

LA RIOJA

PEER REVIEW REPORT



Study Visit & Peer Review Workshop

5-6 September 2018

Authors

Partner 1: La Rioja Government

Partner 2: Ctic Cita

1. EXECUTIVE SUMMARY

The purpose of this report is to present the results of the study visit that took place in La Rioja in the framework of the AgriRenaissance project. The study visit was carried out on September 5 and 6 2018, where several municipalities of La Rioja (Spain) were visited. The present report has been the first one of the five peer reviews that will take place along project, and will be taken as reference to define the work methodology of the next ones.

This peer review has allowed the evaluation of the R&I public policies in La Rioja by the rest of the project partners, obtaining their feedback with a defined methodology that can be extended to the other regions. The main objective of this study visit has been based on these three areas:

1. R&I infrastructure & capacities.
2. R&I public-private collaboration.
3. Hybridization of the agri-food sector with other sectors within and across regions.

In order to publicize La Rioja's agro-food scientific resources, on the first day of the study visit, the Agri food technological center Ctic Cita (Calahorra) and the Technological Center of Mushroom (Autol) were visited. Finally, the facilities of the Institute of Grapevine and Wine Sciences (Logroño) were visited.

On the morning of the second day, several workshops related to the scientific policy of La Rioja were organized. In addition, the main agents involved in the Agrifood Innovation System in La Rioja carried out their presentations.

Finally, on the afternoon of September 6th, the peer review methodology was explained and the peer review exercise was carried out by the consortium partners, giving their point of view about the current situation of the innovation in the agri-food sector in La Rioja.

As a result of these two days of study visit, valuable recommendations and opportunities for improvement have been obtained, which will be taken into account when carrying out the regional action plan.

2. PEER REVIEW METHODOLOGY & RESULTS

2.1. PHASE 1: PREPARATION - STUDY VISIT

In order to better understand the R&I agri-food ecosystem in La Rioja, several study visits were carried out to some of the most important research and technological centers in the region. The main objective was to know firsthand the infrastructures, equipment, as well as research and innovation activities carried out in each of the centers.

✓ TECHNOLOGICAL CENTRE FOR RESEARCH ON MUSHROOMS (CTICH)



CTICH is a research centre for mushroom sector founded in 2003 following the demand of the private sector. The main objective is to centralize the experimentation and research within cultivated mushroom sector, making use of new materials and techniques of cultivation. They provide different services to the sector: training, analytical services, representation of the sector. In the field of R+D+I, they have 4 main research areas: compost production and growing, environment, exotic mushrooms and biotechnology and health.



✓ AGROFOOD TECHNOLOGICAL CENTRE (Ctic Cita)



Ctic Cita is an R&D centre in the agrifood sector that provide solutions based on innovation from the consumer industry to the food industry, with the objective of launching innovative products into the market. The main business units are: technological services, analysis of consumer behaviour, analytical and control services, innovation strategy and project bank, and training.

✓ INSTITUTE OF GRAPEVINE AND WINE SCIENCES (ICVV)



The ICVV is a research centre devoted to scientific investigation on viticulture and oenology. The institute was created by a join agreement of the Government of La Rioja, the Spanish National Research Council and the University of La Rioja. Its main goal is generating new knowledge and technologies in viticulture and oenology based in technological development and innovation. The centre also promotes the transfer of scientific and technological results to the society.



Likewise, due to the lack of time to carry out the *on-site* study visit, the rest of the agents involved in La Rioja R&I ecosystem attended the meeting and presented each center. The main aim was focused on explaining the existing tools and instruments to support innovation and research and the importance of creating synergies with other sectors such as ICT and health in order to increase the competitiveness of the agri-food sector. These institutions are the following:

✓ **ECONOMIC DEVELOPMENT AGENCY OF LA RIOJA (ADER)**



The Economic Development Agency for La Rioja (ADER) is a public organization belonging to the La Rioja Regional Government, attached to the “Regional Ministry” for Economic Development and Innovation, which is responsible for developing policies and economic / industrial promotion.

ADER is an organization committed to promoting business and industry in our Autonomous Community, making them grow in order to reach a position that can rival the most developed areas of Europe.

Its aim is to promote regional economic development, enhancing the creation and consolidation of businesses in La Rioja and creating a suitable environment for companies in La Rioja to prosper.

✓ **CLUSTER OF THE IT AND COMMUNICATION SECTOR OF LA RIOJA (AERTIC)**



The main activities of AERTIC Cluster are related to the ITC SECTOR: Talent and Human Resources, Business Development, Innovation specialization and competitiveness and digital transformation. AERTIC also is involved in some projects related to the Agri-food sector (Agro B.I., Export 4.0, Cultivation 4.0) to show the importance of introducing the ITC technologies in the agri-food industry.

