resource efficiency, sustainable agriculture, sustainable production and consumption

1.3. Poland – Lubelskie Region

Specialisation food is part of the broader smart specialisation of Lubelskie Voivodeship¹ – bioeconomy, and covers agriculture and food processing.

Bioeconomy covers all types of economic activity based on biotechnology, especially (according to food): crop and animal production, feeds manufacture and agrifood processing, chemical industry, environmental industries and services (eco-business) including management of resource use efficiency(especially product regeneration, preservation of nature and ecological construction).

The agri-food industry is one of the largest, dynamically developing segments of the Lubelskie Voivodeship's economy. Farmlands in the region account for 68% of the total area (first place in Poland), and the voivodeship is one of the largest domestic producers of cereals, field vegetables, tree and bush fruit. The Lubelskie Voivodeship is also noted for high level of organic farming development (third place in Poland in terms of the number of organic farms), inland fishing

(first place in Poland in terms of carp farming) and agri-food industry, which employs more than 25% of total employment in industry and accounts for one of the essential branches of economy of the region. The quality of soil (higher than the national average) and dynamic development of food processing helps the voivodeship to gain the position of a strategic feeder of national or European significance. There are 97 universities and R&D institutions operating in the Lubelskie Voivodeship, and their spending on R&D activity is dedicated primarily to research in agricultural, natural, medical and health sciences. Altogether, these fields consume almost 60% of funds which in recent years have been spent in the region on R&D activity. All key sectors of the agri-food industry are present in the voivodeship, including fruit and vegetable processing, sugar factories, dairy industry, meat processing, brewing, manufacture of grain mill products, manufacture of pasta, herb business and manufacture of beverages. The development of food processing is characterized by high growth rate and high share (25%, that is by 4.4% higher than the national average and the largest among voivodships of Eastern Poland) in export compared to the total volume of sales. There are four clusters (e.g. Organic Food Valley, the Lublin Cluster of Food Industry, the Lublin Cebularz, that is the cluster of hotel and restaurant owners) out of the total number of eighteen operating in the food industry.

Regional strengths:

- high level of organic farming development (third place in Poland in terms of the number of organic farms)
- inland fishing (first place in Poland in terms of carp farming) and agri-food industry
- the quality of soil (higher than the national average) and dynamic development of food processing

Main target sectors / areas of application / partners:

- chemical sciences (biochemistry, biotechnology, environmental protection)
- biological sciences (biochemistry, biophysics, biology, biotechnology, ecology, microbiology, environmental protection),
- technical sciences (transportation, production engineering, chemical technology)

¹ Voivodeship is the highest-level administrative subdivision of Poland, corresponding to a "province" in many other countries.



- agricultural sciences (biotechnology, agricultural engineering, protection and development environment, horticulture, fisheries, food technology and nutrition, animal husbandry)
- field of fine arts (fine arts, art design)

1.4. Finland - South Savo Region

Organic food production has been found to increase biological diversity and decrease the dependency on the non-renewable resources. Organic farming takes care of the soil and its condition. Due to the circling of nutrients organic farming reduces waste. It causes less greenhouse gas emissions than conventional production. Increasing the consumption of local organic products in the region is economically and climatewise appropriate by shortening the transportation distances. In organic production the prohibition of pesticides and medicines for animals is carefully controlled. Hence the consumers' exposition to the residues is highly unlikely. As a whole, the food safety is on a high level as the whole food chain of organic produce is monitored. Organic farming also provides employment for more workers than conventional one while typically being more profitable. Specialisation in the organic food chain develops the organic businesses in the South Savo region. Due to the increase and diversity of the local organic production the use of organic products increases in the region. There is a long tradition of organic farming in the South Savo region and development of organic fields share has increased steadily. The demand for organics has increased, but it is not met by the supply of the region. Hence, the diversity of organic products needs to be increased and the bottlenecks of the supply chain resolved. There is a lot of regional research and know-how both in organics and business development. Moreover, a national policy study suggested South Savo as an organic pilot region in Finland.

