



Agri Renaissance

Interreg Europe

AGRIRENAISSANCE PROJECT

Action Plan

2020

Part I – General information

Project: AgriRenaissance

Partner organisation: Agrocluster

Other partner organisations involved (if relevant):

CCDR-Centro

Country: Portugal

NUTS2 region: Centro Region

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Part II – Policy context

- The Action Plan aims to impact:**
- ☒ Investment for Growth and Jobs programme
 - ☐ European Territorial Cooperation programme
 - ☐ Other regional development policy instrument

Name of the policy instrument addressed:

Programa Operacional Regional do Centro 2014-2020

TO1 “Boost research, technological development and innovation”,

IP 1 a “Improvement of R&I infrastructures and capacities for fostering R&I excellence”.

Centro Region Context

The Centro Region of Portugal incorporates 100 municipalities, with an extension area of 28.199,4 km² and a resident population of 2.231.346 people – close to 22% of the country’s population.

The most populous cities of the Centro Region are Coimbra (143.396 inhabitants), Leiria (126.897), Viseu (99.274) and Aveiro (78.450). The Region is composed by several medium-size cities, being the interior of the territory less developed comparing to the coastal strip.

The territory is constituted by the river basins of Douro (Côa), Tejo (Zêzere), Mondego, Vouga, Lis and coastal streams. It is also very diverse in terms of landscape and includes relevant natural areas.

Territorial Cohesion Policy have been decreasing the asymmetries found in the Centro Region. One of the main challenges is the proportional approach to the geographical context, bearing in mind its specificities and territorial diversity. In this policy, a methodology of positive discrimination is being implemented, applying different strategies according to the municipality’s typology:

- 38 municipalities of competitiveness;
- 18 municipalities of transition;
- 44 municipalities of cohesion.

The **regional action plan** for the Centro Region should empower and promote the territorial heterogeneousness, which represents one of the greatest differentiating virtues of the Centro Region of Portugal.

The analysis of the Centro Region is given through the study of different economic indicators (employment, productivity and profitability) and data associated to the international commerce, including the products’ certifications of quality or origin contribution to the internationalisation of Centro’s economy.

At the regional level, some needed elements for a more sustainable industry and economy can be found in all regional priorities for a smarter specialization. It is one of the themes for Centro RIS3 (Research and Innovation Strategies for Smart Specialisation) and “agro-industry” and “Sea” are targeted.

Also, it is to be noted that around 14% of the companies installed in the Centro Region reveal come from the Agri-food sector. The main activities of those companies are “agriculture, animal production, hunting

and related services activities”, related mainly with the primary sector. This last activity has a weight of 79% in the Agri-food sector in the Centro Region.

In terms of employment in the Agri-Food sector, the Agriculture, Forestry and Fisheries absorb 11.6% of the total employment of the Centro Region. It is also to be noticed the existing strong forestry and farming heritage, which performs a huge role in the regional economy. The Centro Region is also marked by small exploitations, integrated in the traditional familiar economy.

Wine, olive oil, dairy products, wood, pulp and cardboard remain important products for the regional production. Nevertheless, the 5 most exported goods according to the national Institute of Statistics (INE) were Fish and crustaceans or molluscs (representing 20% of the total exportations); Beverages, spirits and vinegar (14%); Fruits (11%); Preparations of meat, fish, crustaceans or molluscs (11%) and Preparations of cereals, flour, starch or milk; and, finally, bakery products (11%).

The Centro Region of Portugal has a greater export capacity. Considering the weight of its exports on GDP, we easily realize the dynamism of the Centro Region. The contribution of the Centro Region in national Agri-food's exports shows its relevance, contributing with 9.4%.

The Agri-food sector in the Centro Region is passing by an optimistic and favourable period. The turnover of the agri-food sector has expressed an annual increase of 13.8%. Also, the GVA of “Food Industries” presented a growth of 19%. It is also worthy to refer that “Agricultures, animal production, hunting and related service activities” sub-sector represented the most significant change in terms of GVA as it grew 42% in four years. The GVA of the Agri-food sector contributes with 8.4% for the GVA of the Centro Region.

