











PARALLEL 42

Strategic cluster partnership for EU smart specialisation Strategy in the Agro Value Chain

List of participants

| Participant No | Participant organisation name | Country |
|-----------------|---|----------|
| 1 (Coordinator) | FEMAC | Spain |
| 2 | AGROCLUSTER | Portugal |
| 3 | DISTRETTO AGROALIMENTARE REGIONALE - D.A.Re. SCRL | Italy |
| 4 | AGROFOOD REGIONAL CLUSTER COVASNA | Romania |

1. - Background Situation and Justification

The smart specialisation concept born as a reaction to EU-US productivity gap, is now a core element of the Cohesion Policy 2014-2020, and has been applied by several EU regions, which are now embarking on the implementation phase of the RIS3. Those national or regional innovation strategies, set priorities in order to build competitive advantage by developing and matching research and innovation own strengths to business needs in order to address emerging opportunities and market developments.

Nevertheless, the implementation of Smarts Strategies differs among the countries in Europe. While in the centre, in some regions of South like in Catalonia and Basque Country, and in North of Europe regions are already really advanced in terms of strategy consolidation, other regions less developed have some difficulties in prioritise investment in research, development and innovation within their territories. The main issues of the less developed regions are the weak cooperation between the R&D institutions and companies and the financing of the strategy, while for the more developed regions the problems are related to the SMEs and the diversified economy. For the less developed regions, the major challenge is the realization of a better connection between businesses and R&D organizations, such as research institutions and universities. Another problem faced by these regions is related to the financing of the strategy, from both public and private resources, a problem which extends to even a more general aspect as the financing of the research-development field. In addition, other key-challenges are the lack of coordinated technology transfer activities (as both public entities and clusters as an example do the same job, causing overlapping, energy scattering and ineffective impacts), low levels of international marketing activities and the lack of governance of the strategy which doesn't rely on well set formal mechanisms to ensure its application and monitoring.

On the other hand, Clusters provide a conceptual framework to describe and analyse important aspects of modern economies. This framework is compatible with the conceptual underpinnings of the S3 approach, which is a programmatic framework to guide policy. Clusters play a major role as facilitators for cooperation among SMEs, and focus on productivity and innovation as key drivers of competitiveness. Clusters also put an accent on fostering regional embedding with the view to capitalise on the advantages of proximity.

In addition, the transfer of innovation and knowledge produced by RTOs (Research and Technological Organisations) and higher education system to the local and regional businesses remains one of the most important gaps and difficulties in terms of Innovation and Growth. It is essential to generate economic exploitation of the R&D results and particularly important in local and regional areas of Smart Specialisation (RIS3) and innovation opportunity.

2. - Objectives and Ambitions

The concept and objectives of the consortium PARALLEL 42 for the mobilisation of Agro Food European Strategic Cluster Partnerships, for smart specialisation investments via cluster cooperation, are founded on the regional integration of European policies. These are the National and regional innovation strategies for smart specialisation (RIS3) and the European Territorial Cooperation (ETC), better known as INTERREG, which is one of the two goals of cohesion policy that provides a framework for the implementation of joint actions and policy exchanges between national, regional and local actors from different Member States and Associates countries. The concept of the consortium is also based on the EIP Agri-Focus Group on Precision Farming, which carried out in 2014 different activities and studies to decide how to organize the data capture and processing to mainstream the application of precision farming for an optimization of inputs and yield.

Smart agriculture and precision farming are taking off, but they could just be the precursors to even greater use of technology in the Agro Food World. Open access to research, meta-analysis, and open publication of data are vital resources for farming precision and nutritional security. The way that farmers, researches and SMEs, interact and communicate will change, and consumers will ask for more safe and healthy products. Regions in Europe have to seek for a long-term sustainable development by improving economic opportunities for farmers and health of consumers.

The main objective addressed by PARALLEL 42 is to boost collaboration and synergies among 4 EU Clusters situated along the Parallel 42 and 45, where the agriculture and food areas represent key sectors to their Smart Specialization Strategy, as well as to the innovative system for a sustainable, smart and competitive development of the agro value chain towards the use and implementation of BIG DATA.