Regional strengths:

- long tradition of organic farming in the South Savo region (and development of organic field has increased)
- lot of regional research and know-how both in organics and business development
- safe packaging materials based on wood fibre

Main target sectors / areas of application / partners:

- sustainable innovation agriculture, production and consumption
- public health & security food security & safety

1.5. Finland – South Ostrobothnia Region

The key values of specialisation: sustainable food systems and the regeneration of the bioeconomy. Sustainable and efficient solutions for food systems focus on food production and consumer systems and their management. Solution elements concern primary production, agriculture and production technology, foodstuff refining, logistics and environmental solutions, trade and marketing as well as consumption and user experience.

South Ostrobothnia is the most specialised Finnish region in primary production and food stuff refining, regardless if it is considered in terms of number of workplaces, personnel or turnover perspectives. Relatively speaking, in Finland, the highest employment in agriculture and the food industry is in South Ostrobothnia, with 16% of turnover for the whole country's food industry located in the region. Agriculture and food industry employment and economic influences are at their greatest in South Ostrobothnia where the figures are a proportion of the employment level and economy size of a region. Robust primary production, food system skills, versatile investments, already existing development platforms and extremely broad user networks as well as national and international networking all create a strong base for operations.

Regional strengths:

- the most specialised Finnish region in primary production and foodstuff refining
- in Finland, the highest employment in agriculture and the food industry is in South Ostrobothnia
- 16% of turnover for the whole country's food industry is located in the region
- robust primary production
- food system skills
- versatile investments
- already existing development platforms
- extremely broad user networks and national and international networking

Main target sectors / areas of application / partners:

- agriculture and Rural Enterprises
- food Processing and Biotechnology
- marketing in food sector
- food chemistry





- consumer behaviour
- food safety
- microbiology
- economics of animal health and welfare
- entrepreneurship & responsibility (in food sector) especially SME's

1.6. Poland – Kujawsko-Pomorskie Voivodeship

The key values of specialisation are protection of human life and health through the implementation of innovative solutions at all stages of food production and marketing.

The idea of specialisation in the field of the best, safe food results from the functioning of the spatiotemporal system, shaped as a farm-to-table system with all the related aspects of production and services. Food security refers to the food chain, understood as the sequence of the various stages and processes involved in the production, processing, distribution, storage, handling of food and its ingredients, from primary production to final consumption. These are all the conditions being shaped, actions are also taken at all stages of production and marketing of food to provide the protection of human health and life. Specialisation also includes related branches such as: fertilizer production, packaging production and logistics processes (e.g. distribution, storage).

Regional strengths:

- very high level of agriculture in the region
- high and very high class of agricultural land
- · developed sector of food processing
- profiles of regional universities- many fields of study on agriculture or food processing

Main target sectors / areas of application / partners:

- sustainable innovation agriculture, production and consumption
- food chemistry
- public health & security food security & safety
- agronomy

1.7. Identification of needs and challenges of the BSR food sector

In order to increase the sustainability and efficiency of the food chain, sound interaction between agriculture, business and research is required. Collaboration between companies and research and development is needed to promote innovation, creation of new business ideas and knowledge exchange within and between the food industry.

Bearing in mind the information presented in the above subsections, main needs and challenges that BSR food sector has to face in order to increase the sustainability and efficiency of the food chain are:

- active cooperation between regional stakeholders and regional research and know-how
- strengthening R&D transfer to and between SMEs
- supporting technology development and diffusion of new technology to the industry
- establishing external relations in order to develop potential international cooperation
- boosting the competitiveness of SMEs
- promoting entrepreneurship, leadership and professionalism





2. Good practices – short description, transferability, success factors

The following chapter presents various good practices of diverse business supporting tools and methods that the partners exchanged in the EmpInno project. They are cyclical or based on one-off projects that allow for effective and cost-effective implementation of tasks and achievement of goals. They are in general universal and possible to be used in other organisations and areas that are intended to support SMEs, universities and research entities to meet their challenges.