The regional distribution of total expenditure on innovation shows that companies in the region were among the companies that invest the more in innovation, contributing with 22% for the total expenditure. The Centro Region is nowadays a “Strong – Innovator” and benefits from the collaboration with innovative SMEs, SMEs innovating in house, non-R&D innovation expenditures and firm innovation. In addition, the Centro Region has a good performance in marketing and organizational innovation and product/process innovation.

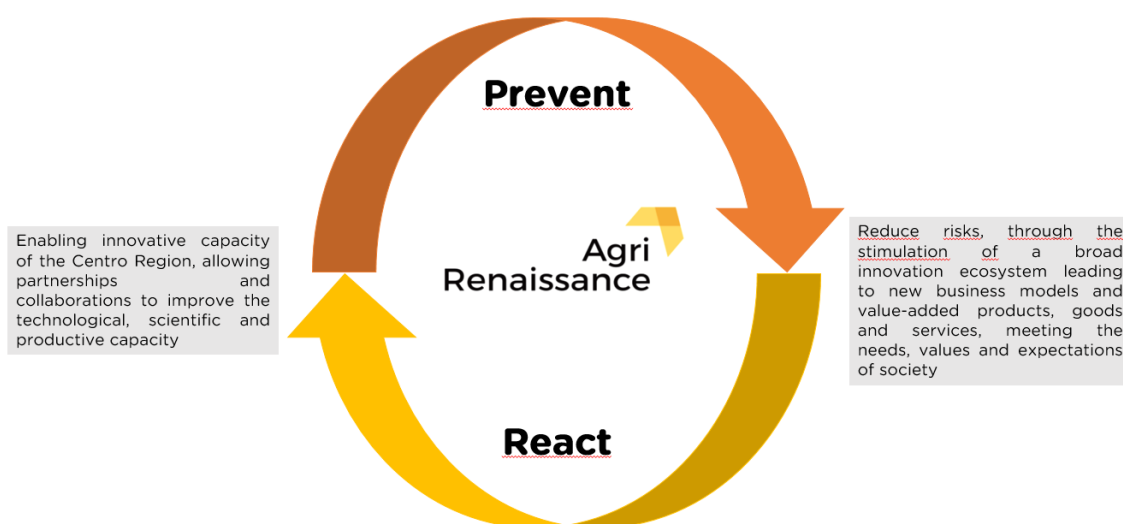
The Centro Region accounts for 19.3% of the total number of national research units and associated laboratories (evaluated by the Foundation for Science and Technology – FCT). With regard to the production of scientific and technological knowledge, the Agrarian Sciences present a weight of 6.7%. The regional stakeholders' diversity ensures the innovative capacity of the Centro Region, allowing partnerships and collaborations to improve the productive fabric.

The presence of research units and laboratories allows companies to have access to high qualified human capital and infrastructures. To better answer the consumers' demands, technological centres, agricultural clusters and business associations play a leading role in boosting projects to promote new opportunities and reduce challenges.

Part III – Details of the Action - ENTREPRENEURIAL DISCOVERY PROCESS – ADAPTING THE CENTRE'S RIS3 FOR THE FUTURE OF THE AGRI-FOOD SECTOR

The following action is based on the SWOT Analysis of Centro Region Agri-food sector. The purpose of the SWOT analysis was to serve, alongside with the best practices, as a basis to identify remaining challenges and define priority areas of intervention that will be addressed in this Action Plan.

The Action Plan is based in two cross-sectional aspects: **Prevent and React**. Mainly, the Action Plan for the Centro Region aims at preventing **negative externalities** – such as international crisis, population growth, reduced biodiversity, summer fires or even pests -, by giving the means to respond to these and other challenges. The objective is also to internalize capacities by creating an integrated approach to stimulate the differentiating domains of the Region, responding to and promoting the installed productive capacity and/or capacity of knowledge and technological production areas.