Specific Objectives:

- 1. Initiate mutual knowledge exchange and learning of agro food related clusters from different regions in involving smart specialization Strategies
- 2. Facilitate innovation and gain critical mass through cluster initiatives across 4 regions with strong BIG DATA orientation and high complementarity in the agro value chain
- Initiate trans-regional cluster-to-cluster cooperation in involving use of BIG DATA

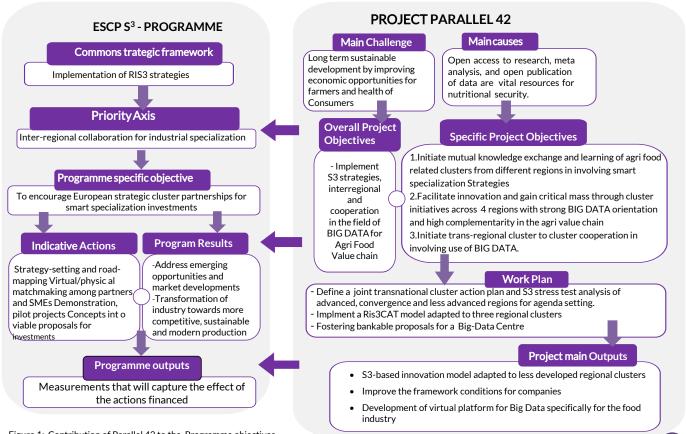


Figure 1: Contribution of Parallel 42 to the Programme objectives

3. – The members of the partnership

The PARALLEL 42 partnership includes four clusters implicated in the Agriculture and Food sectors, and the main Research Centres involved in the Smart Specialization Strategy and the Regional Development Agencies in Charge of the S3 Policy framework.

The table below (see table 1) describes the names and websites of the Partnership.

| | CLUSTER | RESEARCH CENTRE | REGIONAL DEVELOPMENT AGENCY |
|----------|-------------------------------|---|--------------------------------|
| SPAIN | http://www.femac.org | <u>www.udl.cat</u> | www.accio.gencat.cat |
| PORTUGAL | http://agrocluster.pt | http://tagusvalley.pt/pt/servicos/inovlinea- transferencia-de-tecnologia-alimentar | http://www.portugalglobal.pt |
| ITALY | http://www.darepuglia.it | http://www.crea.gov.it/ | http://www.regione.puglia.it/ |
| ROMANIA | http://www.agrofoodcovasna.ro | http://csik.sapientia.ro/hu | http://www.adrcentru.ro |

Table 1: Project Participants websites.

Below are identified the areas of specialization and the aim of each actor involved in the proposal for a better understanding of the synergies and the complementarity of each actor and their research centres.

| FEMAC | DARE | AGROFOOD | AGROCLUSTER |
|--|--|---|--|
| Areas of specialization. Agricultural Productions Means, Agricultural technologies (digital farming, agricultural machinery, IoT in agriculture etc.) Aim: Develop and implement projects that combine the capabilities and vision of cluster companies with sustainable solutions for global agriculture | Areas of specialization: Functional foods, mild technologies and biotechnologies, packaging and convenience, food safety, eco- sustainable process and products Research organizations, universities, SMEs, farmer and industrial associations. Aim: Improve the innovation potential of agri-food sector. | Areas of specialization: Support members in developing their management strategies. Aim: Create a common management strategy; look for solutions to make products and services national and internationally competitive. | Areas of specialization: Agro-Industrial sector. From the agricultural production to the final product. Focused on horticultural and fruit crops, and food transformation. Aim: It focuses on the development of the sector and the promotion of competitiveness. |
| University of Lleida | Consiglio per la ricerca in agricoltura e l'analisi | Sapientia University | Centro de transferência de tecnologia alimentar |
| The University of Lleida is leading a platform for Big Data of agribusiness and it is leading the Catalan Community for Food Production –COTPAdeveloped under the Catalan Smart Specialization –RIS3CAT. | Their competences address to agroindustry, food, fishery and forestry. They deals with remote and proximal sensing ("robot" machines and drones) equipped with several sensors (termal, mulyi and hyper radiometers), elaboration and data management | Sapientia University is The Hungarian University of Transylvania, and is the leading University of the Region in Agro alimentary field. | This Food Technology Transfer Center is a structure to support innovation, focused on applying new technologies, developing new products and innovative techniques in food processing and preservation. |