2.1. Test bed for the digital food solutions

Region: Regional Council of South Ostrobothnia

Target group: mainly local ICT and food system businesses

Contact and more information: Regional Council of South Ostrobothnia

Description: the project "New Digital Solution in Food System – from ideas and concepts towards piloting" is realized by Into Seinäjoki Oy which is Seinäjoki region's business development company owned by City of Seinäjoki and Seinäjoki University of Applied Sciences. For start-up companies finding a test environment can be challenging. Especially ICT companies (which usually provide digital solutions) don't have existing networks with traditional and distant food business companies. Thanks to this project:

- 1) Local actors can have existing rural environment networks and resources for creating ones with ICT companies.
- 2) This way local actor can be a matchmaker between business sectors and solve two different problems:
- Companies get to test their new digital products and services in a valid test environment. Proof of concept will help them to get first clients for their products and services.
- Companies that do the testing will get finalized products and services that better suit their need and boost their business. And they get their hands on new products among first ones before their competitors.

Success factors:

- invitation of competent and relevant entities
- meetings organized by a competent entity with knowledge of local actors
- relevant meeting agenda

Transferability:

- it can be easily transferred to various ICT companies and universities
- business co-operation within future projects

2.2. Taste Organics

Region: South Eastern Finland University of Applied Sciences

Target group: people living in the South Savo Region, tourists and summer house owners

Contact and more information: Finnish Organic Research Institute

Description: three days long organic food event carried out in different venues in Mikkeli region. The objectives are to transfer research results to diverse audience, to reach old and new users of organic food to taste it and enjoy the abundance, establish new cooperation, find and share information of organics and the local organic food chain. The Organic Food Event consists of several sub-events giving an opportunity to reach diverse audience of the organic food chain: producers, processors, restaurants, public food service, retail and consumers. The event is able to disseminate the latest research results in an easy form for SMEs, professionals and the public. The event offers an opportunity to







food sector SMEs to match-make, cooperate and get feedback of new products/services.

Success factors:

- partner cooperation should start in the planning sphere early enough
- effective target group mobilization means a lot of advertising and promotion
- costs can be reduced to a reasonable level depending on the activities included in the event
- organizer needs to have good organizing skills and ability to delegate tasks in a reliable partner cooperation
- Several local and national partners need to be involved: city officials, local development organisations, tourist agency, organic organisations, advertising agency

Transferability:

- event is transferable to other regions with diverse and active agri-food sector
- Organic Food Event consists of several sub-events giving an opportunity to reach diverse audience of the organic food chain: producers, processors, restaurants, public food service, retail and consumers
- event is able to disseminate the latest research results in an easy form for SMEs, professionals and the public
- event offers an opportunity to SMEs in the food sector to match-make, cooperate and get feedback of new products/services

2.3. SHOPA

Region: Kujawsko-Pomorskie Voivodeship

Target group: SME's, start-ups, science representatives, research entities

Contact and more information: https://shopa.eu/

Description: program addressed to entities interested in constant cooperation in the field of changing the innovation policy of their institution - from the implementation of design thinking, through changing methods of solving everyday problems to creating a creative space where new ideas can emerge. It is strategic consulting aimed at stimulating creativity of employees. Design thinking methodology is a multistage process, evolved in 5-6 member teams of methodologists, students and specialists from specific fields. The team starts with interviewing target groups and collects their needs and demands regarding the product or service. During the defining process, the real problem is defined (real case) and work on proper solution is conducted. Then the solution-prototype undergoes a testing phase and next is improved to meet the expectations of the clients and their customers.