The Action Plan was developed in collaboration with CCDRC - Comissão de Coordenação e Desenvolvimento Regional do Centro. Our ambition is that the results of the Action defined below can play an important role in the forthcoming policies by impacting the Centre' Smart Specialization Strategy (Centre's RIS3) definition.

The defined Action Plan will impact the RIS3 in two different moments: during its review and during its implementation. It is worthy to mention that this project is running while the RIS3 is actually being reviewed.

To influence the Centre's RIS3 review, firstly we will share information regarding the approach of this Action Plan in a template provided by CCDRC. The Action will produce initial contributions and recommendations to be taken into account during the preparation of the new RIS3 presentation document.

As a second step, in order to generate relevant new insights for the RIS3's implementation, we will organise a set of focus groups, based on the Entrepreneurial Discovery Process methodology, which will focus on specific domains of both, the current and the future RIS3.

The Action will thus allow to promote a deeper critical reflection on the future of the region' specialization, with a view to support defining a regional development strategy that may impact the future of the Agri-food sector, addressing its existing weaknesses and strengths. In this line, the Action will summarize the

discussions, concerns, conclusions and new projects ideas that should have arisen during the exercises. As such, very concrete recommendations on how the implementation of the Centre's RIS3 can be improved in the Agri-food's regional context will be reflected in a new more complete document. This will also include recommendations for future funding calls.

The dynamics of interaction between Agrocluster and CCDRC is crucial to successfully influence the regional strategy. In fact, the Agri-food sector is an area of extreme importance that was already appointed as a thematic area of intervention. Consequently, the Action Plan targets at creating deep knowledge to concentrate cohesive solutions to best respond to the conditions expected in some territories in terms of production factors, RDI and High-Tech farming.

ACTION – ENTREPRENEURIAL DISCOVERY PROCESS FOR THE AGRI-FOOD REGIONAL SECTOR

1- The background

The AgriRenaissance project aims to promote and build bridges with stakeholders, in order to implement actions that contribute to R&I strategies and tackle the regional development. The goals of the planned strategic actions are to boost Research, Development and Innovation activities in the Centro Region, to increase and improve the Agri-food sector capacities and resources.

During the Regional Diagnosis of the Agri-food sector of the Centro Region and local group of stakeholders' meetings and discussions, the following weaknesses regarding "**RDI infrastructures and capacities thematic area**" were perceived:

- Production of scientific and technological knowledge in Agrarian Sciences below the national average.
- Centro Region is below the national average in jobs creation with high and medium-high technology industries.
- Lack of training and qualifications in the sector.
- Lack of advanced technology adoption in the Agri-food supply chain – disinvestment in the sector.

Companies of the Agri-sector of the Centro Region are still not well-prepared for future challenges and opportunities. The proposed action, alongside with the Region' identified strengths, may shape the formula to induce communication and capacitation between stakeholders, in order to reinforce the existing R&I infrastructures and capacities.

The proposed action was designed based on the mobilisation and engagement of stakeholders, in order to promote a unique opportunity for the participants to get involved in regional priority-setting. Hence, it is intended to explore the dynamics of discussion, cooperation and generation of new approaches and solutions.

The planned activities for the Action will trigger a learning effect with consequences in the Centro region, aiming at being an ongoing process. Therefore, the Action will challenge a wide-range of actors from the Agri-food sector for establishing, together, the direction for the regional development.

The inspiration for the present action resulted from a large number of lessons learnt acquired during the AgriRenaissance project. In fact, the AgriRenaissance activities provided the opportunity of learning and experience exchange through the Regions' interaction.