✓ **CENTER FOR BIOMEDICAL RESEARCH OF LA RIOJA (CIBIR)**



CIBIR is a public research center which intends to carry out translational research based on excellence, exemplifying the vocation of progress and improvement in the quality of care of the Public Health System, through the provision of advanced support services that integrate Research activities with healthcare processes that require a high technological demand. The research activity began in 2008 and currently counts with 13 Research Units grouped in 6 strategic areas: Infectious diseases, Oncology, Neurodegenerative diseases, Resistance to antibiotics, Health economics and Care Research.

CIBIR counts with a strategic line “Development of a strategic line of research in food and health” through which has a direct link with the agri-food sector

✓ **CLUSTER FOOD+I**



CLUSTER FOOD + I is a private entity created in 2009, which brings together more than 90 companies, research centers and other entities related to innovation. Its objective is to promote the competitiveness and development of the agri-food sector of the Ebro Valley through the anticipation of business trends, the incorporation of technology and the development of R & D & I solutions close to the market within the European environment.

2.2. PHASE 2. WORKSHOP & DISCUSSION

Below is shown the methodology which will be followed by consortium members to carried out the peer review exercise. The Discussion Logic applied in the Peer Review was the following:

- *The representatives of the hosting region will deliver a presentation. This presentation will focus mainly on the key questions that the peer review exercise should answer. Participants can ask as many questions as they consider necessary for a better understanding of the situation.*
- *All the peers are asked to join one of the discussion tables (one for each question). Ideally, each table should include at least a representative of the hosting region.*
- *Participants at each table are invited to introduce themselves to other people at their table.*
- *The moderator distributes randomly the key questions among the discussion tables.*
- *Participants at each table begin the discussion. They will follow the following iteration: i) the question behind the question; ii) policy suggestions to the region under review; iii) lessons learned.*
- *Each group nominates a rapporteur that will summarize the results of the discussion.*
- *The moderator will summarize the general results obtained in the discussion. Participants can discuss the results obtained, adding additional details to the suggestions and lessons learned.*
- *All participants will fill out the assessment questionnaires and the lessons learned form.*
- *The contact person will compile all this information in order to elaborate the Peer Review Report.*

- **Find the question behind the question (yellow).** Participants must discuss the question assigned in order to better understand the problem faced by the region. The aim is to build a “new question behind the originally posed question” that allows a better understanding of the problem to solve. They will write in down on a yellow post-it note.

- **Policy suggestions (green).** Participants must propose policy suggestions based on their own experience and knowledge. Participants are encouraged to share both positive and negative experiences. They can analyze if these experiences can be applied in the hosting region.

Participants must agree on a list of the 3 most important suggestions. They will write down them on a green post-it note.

- **Lessons learned (pink).** Each participant must reflect on what they have personally learned on the peer review exercise. They can share their lessons with the group. Each group must agree on 3 most relevant lessons learned.

They wrote down them on a pink post-it note.

All the groups share the results of this discussion attaching them to a whiteboard. The moderator will foster the debate among the participants in order to identify additional aspects that they want to mention. Finally, he/she will summarize the results of the discussion tables.

2.2.1 - WORKSHOP & DISCUSSION - QUESTIONS & ANSWERS ON SITE

1. How the R&I infrastructures and capacities can be improved or coordinated to obtain better results in terms of innovation?



YELLOW: FIND THE QUESTION BEHIND THE QUESTION

1. Improve coordination of communication.
2. Insufficient coordination between key players of Innovation actors.
3. Lack of coordination between organisms working in the same field. Projects, etc
4. Insufficient coordination of agro food for new product development.
5. Use the infrastructure in more efficient way.
6. Lack of communication between R&D centers and private sector. No transfer of results.
7. Exploitation of infrastructures in new areas and products (for example fish).
8. No involvement and financial support from private sector in the development of infrastructures.



GREEN: POLICY SUGGESTIONS

1. Storytelling video.
2. Synchronization of current projects (regional, national and international) and penetration of synergies between projects and actors.
3. Pitching sessions with SMEs.
4. Regional living Lab.
5. Open platforms to share good practices in management.
6. Create a repository for gathering all the information regarding capacities, infrastructures, in order to find quickly synergies.
7. Identified challenge — Cross-cluster and cross sectorial & infrastructural solutions
8. Empower cluster to collect more feedback from SMEs.
9. Organization of meeting (commissions) in different places/ partners .
10. Cross-sectorial and rules question synergies. (multiplying effects about €)
11. Supra-regional cooperation. Study visit (integration) more complementary.



PINK: LESSONS LEARNED

1. Specialization in specific sectors is a bonus for encourage R&D in the region.
2. Regional Government is financing key players (clusters, research technological centers) to implement strategies.
3. “Circular” management and pacification in public administration at key players.
4. “Open doors” to regional government.
5. Informal meetings with key players of innovation system.