Success factors:

- using a time-efficient agenda that reflects meeting goals;
- information about the meeting should reach the target groups;
- implementation of the tool should take place at the similar level of the institutions (comparable competences);
- to ensure the project's durability other (than European) financing resources should be considered
- smaller training groups (of SME) work more effectively- reliable contact person (eg. RIS3 specialist) and constant exchange between BSI and SME brings better results

- an idea based on the experience of institutes in the USA, Finland and Norway
- can be used in various scientific institutions and companies





2.4. Cooperation model for knowledge transfer in the area of pharmaceutical manufacturing



Region: Lubelskie Voivodeship

Target group: companies, research entities

Contact and more information: Medical University of Lublin

Description: the aim of the good practice is to strengthen the cooperation between the research entity and the company, applying a determined tool for knowledge transfer - the joint research agenda. The cooperation has been developed since 1 August 2016 under the research and implementation works between the Medical University of Lublin and Colfarm manufacturing S.A. (pharmaceutical company founded from the health care sector, developing the manufacturing technology in the dietary supplements and OTC medicines segment). The area of cooperation constitutes the use of natural resources in the pharmaceutical industry, included in the first smart specialisation of the Lubelskie Voivodeship bioeconomy. The main undertaken activities are based on the intellectual and infrastructural potential with investment approach. The research agenda has been designed to maintain the independence of 3 processes: the conduct of research and development activities (university), technological and production processes (company) and registration activities (company and university). At the same time thanks to the fact that from the beginning the above actions have a common orientation on the product, it is possible to achieve a synergy effect, including:

- innovation of research (indicating the most active substances and their combinations),
- technological and production requirements, including the requirements for obtaining raw materials (selection from a broad list of active substances which, from the perspective of production technology, have the greatest market potential),

• registration requirements (including the conditions met by the medicinal product based on the natural resources and the traditional use - plant medicine, dietary supplements).

Success factors:

- elaboration of complex and plant-derived products for antimicrobial treatment and prophylaxis of Helicobacter pyliori - bacterium responsible for development of upper gastrointestinal diseases (duodenal and gastric ulcer, gastritis, stomach cancer) achieved thanks to the close cooperation between two entities
- the organizer needs to have good organisational skills and ability to delegate tasks in a reliable partner cooperation

- the effectiveness, synergy and cooperation scheme made it appropriate for potential replications and developments
- low lump sum payed for the research service realization. It includes also the participation of service contractor in the future profits (revenues) of the service provider by exploiting the intellectual property resulting from the service delivery
- the University acts as the contractor of the research service, commissioned by the entrepreneur, who generates an IP which the entrepreneur will implement into his own business activity while developing his own R+D facilities
- the advantage of this R & D work funding model is the postponement of the receivable evaluation for the service realization until the product, resulting from this work, can be evaluated.





3. R+D Transfer Workshops and mechanisms

The following chapter refers to the workshops transferring specific technical and organisational knowledge. These activities are customised activities selected to meet the needs and challenges of the partner regions mentioned and identified in chapter 2.8. The transfer is made mainly between the science and research sector and the sphere of economic activity, creating a specific bridge between these worlds. This process also takes place within the economic sphere between enterprises and at its interface: individual inventors - entrepreneurs. Partners in various arrangements are scientific and research institutions, large, medium and small enterprises, public institutions and private individuals.

3.1. Ruokaverstas (Food Works)

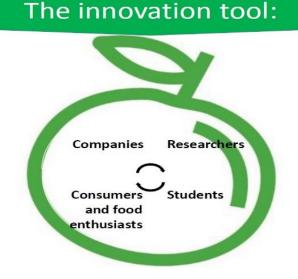
Region: Regional Council of South Ostrobothnia

Target group: companies, SME's, research organisations and educational institutions

Contact and more information: Seinäjoki University of Applied Sciences, School of Food and Agriculture <u>http://ruokaverstas.blogspot.com/</u>