From the interregional experience, the carried activities highlighted the principal lines of guidance for a better specialization in the Agri-Food sector in the Centro Region. Within the interregional project meetings, we retained the following conclusions from the Project activities that served as an inspiration for the present Action Plan:

Study Visit La Rioja (4th September 2018):

- Encouragement of R&I activities through Research and Technological Centers:
- The swift technological developments in the sector demands a constant updating of structures and knowledge. Also, having an Entity that serves as a network of companies, research centers and government institutions plays a crucial role in the innovation ecosystem, promoting competitiveness.

Study Visit Lithuania (20th March 2019):

- Technical support, digital transformation, human resources and identification of training needs are an important factor for the acceleration of innovation linking science with practice, supporting knowledge transfer;
- Efficiency can be achieved by utilizing scale of operations, synergies among different agricultural sectors and applying latest scientific knowledge to improve all production processes;

Study Visit Calabria (14th May 2019):

- The governance of Science, Technology and Innovation area and policy coordination must be adjusted to put in practice a long-term strategy in the Region;
- It is important to operationalize strategies of attraction and retention of top talent in RDI field, as well more expertise and expert involvement in all stages of innovation:

Study Visit Mazovia (18th October 2019):

- A strictly cooperation between students and research and SMEs in fields connected to agro-economic, forestry and rural development promote knowledge transfer, creation of SMEs and disruptive products.

Although the different contributions from the several activities conducted during the project impacted the design of our Action, the good practice HEALTHY RIOJA was selected as a good example for the Centro Region. Therefore, through this good practice we were able to discover new and useful learning experiences from the HEALTHY RIOJA. The Healthy Rioja project aims to implement a healthy food strategy as a tool to boost the food industry through bioeconomy, health, and technology 4.0.

The Healthy Rioja was created due to the opportunity of implementing a regional strategy and promoting collaboration between the different actors – as R&I centers and universities, local and regional administration, public and private BIO, ICT and AGRI companies, society, clusters, consumers and farmers associations – in order to boost the competitiveness and the innovative capacity of La Rioja Innovation System. The project had 2 years of execution – during 2016 and 2017 – and demonstrated its efficiency as a “platform” for debate around the Agri-food sector in La Rioja.

The discussion occurred in the form of “Open Workshops” where it was possible to instigate the cooperation between the different entities. In fact, it was interesting to see the alignment of the regional strategy defined in the RIS3 and La Rioja R&D Plan with agribusiness fabric. In order to do so, the Project Leader (Citic Cita) was the link between the different players, in particular between the Regional

Administration, academic institutions and the productive sector within the La Rioja Innovation System. Through these activities and practices, the project was able to impact La Rioja Government in the promotion and redirection of innovation strategies in the area of Agri-food towards the intelligent specialisation.

Although the different stakeholders' interactions methodology used in the Healthy Rioja project, it was interesting to perceive the importance of a collaboration network towards a well-marked regional sector positioning and its impact in the Innovation strategy.

In general terms, the interregional experience has allowed us to identify a network model that can explore the dynamics of exploitation of critical themes for the region, and make them useful not only for the participating entities, but also for other companies, in a collaboration network.

In coordination with the managing authority of the current Regional Operational Programme of Centro (CCDRC), we expect to influence the Centre's Regional Smart Specialization Strategy, which will be the baseline for the future new regional Operational Programme's implementation. In fact, the AgriRenaissance project has allowed us to realize that a lot of work should still be put in place in order to make the Agri-food' sector future-ready, addressing specific challenges in specific domains. As part of the support scheme for the sector's development, we expect to contribute defining the strategic axes that will guide new R&D+i projects, allowing a better response to the sector's needs.

By organising a set of focus groups, based on the EDP methodology, focused on the Agri-food sector (which is one of the priority domains of Centro RIS3), Agrocluster will create an opportunity for the stakeholders to openly discuss the challenges faced by this sector in the region, showcasing its regional specificities, strengths and opportunities. Knowing that this Entrepreneurial Discovery Process will be followed by CCDRC, which is also responsible for implementing the regional RIS3, the RIS3 technical team will have a unique chance to receive a compilation of new important information that will support the establishment of the transformative agendas for this domain in the next programming period.