2. How can La Rioja modify its legal and economic framework and its policies to increase the collaboration among public and private players?



YELLOW: FIND THE QUESTION BEHIND THE QUESTION

1. Management between center is not well coordinated.
2. Timing in private and public sector is not always the same. High bureaucracy.
3. A lot of regulation.
4. Fragments system, a lot of actors.



GREEN: POLICY SUGGESTIONS

1. Simplify administrative procedures.
2. Mentoring, coaching & case of success. Examples to motivate.
3. Centralizations of the common functions (finances, legislation, communication, logistic..) May help to reach cost efficiency.
4. New models for cooperation based on sea-star model networking. (Not spider)
5. Create agreements between the involved partners in R&D in the management and exploitation of results.



PINK: LESSONS LEARNED

1. ICVV management system between 3 different national and regional institutions.
2. Identify the key actors of collaboration.
3. Collaboration tools with high effectiveness form public-private collaboration.

3. How can the hybridization with other sectors or the integration of Key Enabling Technologies (Biotechnology, Nanotechnology, ICT) be fostered?



YELLOW: FIND THE QUESTION BEHIND THE QUESTION

1. SMEs are concerned about the present moment and don't look for innovation in the long term.
2. Need for creating a demand from public sector.
3. Not enough knowledge of the trends.
4. No spin-off from universities.



GREEN: POLICY SUGGESTIONS

1. Boosting international projects and promoting investment in (...)
2. Pilot projects as testing field of new actions.
3. Horizontal, vertical collaboration and cocreation approach.
4. Application of ICT/DIGITAL solutions in agrofood. KET's
5. Bottom-up approach (ideas from companies to research).
6. Conferences made specifically for specific sector/companies with similar problems. Invite foreign expert to talk about the trends.
7. Follow the Basque model in R&I network. Under the same legal structure different center with same research fields and objectives, to make more efficient.
8. Tools for SMEs to bring them closer ITC opportunities of KETS.
9. Business innovation Ecosystems inspirations from other regions and countries.
10. Best practices of the European Union.
11. EU funds (H2020, COSME...)
12. Spending ¿cross-selected? Cooperation agro food (mushroom + health for cancer treatment)
13. Star-up booster in traditional and hi-tech sector.
14. Co creation.



PINK: LESSONS LEARNT

1. Already establishment collaboration between science, public, administration and cluster.
2. Incentives to participate in European projects. Example: ADER grants.
3. Inspiring examples of food & health cooperation cluster and business support organizations.

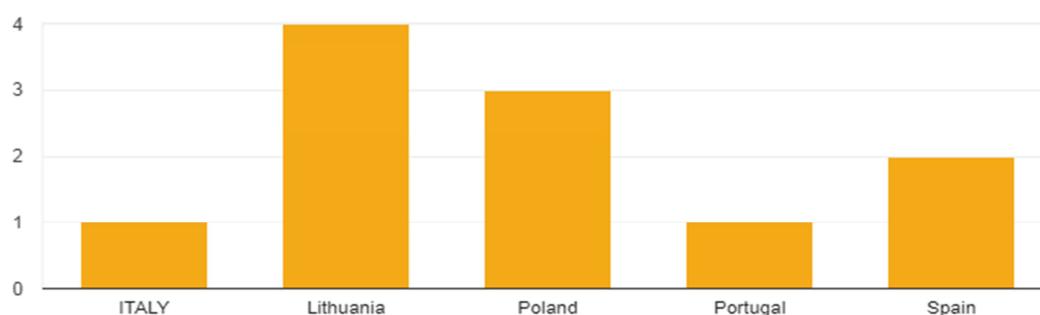
2.2.2 - WORKSHOP & DISCUSSION – ON LINE SURVEY & COMMENTS

In order to have a deeper review of the La Rioja policies, a survey was made to the project partners. They had to assess specific issues about the three objectives of the project in reference to La Rioja. The forms were sent on September 10nd with 2 weeks to answer. The response rate was high, with 11 surrendered surveys, involving all the regions of the project. The option to provide observations or comments to each of the objectives of the project was also given.