Description: the information transfer between companies and research organisations has many kinds of levels, but the knowledge from either side is not always transferred to the best use. Ruokaverstas (Food Works) is testing and developing the good practices for that purpose in the food sector. The aim of the Ruokaverstas -project is to find new forms of co-operation between research organisations and companies and to generate new ways to improve the development work in the food industry. The project also aims to bring competitive advantages to companies in South Ostrobothnia. New information may help the companies to create new kind of added value to their customers. The project is based on the gastronomy food club concept that helps companies to create new knowledge and skills. The concept also connects customers into the different phases of the food development process, which normally is not possible. The companies can use this process as a new innovation tool. This will be done with a tight cooperation between companies, researchers, students and customers.

The researchers and educational institutions bring their own know-how to gastronomy food clubs tailored



directly to the needs of the company. In workshops, the students are able to apply their learned knowledge in real cases as well. The contents of workshops is designed in close cooperation with the companies. A theory presentation is prepared for the workshops based on the literature. There are also small-scale tests such as how different production methods affect the properties of the product. All the parties who participate in the workshop act as the evaluators. An interactive discussion makes new ideas possible. With the help of workshops the innovative ability of companies increases. The results of the workshops are presented through social media. This confirms the dialogue between the food experts of the province. This also involves the people of the area as part of a national and international food network. Further, the transfer of the information and research results are examined in the project. An attempt is made to find models for bringing research results into practice.

Success factors:

- interviewing the local food entrepreneurs, the questions and challenges
- scientific backgrounds for all the topics raised by entrepreneurs
- connecting threads
- choosing the most sought-after themes (flavor, vegetarian food, traditional methods and present)
- choosing three topics for each theme
- planning and executing the workshops





Transferability:

- the companies of the area gain a customer-oriented problem-solving method for their development work and achieve a dynamic dialogue with the researchers, educational institutions and the students.
- the researchers get the channel for an active dialogue with the companies, get interesting topics for their research projects and are able to apply their research information at a practical level.
- the students are able to adapt their skills in the practice and are able to introduce themselves to the companies. The students are able to work in a new learning environment.
- the consumers are able to participate in the product development process and to become familiar with the food production of the area.
- the project promotes a common interest for the developing of the target region as a food province.

3.2. Smart specialisations workshops:



Region: Kujawsko-Pomorskie Voivodeship

Target group: entrepreneurs, representatives of business and science environment institutions.

Contact and more information: Kujawsko-Pomorskie Innovation Agency <u>http://kpai.pl/empinno-inteligentne-specjalizacje/</u>

Description: the purpose of the meetings is to disseminate information about smart specialisations as well as to present opportunities for financing projects based on smart specialisations. Within the workshop session participants are discussing possible network cooperation and preparation of new projects in the area of RIS3. All meetings were divided into two parts. The first, theoretical part, included presentations of representatives of Kujawsko-Pomorskie Innovation Agency and external experts. The second part was dedicated to workshop and moderated discussion on the implementation of smart specialisations in our region. During the meetings participants focused on the following issues: competition and cooperation, building the network of entrepreneur cooperation

for the development of chosen smart specialisation, developing of leading and niche sectors, evaluation of smart specialisations within the expected projects financed from regional operational programme, RIS3 – the opportunity or impediment and others.

Success factors:

- effective target group
- using time-efficient agenda that reflects the meeting goals
- information about the meeting should reach the target groups
- event should be free and open

Transferability:

- the process is easily understood
- it can be easily transferred to various enterprises as well as business and science environment institutions
- it offers an opportunity to all relevant actors in the region to gain and exchange knowledge about new projects in the area of RIS3

3.3. Workshops for innovation brokers:

Region: Kujawsko-Pomorskie Voivodeship

Target group: universities, institutions cooperating with universities in the region, private entities interested in the commercialization of the results of scientific works from the region.