Additionally, as a spill-over effect, the identification and detailing of the projects' ideas that will emerge from the focus groups will allow to detect existing bottlenecks regarding the policy instrument that might hamper its successful implementation. Considering it as a positive externality, with this information in hands, stakeholders will thus be able to draw up recommendations for the Managing Authority in order to support designing the funding instruments and calls for the next programming period in a more effective way.

At this stage, it is difficult to predict the recommendations that will be issued and, thus, the real improvements that will be made. Nevertheless, CCDRC expressed its availability and willingness to follow all the tasks foreseen, especially the focus groups.

2- Action

To stimulate the development of scientific and technological knowledge in the region, it is fundamental to allow the further involvement of public and private entities in R&D scope. For that so, it was made clear that it is crucial to reduce existing barriers and promote synergies between SMEs, entrepreneurs and businesses with R&D infrastructures, Experts and Policymakers.

Agrocluster intends to promote the **implementation of the Entrepreneurial Discovery Process (EDP) methodology as a process to support the implementation of an innovation policy**. The concept of the EDP was recognized by the Joint Research Centre as a pillar for the Smart Specialisation Strategies (RIS3). This particular methodology uses a bottom-up approach, where participants from policy, business,

academia, and society at large, engage with each other through focus groups to identify new ideas for specific constraints.

Therefore, the goal is to **promote interaction and knowledge about possible solutions for the main needs of the region**. The EDP methodology allows to select and prioritise technological trajectories, reveal what an industry does best and to map knowledge gaps, in order to co-create innovative and effective approaches and solutions.

The added value of the action will be felt at a medium and long term. The downstream SMEs, Entrepreneurs and Business will become more technologically and scientifically prepared, informed and capacitated, to develop new resilient products and services to better compete at the international scope. On the other hand, a higher stimulation of knowledge transfer through specific and thematically dedicated working groups will decrease the existing trend of disinvestment in research and development of new technologies for the Agri-food sector and increase its attractiveness.

Mobilising and engaging relevant actors from the Agri-food sector will lead to brainstormed solutions. The outcomes will conduct to:

- Systematic identification and effective exploitation of SMEs potentialities.
- Deep knowledge about the industry capacities and needs for external support at R&D activities.
- More knowledge transfer from research/academic centres to SMEs, returning in products with more added value.
- More SMEs involved in R&D projects which may result in new scientific papers.
- More specialized work in Agro-industry sectors.

Therefore, the stimulation of proximity sessions as an incentive of Entrepreneurial discovery processes will help monitoring SMEs capacities, knowledge gaps and bringing them and R&I entities together. This process stimulates companies' current processes into innovative, value-added products and services production that streamline their value chains. This is a proactive measure to promote R&I Infrastructures and capacities in the Region.

2.1. – General Methodology

As mentioned before, the Action Plan is based on the EDP methodology for a “Focus Group” on value chains related to the Agri-food sector in the Centro Region. The idea is to create a space for mutual cohesion, as a process of growth of coherent palette of innovations and activities which are expected to become new economic strengths in the regional context.

Agrocluster will play a strategic role in this field, along with CCDRC. In particular, **Plenary and Parallel Sessions** will be created to stimulate the discussion and brainstorming ideas for creating/leveraging knowledge in specific Agri-food related scientific themes, with regional entities which are more mature at scientific and technological levels.

In this process, the key is to promote engagement from the stakeholders for establishing the direction of the regional development. In order to do so, Agrocluster will identify and invite regional and national experts in various fields which are relevant to discover and create information about potential new activities, identifying potential opportunities that emerge through this interaction, while policymakers assess outcomes and ways to facilitate the realisation of this potential.