Total Answers distributed by countries

COUNTRY

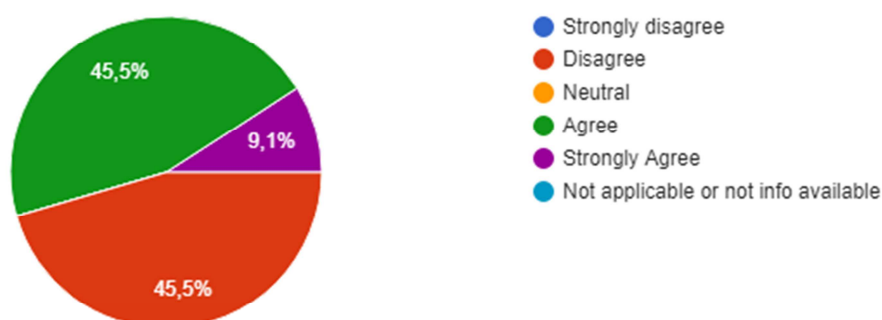
11 respuestas



Objective 1. R&I infrastructures and capacities: questions & answers

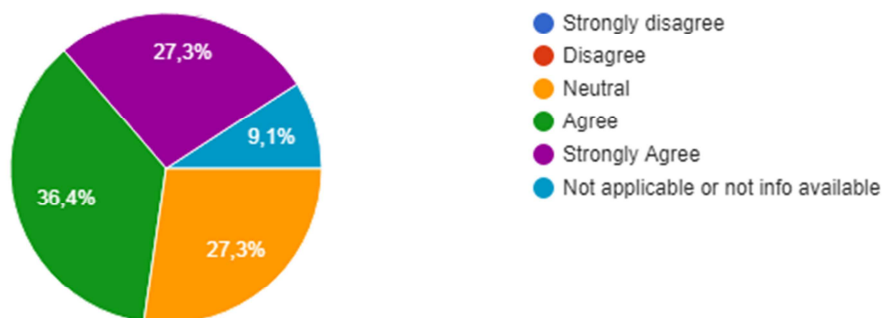
1.1 The regional R&I infrastructures and capacities are efficiently managed, obtaining the maximum available performance

11 respuestas



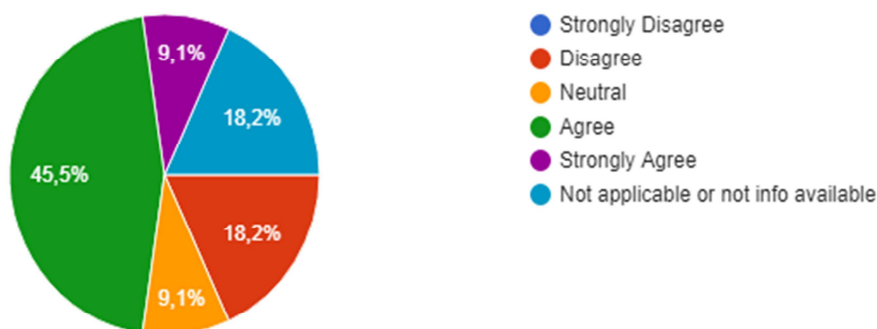
1.2 The technical and scientific resources available are enough according to the socioeconomic and scientific profile of the region

11 respuestas



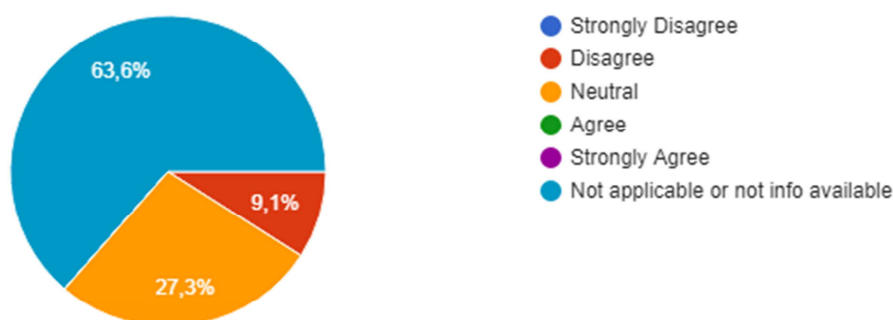
1.3 The mechanisms to incorporate investigators in the R&D&I centres are adapted to the necessities of the region

11 respuestas



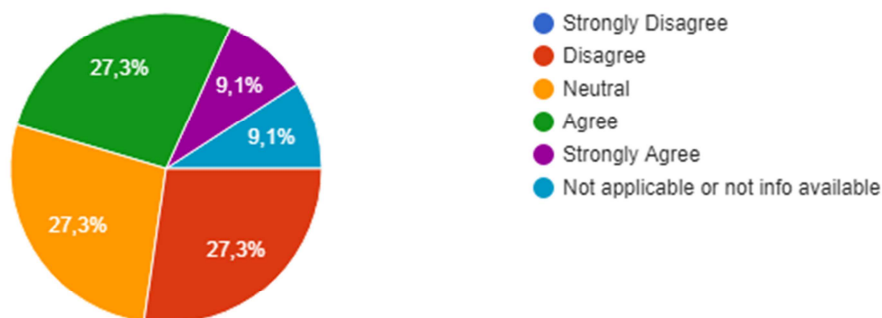
1.4 A precise formation and a solid professional career plan are available for the investigators