Contact and more information: Kujawsko-Pomorskie Innovation Agency http://kpai.pl/empinnointeligentne-specjalizacje/

Description: meetings concern selected aspects of commercialization of the results of scientific work. The purpose of the meetings is to disseminate and promote the knowledge of selected aspects of commercialization of scientific results among current and potential innovations brokers from universities in Kujawsko-Pomorskie Region, institutions cooperating with universities in the region and private entities.

Success factors:

- effective target group
- using time-efficient agenda that reflects the meeting goals







- information about the meeting should reach the target groups
- event should not require participation fees or additional costs

Transferability:

- this format is an easy to replicate basic concept
- can be used in universities, institutions cooperating with universities in the region or private entities

3.4. Workshops organised as a part of the Project EmpInno.

Region: Foundation for Lubelskie Development

Target group: representatives of companies and institutions from the food industry

Contact and more information: Foundation for Lubelskie Development

Description: during the workshops, issues related to technology transfer, promotion of innovation and cooperation in the field of research and development within the smart specialisation of the Lublin Province – bio-economy with a special emphasis on the food industry were presented. There were also valuable discussions thanks to which specific recommendations were developed that could be used to improve the implementation of the Regional Innovation Strategy in the food industry.

Success factors:

- effective target group
- using time-efficient
- agenda that reflects the meeting goals

- basic concept
- can be used in universities, institutions cooperating with universities in the region or private entities





4. SME Empowerment tools

The following chapter describes tools that encourage and enable SME's to solve problems, meet customer needs and seize market opportunities at their own initiative – either individually or in groups of various disciplines.

4.1. The Research and Implementation Fund

Region: Kujawsko-Pomorskie Voivodeship

Target group: enterprises, SME's, research entities, universities

Contact and more information: Kujawsko-Pomorskie Innovation Agency http://kpai.pl/fundusz-badan-i-wdrozen/;

Toruń Regional Development Agency <u>https://www.tarr.</u> <u>org.pl/projekty/aktualne/fundusz-badan-i-wdrozen/</u>

Description: the Research and Implementation Fund is a grant project carried out in the Kujawsko-Pomorskie Voivodship concerning the construction and development of an innovation system and a non-returnable financial support program (grants) for enterprises operating in the Kujawsko-Pomorskie Voivodeship in the form of support provided for entities consisting of the following modules:

1) Conducting research and development works by enterprises: conducting research and development works by enterprises that include industrial research and experimental development works or any combination of them. Obtaining support for basic research is excluded.

2) **Patent voucher**: cover the costs related to submitting a patent, utility model or industrial design to the competent authority to obtain protection granted by national, regional, EU or international industrial property protection authorities, as well as patent analysis.

3) **Research Voucher**: grant project implemented in the Kujawsko-Pomorskie Voivodship, concerning the construction and development of an innovation system and a program of non-returnable financial support (subsidies, grants) for the implementation of research and development activities for enterprises in the SMEs of the sector operating in the Kujawsko-Pomorskie Voivodeship.

The goal of The Research and Implementation Fund is to strengthen the competitiveness of enterprises in the Kujawsko-Pomorskie Voivodeship as a result of supporting research and development by enterprises and obtaining protection of industrial property. The planned effect of the project implementation is the increase in the level of cooperation of the enterprise sector with specialized research units and the use of the results of research and development for commercial purposes.

Success factors:

- reaching the right recipients who can actually be interested in the project: effective target group
- clear and transparent rules for the submission of applications
- reliable contact person
- easy access to information on the submission of applications

Transferability:

- the subjects of funding include the purchase of research, implementation research, purchase of laboratory equipment, use of prototypes and R&D enterprises
- the beneficiaries of the Fund are universities, research institutes and companies

4.2. Regional expert work group "food"

Region: Foundation for Lubelskie Development

Target group: representatives of companies and institutions from the food industry

Contact and more information: Foundation for Lubelskie Development

Description: the 1st meeting of Working Group Party took place on 27/04/2018. It was organised by the Foundation for Lubelskie Development as a part of the EmpInno Project. During the meeting, three workshops on the promotion of research and development cooperation of enterprises and universities in the food industry, which took place in 2017, were summarised.