Table 2: Project Participants specialisation

It is important to underline that all cluster partners are highly committed to the development of the proposed PARALLEL 42, thus guaranteeing the optimal realization of the Project objectives. A cooperation agreement will be signed between the partners upon received approval from the evaluation Committee. The agreement will include details of each partner's financial and human resources' commitment and procedures, responsibilities and tasks for the implementation of various activities within the working Plan.

Some of the partners have previously worked together, like FEMAC and, AGROCLUSTER, who joined the European Strategic Cluster Partnership <u>NATUREEF</u>, and DARe and AGROFOODCOVASNA who participates together in the COSME Excellence Project TRACE-KEY, where FEMAC has a relevant participation too.

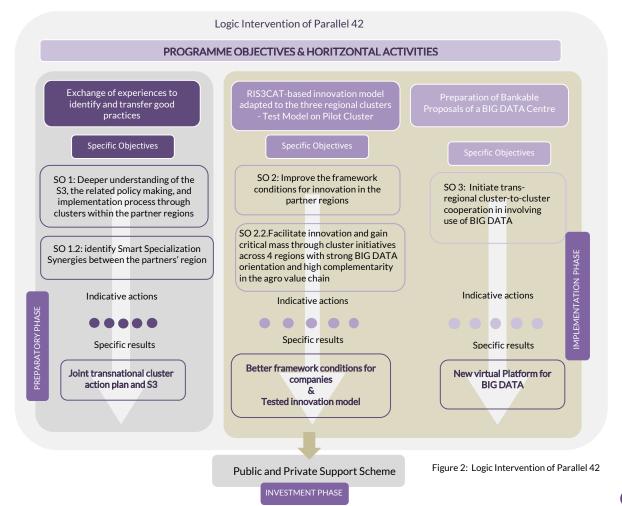
4. - Approach and methodology

PARALLEL 42 has a strong innovation and focus on the agricultural value chain, and its ultimate goal is to encourage European strategic cluster partnerships for smart specialization investments among the regions involved in the Project. The Regional Development Agencies of each of the countries in charge of the Smart Specialization Strategy in the region have shown their interest in supporting the content and activities of PARALLEL 42:

The PARALLEL 42 pursues the following activities:

- Define a joint transnational cluster action plan and S3 stress test analysis of advanced, convergence and less advanced regions for agenda setting.
- Implement a RIS3CAT model adapted to regional clusters in three less developed Regions.
- Fostering Bankable proposals for a BIGDATA Centre.

The Proposed Logic Intervention of PARALLEL 42 contains three main phases, which include a Preparatory phase where we will identify and exchange experiences and synergies among the four regions. In a second Implementation Phase, we will benchmark and test the RIS3CAT pilot model, and we will prepare a potential Bankable BIG DATA Centre interlinked to the four regions. Towards the end of the project, an Investment Plan will be defined to support the investment on new Big Data Infrastructure.



5. - Expected economic and social impact

The core elements of the project to achieve impact include:

| EXPECTED IMPACT | PARALLEL 42 CONTRIBUTION | |
|--|--|--|
| Strengthen interregional collaboration. Linking competences, infrastructures and innovation efforts at European level | Share for business infrastructure | |
| Transformation of Agro Food Value Chain towards more competitive, sustainable and modern production | Transfer and spread of the Catalan Big Data participation model for the Agri-food sector | |
| Foster implementation of Ris3 strategies in less developed participants regions. | RIS3 CAT strategy participation model transfer to the less developed regions of the project partners | |
| Future agreements for cooperation and investment in BIG DATA infrastructure | Identifying, evaluating and Fostering a Bankable proposals for a BIGDATA Centre | |

6. -Contact Information

FEMAC Parc de Gardeny s/nº Edifici H3, Planta Baixa

25003 Lleida (SPAIN) Telf: [0034] 973 224 921 Email: <u>femac@femac.org</u>

Enric Pedrós