11 respuestas



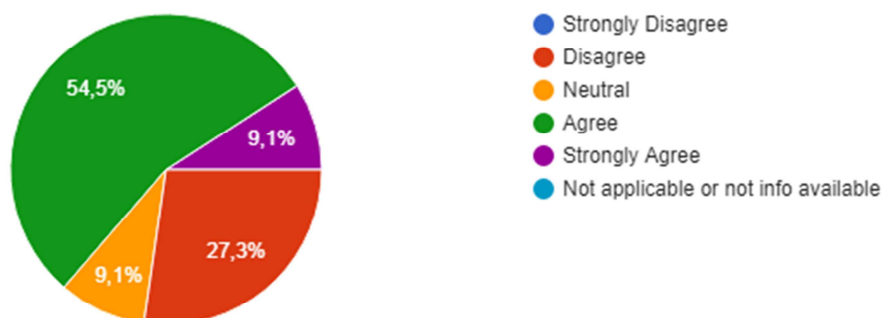
1.5 The coordination among public and private agents to use the R&I infrastructures and capacities is optimal.

11 respuestas



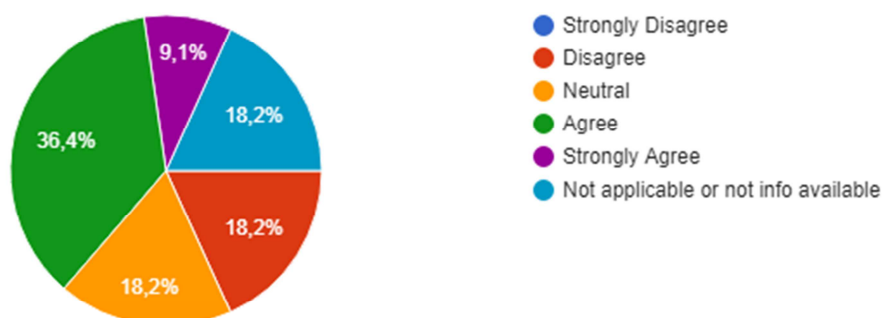
1.6 The R&I public policy mix covers satisfactory the management and dynamization of the infrastructures and capacities

11 respuestas



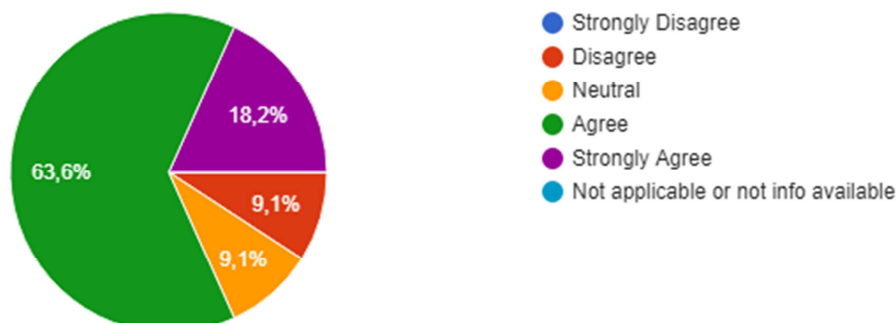
1.7 The public funding available is enough to cover the necessities of R&I infrastructures and capacities of the Food Sector

11 respuestas



1.8 The Technology Centres are participating actively in the technology implementation in the Food Sector

11 respuestas



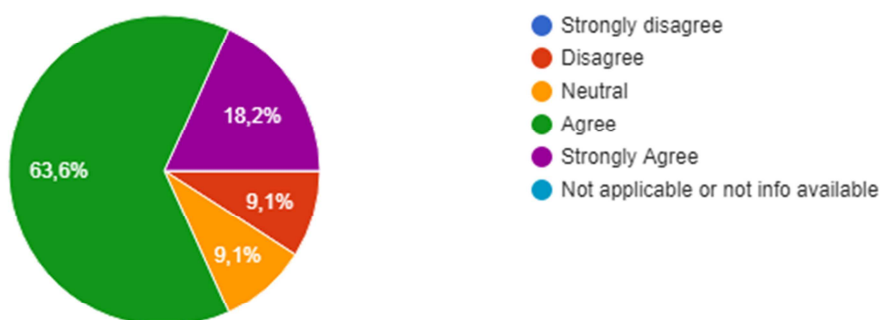
Objective 1. R&I infrastructures and capacities: comments