The participants discussed the effective methods and tools for implementing the recommended ideas in the field of R & D in the food industry in the Lubelskie Region. Three ideas have been developed, which will be analysed in detail in terms of their implementation during the following workshops (conducted in accordance with the design thinking methodology):

1) Modern, biodegradable packaging of the socalled "Packaging of the future" - design, production, distribution

2) Creating an intelligent local cooperative system

3) Functional food

Success factors:

- selection of key problems for which proposals of solutions will be worked out in the next stage of the project implementation
- using a time-efficient agenda that reflects the meeting goals

Transferability:

- this format is easy to replicate-basic concept
- can be used in universities, institutions cooperating with universities in the region or private entities

4.3. Promotion WoManager - JOKO -training programme

Region: South Eastern Finland University of Applied Sciences

Target group: woman who are already working as a manager or will do so in the future

Contact and more information: South Eastern Finland University of Applied Sciences

Description: Now and in the future, the leader of the organisation must be more and more capable for the sparring of the hybrid experts, network-wide distributed activities, as well as time and place independent and able to change work.

WoManager-JOKO training supports the development of women leadership, entrepreneurship and digital skills. The measures address current challenges and opportunities. Training program includes 6 faceto-face days, 3 small groups work on solving of the everyday challenges, have information sessions and study trips related to the actual subjects. The training program gives participants new managerial and digital skills, good network and possibility for peer learning.

Success factors:

- an adequate small number of people in the group
- well thought out selection of topics for study trips
- agenda that reflects the meeting's goals

Transferability:

• training concept is transferable after possible tailoring and adapting this to the new country needs.

4.4. Series of development clinics

Region: South Ostrobothnia

Target group: SMEs

Contact and more information: Regional Council of South Ostrobothnia

Description: The internationalisation clinics were organized in 4 sub-regions of South Ostrobothnia. The aim of the clinics were to enhance the competitiveness of SMEs, give them tools to overcome the obstacles of growth (1. how to internationalize their business step by step and 2. how can an SME benefit from digitalization) and create synergy within the companies and organisations attending the clinic. The clinics helped the SMEs to conduct a concrete internationalisation plan, to get familiar with digital tools helping to develop their business and supported the SMEs and supported the SMEs.

Success factors:

• the content must be very concrete and help participants to take concrete actions towards internationalization.

Transferability:

• the clinics can easily be transferred to other regions as the challenges and solutions are similar everywhere





5. Description of transnational delegation trips

The following chapter refers to delegation trips that offer companies the opportunity to acquaint themselves with the target market and to make initial business contacts for co-operation within future projects or continuation of international cooperation on scientific and business issues. Study visits provide the necessary framework and space for a fruitful mixture of communication, learning end experiences that can be used in the future.