The Action will thus include the following tasks:

Task 1 – Preliminary information sharing with CCDRC: Agrocluster will start to fill in a template provided by CCDRC about this Action's approach regarding the Agri-food's domain of specialization. This will support CCDRC during the review of the current RIS3, by helping it to understand the strategic priorities that could better address the regional features of the Agri-food sector, as well as its valuation potential for incorporating knowledge and technology transfer. A first document will thus be produced and shared with CCDRC pointing out possible priority policies (such as basic research, knowledge transfer, entrepreneurship, innovation diffusion, internationalisation, etc.) that may better address the Agri-food' sector development.

Task 2 – Preparation and launch a survey across the regional industry to identify the state of the art in terms of knowledge, used technologies and personnel qualifications and map specific needs in terms of innovation. This reflects our second step to start influencing the implementation of the future Centre's RIS3.

Task 3 – Analysis and treatment of the survey results.

Task 4 – Mobilisation of stakeholders and experts, who will be informed, at this stage, which specific needs were identified in the previous tasks. A round-table discussion about the main outcomes of the survey will also be organised.

Task 5 – Definition and organisation of thematic work groups with stakeholders, based on specific smart specialization domains of both, the current and the future RIS3.

Task 6 – Implementation of a participatory model based on **EDP focus groups** to instigate the exploration of thematic subjects.

The structure of this model will be divided into three distinctive moments:

- 5.1 Organization and preparation of the Plenary and Parallel Sessions: meetings with stakeholders to prepare the event and development of support materials (presentations, instructions for the exercise, work templates for the participants, etc.).
- 5.2 Plenary Sessions: these sessions will occur in the beginning and at the end of the events. Agrocluster will make a presentation to outline the objectives of the Agrirenaissance Project, to contextualize the methodology of the EDP process and CCDRC will make an introduction to the Centro Region RIS3. Scene-setting presentations from experts' speakers will also be made in order to open discussion.
- 5.3 Parallel Sessions: The participants will be divided into separated focus groups according to the thematic work groups defined in Task 5, and therefore Parallel Sessions will be implemented. The intention is to achieve a mix of actors in each focus group:
 - o Civil society and Agri-food business;
 - o Public and private research sectors;
 - o Organisations operating in various parts of the value chain;
 - o Policymakers;
 - o Scientific/Technological perspectives.

The set of sessions aims to discuss and generate ideas based on the constraints and needs felt in the Agri-food sector (according to the survey results) and the debate between business, public and research stakeholders and experts.

Each focus group will have a moderator (member of the Event organization) and rapporteur (participant in the activity). The exercise will comprise a sequence of tasks for helping generating and selecting ideas. The key steps for the exercise will be organised as the following:

- Step 1: Individual Generation of ideas (through a questionnaire filling). The objective is to establish some information about the participants and their ideas and to identify each participant profile, a possible idea to resolve one constraint and the expertise needed to implement the idea.
- Step 2: Presentation of ideas, in order to create and open up the discussion to promote a real creative environment.
- Step 3: Discussion of the individual ideas between the participants of each focus group, in order to create a consolidated list of ideas (or projects), in which similar or complementary proposals will be clustered.

In each parallel session, the participants will discuss and identify the ideas that seem more suitable to develop and implement in the Agri-food sector. The moderator will organise different “sub-ideas groups” or “idea partnerships” groups.

- Step 4: The groups formed in step 3 will discuss and develop the idea further. The moderator will present some topics in which the group must work.
- Step 5: The participants in each “idea-partnerships” will define and write more detailed information about the project, its interest for the Agri-food sector, the criteria for the implementation (if applicable), estimation of the resources and timeline needed and possible funding schemes for its implementation. The work will be conducted under a set of guiding questions made from the moderator.

The expected outputs of this participatory model will be the development and implementation of new projects, which will merge research and business stakeholders and which should be aligned with the local RIS3 strategy.

The final output of the Focus Group will result in projects’ descriptions, characterizing each project idea individually and detailing its possible development. These documents will allow to conclude about existing bottlenecks and difficulties felt by the entrepreneurial agents from the Agri-food sector in the Region that might constraint the projects’ execution in the next period.