- Study visit confirmed that region La Rioja has good quality R&I infrastructures and capacities. You have modern laboratories, working in key areas for the regional agri-food sector. How we could see during the study visit laboratories working and their work is dependent on crop seasonality. Maybe you should find some solution which help use laboratories also during the inter-crop season.
- For a better cooperation, it would be useful to create a common R&I demand and supply platform.
- There is still a long and desirable way to go concerning the relation in between the regional R&I infrastructures and capacities and the local enterprises.
- I am deeply impressed with solutions in the field of R & I Infrastructures and capacities taken by the Government of La Rioja.
- R&I Infrastructures and capacities are wisely designed using collaborative approach that includes bottom-up needs (business), top-down activities (regional government) and inclusion of scientific institutions and clusters in joint planning and coordination.
- The laboratory research and Institute didn't work with intense mechanism system, but the quality and levels of research is high and the specialization of the production is excellent.
- Suggestion is to implement more different pilot projects.
- The R&I infrastructure at La Rioja region is developed quite well. Activities are being implemented according to the needs of La Rioja region. It seems to be well planned and well organized.
- In my opinion, La Rioja has many capacities in the context of the agri food sector, mainly in wine and vegetables and there are many important and new infrastructures created for this purpose, from research centers to technological centers. But, on the other hand, I believe that the companies that there are traditional SMEs, with a more short-term vision of production instead of investing in new infrastructures or new equipment for the future. This is difficult without the correct training (Industry 4.0, new technologies, new processes ...) of the personnel that works in the companies and without the economic / administrative support of the public entities.
- It would be interesting to find a solution for technology centers, companies to use public scientific infrastructures in a continuous, agile and beneficial for all parties. For example, collaboration agreements, public prices for the use of infrastructures or a legal personality that groups La Rioja research and government centers.

Objective 2. R&I public-private collaboration: questions & answers

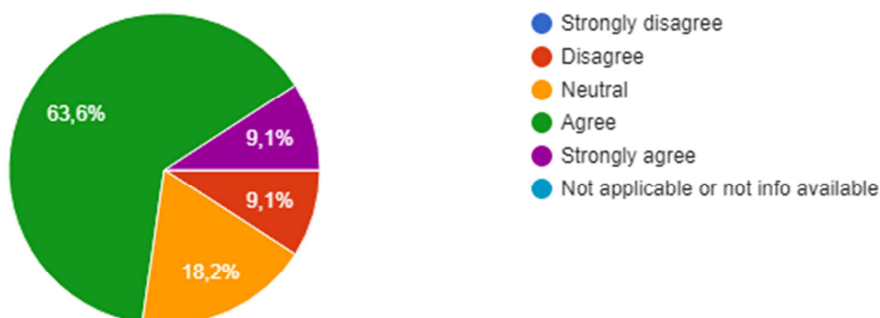
2.1 The governance structure of the La Rioja R&I System integrates all the relevant stakeholders in an adequate manner

11 respuestas



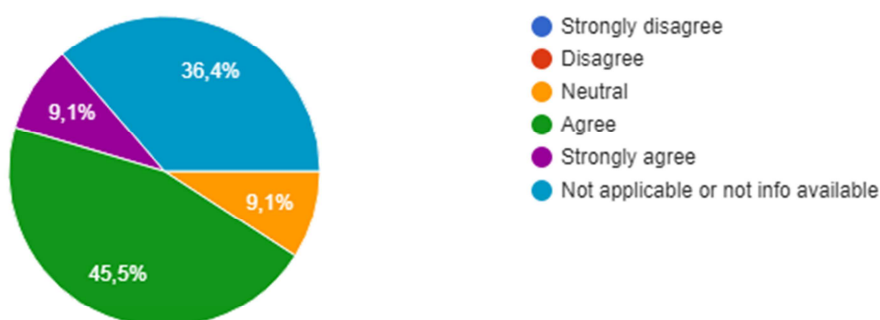
2.2 The collaboration among public and private Agro-Food Technology Centres is efficient

11 respuestas



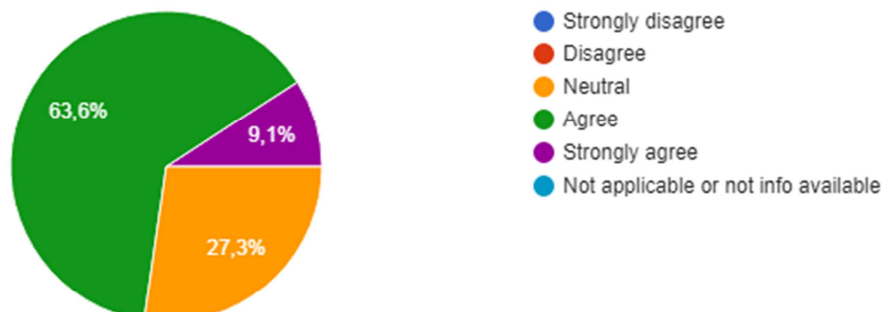
2.3 The R&I policy mix planning is done in coordination with the main stakeholders