5.1. First delegation trip – Seinäjoki

Target group: EmpInno project partners and stakeholders

Contact and more information: Regional Council of South Ostrobothnia

Description: EmpInno partners and stakeholders visited Seinäjoki, Finland on June 15-16 2017. Participants of the event were hosted by the Regional Council of South Ostrobothnia. During the first day participants took part in Farmari exhibition. Key themes for the exhibition are agriculture, development of new concepts in agriculture, forest, energy and local and Finnish food. Farmari is taking place every second summer in different parts of Finland. The exhibition is a professional event which brings professionals together from the field of agriculture and forestry as well as from the food and energy sector. Farmari is able to bring all sectors of the bioeconomy together, meaning food, forestry, energy, water and natural services and at the same time unites above mentioned sectors and their actors with each other for further cooperation. Farmari showcases diversely the agricultural and rural development and presents the latest innovations. EmpInno project had a small stand at the fair together with the Europe Direct Information Center (Cofunded by EU) which is located in Seinäjoki and hosted by the Regional Council of South Ostrobothnia. Participants visited the local food market at the exhibition where Suvi Mäki-Pirilä from Into Seinäjoki, which is a city development company, described their cooperation with SMEs in the region. Then they visited SMEs Kaffiino (coffee roasting factory), Alavuden Öljynpuristamo (Rapseed oil producer) and Pirjon Pakari (bakery) who all described their companies and explained the benefits they have received from working together under the "Food Province" brand. After lunch Enterprise Europe Network organized a matchmaking event for the participants and altogether eight of the visitors attended. All had 2-4 meetings with companies or other organisations. Some participants from the organic sector also visited two stores, Mirtello and Punnitse & Säästä, in Seinäjoki. At the same time others were invited to attend a walk at the exhibition "Recycled nutrients and biogas bring profitability to farms -horse manure as an example". On the second day the participants visited Juustoportti which is a dairy and cheese producer. Juustoportti is a family business that will soon celebrate its 50th anniversary. It has grown from a small cheese farm to an enterprise with about 150 employees. In addition to dairy and cheese-making, Juustoportti has café-restaurants in Jalasjärvi and Mäntsälä as well as the food production company Kasvis Galleria in Kuopio. The vast majority of Juustoportti's dairy products are made in its own dairy close to downtown Jalasjärvi. Its production technology is one of the most modern in Finland.

Success factors: success of this format is based on the creation of an agenda tailored to the needs and area of interest of the people taking part in the event.

Transferability:

- business co-operation within future projects
- continuation of international cooperation on scientific and business issues
- the possibility of using contacts gained during delegation trips

5.2. Second delegation trip - Toruń

Target group: EmpInno project partners and stakeholders

Contact and more information: Marshal Office of the Kujawsko-Pomorskie Voivodeship

Description: On the 14 and 15 October 2018, the Marshal Office of the Kujawsko-Pomorskie Voivodeship organised a delegation trip for EmpInno partners and stakeholders to the Kujawsko Pomorskie Region. The agenda provided a combination of several visits to innovative companies in the region and of participating as experts in the Fifth European Congress of Agribusiness Managers in Łysomice. During the first day, the participants visited a series of companies active in the food industry sector and considered as innovative food producers and/or marketer of high-quality and healthy food products. Beside the possibility to learn





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about specific products or innovative production and marketing processes, EmpInno partners had the chance to exchange visions and ideas of how entrepreneurs can be part of regional innovation transfer and strategies. A practical example of how innovation transfer can be organised between academic institutions and entrepreneurs was given by the University of Science and Technology in Bydgoszcz (UTP). On the second day, EmpInno partners and stakeholders participated in the Fifth European Congress of Agribusiness Managers in Lysomice. The Congress is a two-day event for representatives of various enterprises in plant and animal production business, representatives of the agri-food processing sector and individual farmers. Beside being a stage for current trends in agriculture, production techniques and processes, the Congress also serves as a platform for innovation and knowledge transfer from the scientific community to the agricultural producers and entrepreneurs. Thereby, food security or environmental protection are among the topics that are transferred and discussed. EmpInno partners contributed by presenting good practices of innovative solutions for producers and farms based on the transnational exchange within the EmpInno partnership. The Association, in cooperation with the European Landowners' Organisation, is organizing this event for the fifth time. The European Landowners' Organisation, Brussels, is a unique organisation bringing together national farmers' organisations from the 28 Member States of the European Union and non-EU countries, which represents the interests of landowners, land managers and agricultural businesses at European level.

Success factors:

• success of this format is based on the creation of an agenda tailored to the needs and area of interest of the people taking part in the event.

- business co-operation within future projects
- continuation of international cooperation on scientific and business issues
- the possibility of using contacts gained during delegation trips

Synergy and Empowerment Concept

Based on good practices shared and implemented in the Interreg BSR project EmpInno

Food