Task 7 – Development of a Platform enabling an on-going process: development of an arranged platform (group chat, for example) to enable the continuously stakeholders’ interaction. One of the Participants in this Platform will be the CCDRC, as a key-player of the Project, enabling the continuous monitoring of the process development, instigating topics for debating, having the opportunity of following-up the projects’ execution and accessing crucial information about the entrepreneurial regional tissue.

Task 8 – Recommendations for the next Centre’s RIS3: based on the conclusions produced, a more complete document will be delivered to CCDRC. This document (which may be called “Agri-food’ Smart Specialization Strategy – Recommendations for the Centro’s Region”) will include all the discussions that took place in each working group, as well as all the emerged projects’ ideas (and their bottlenecks) and a set of specific recommendations on how the Centre’s RIS3’s implementation should be improved regarding the Agri-food sector, including recommendations on new funding calls for the next programming period.

This will be indeed a unique chance for the CCDRC’s RIS3 technical team to receive a compilation of new and useful information for revisiting the regional smart specialization strategy of the Centro’s Region and consequently improving the next Regional Operational Programme’s implementation with possible regional thematic agendas and other public policy instruments that could better address the Agri-food’s needs. Since the Action will be auscultating multiple actors of the regional Agri-food sector, it will conceive a valuable insight regarding the concerns, ideas and perspectives of these actors, in order to present recommendations that can improve the effectiveness of processes leading to smart specialization of the Region in the Agri-food domain.

3- Target Group:

SMEs and Entrepreneurs in Centro Region, from different municipalities (NUT III).

4- Players involved

R&I institutions, Policymakers, Universities, Clusters, Incubators dedicated to the Agri-food Sector, such as:

- CCDRC – as the managing authority responsible for the Regional Operational Programme of Centro and for the design and implementation of Centro RIS3.
- R&I Institutions from the Centro Region /or national institutions relevant for the sector with existent skills in the Agri-food sector and specialised training, technological resources, and educational offer:
 - o CATAA – Centro de Apoio Tecnológico Agro-Alimentar
 - o FIPA – Federação das Indústrias Portuguesas Agro-alimentares
 - o INIAV – Instituto Nacional de Investigação Agrária e Veterinária
 - o Inovcluster
 - o Instituto Pedro Nunes
 - o Instituto Politécnico de Castelo Branco
 - o Instituto Politécnico de Coimbra
 - o Instituto Politécnico de Leiria
 - o Instituto Politécnico de Santarém
 - o Instituto Politécnico de Tomar
 - o TagusValley – Parque Tecnológico do Vale do Tejo
 - o Universidade da Beira Interior
 - o Universidade de Aveiro
 - o Universidade de Coimbra

- Other regional policymakers, such as the Intermunicipal Communities (such as CIM Médio Tejo, CIM Oeste, CIM Leiria, CIM Beira Baixa, CIM Viseu Dão Lafões, CIM Aveiro, CIM Beiras e Serra da Estrela)
- Relevant business associations and clusters relevant for the sector: NERSANT and Portugal Foods.

5- Timeframe

Tasks	Duration	Project Semester
Task 1 - Preliminary information sharing	November 2020	Semester 5
Task 2 - Survey	November 2020 – January 2021	Semester 5 and 6
Task 3 - Analysis	February 2021	Semester 6
Task 4 – Mobilisation of stakeholders	March 2021 – April 2021	Semester 6
Task 5 – Organization of thematic Groups	May 2021 - August 2021	Semester 6 and 7
Task 6 - EDP focus groups	September 2021 - December 2021	Semester 7 and 8
Task 7 - Platform	March 2021 - January 2022	Semester 6, 7 and 8
Task 8 – Recommendations for the next Centre's RIS3	December 2021- January 2022	Semester 8

6- Costs

Internal costs of human resources. The measure will not represent a direct cost or expense to the administration involved.

7- Funding Sources

No additional funding sources needed. Internal budget for meetings and events will be used.