11 respuestas



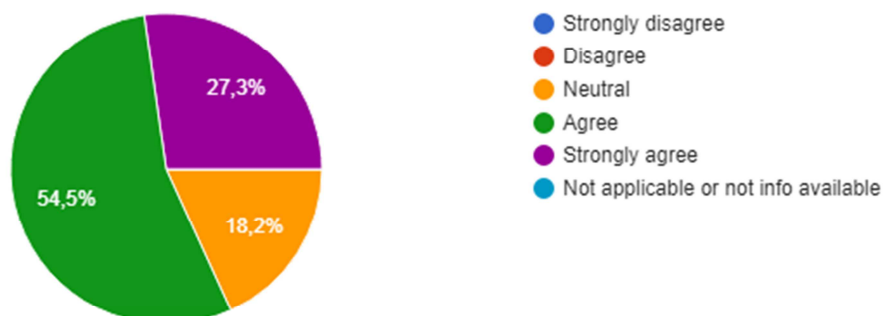
2.4 The cluster policy encourages the collaboration among public and private players in the Food Sector

11 respuestas



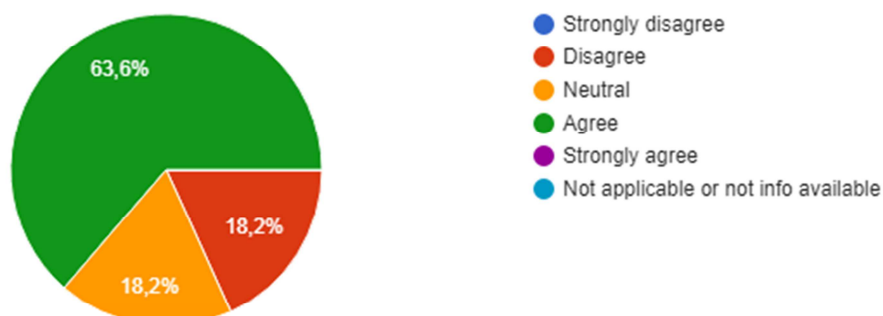
2.5 Clusters are one of the main protagonists in fostering the innovation in the enterprises

11 respuestas



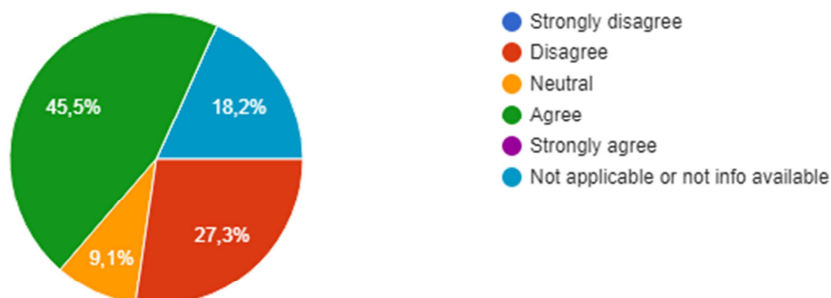
2.6 There are enough tools and mechanisms to facilitate the collaboration among Public Administration, Universities and private R&D Centres.

11 respuestas



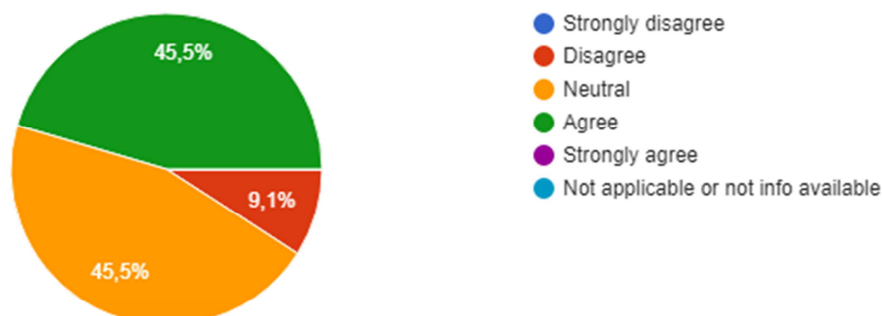
2.7 The internationalisation policies planned and executed to foster the scientific collaboration are adequate

11 respuestas



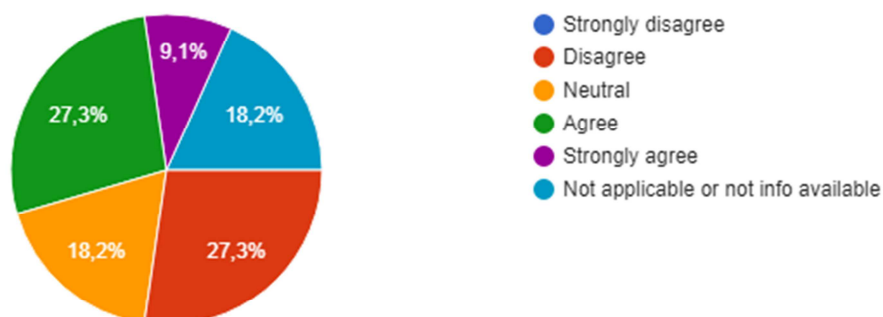
2.8 The funding tools (policy instruments) are efficient in terms of fostering the collaboration between the public and private sector

11 respuestas



2.9 The exiting tools to promote the collaboration with players of other regions are adequate

11 respuestas



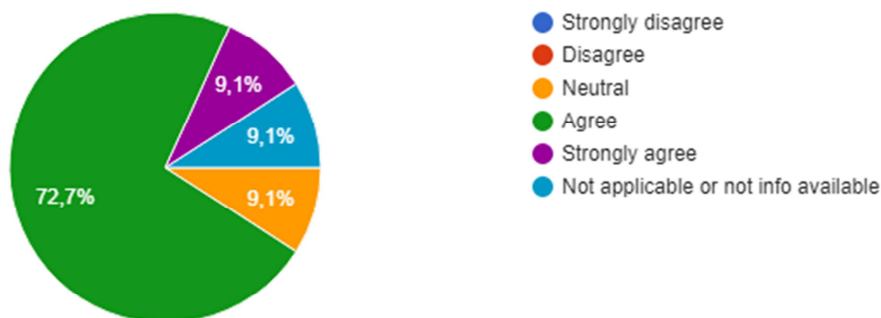
Objective 2. R&I public-private collaboration: comments

- We could see that region La Rioja put pressure on R&I public-private collaboration and your agri-food cluster seems acting very dynamically.
- For a better communication, it would be useful to create a tool for communicational issues between researchers and producers in agri- food sector.
- There is already some public -private collaboration but we fell that there are still some obstacles to this collaboration.
- The issue of R&I public-private collaboration is an important element in the implementation of innovation in the region. Each action in this area contributes to the implementation of innovation and therefore the greater the level of cooperation, the better for the region.
- La Rioja has established an inspiring & inclusive innovation ecosystem that can serve as an example of R&I public-private collaboration.
- the governance structure of the La Rioja R&I between public and private is fragmented but with strong public influence in private sector, the trust by private collaboration i mediate by cooperation system, the quality of the cooperation is a good level.
- The governance of the R&I structure of La Rioja is organized in good way with involvement of private and public structures-entities. The funding tools policy could be more efficient.
- In general terms, I think that public private collaboration is good in the region. Stakeholders are well represented throughout the value chain in the agrifood sector and their opinions are taken into account.
- It is necessary to boost the internationalization of the Rioja Innovation System. It would be interesting to close technological agreements with other administrations, technology centers and companies from outside Spain and Europe. It would also be interesting to review the financing instruments of the collaborative projects in La Rioja, in order to prioritize investment in R & D projects in the agri-food sector. Finally, it would be good to cluster resource management among R & D centers in the sector, in order to increase the capacity to face new scientific and technological challenges.

**Objective 3. Hybridization of the agri-food sector with other sector within and across regions:
questions & answers**

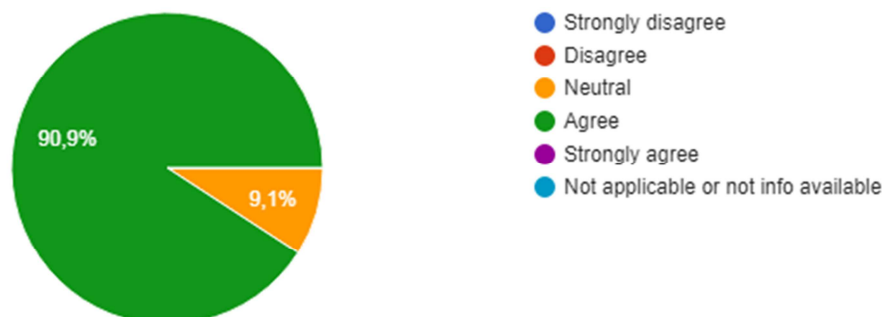
3.1 The main players are being involved in the process of technology implementation

11 respuestas



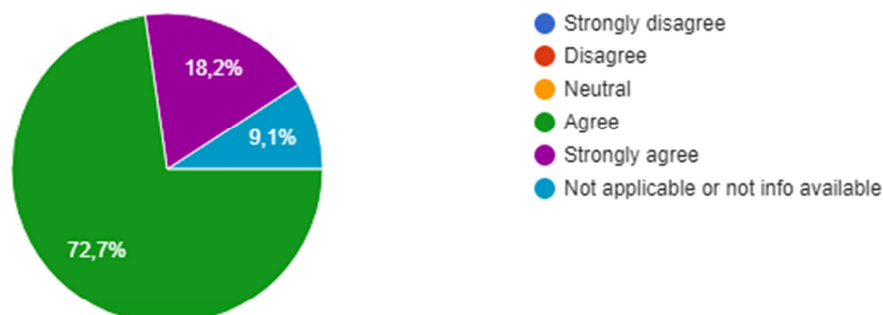
3.2 The policy mix supports the identification of innovation opportunities at the interface between different disciplines, industries and sectors

11 respuestas



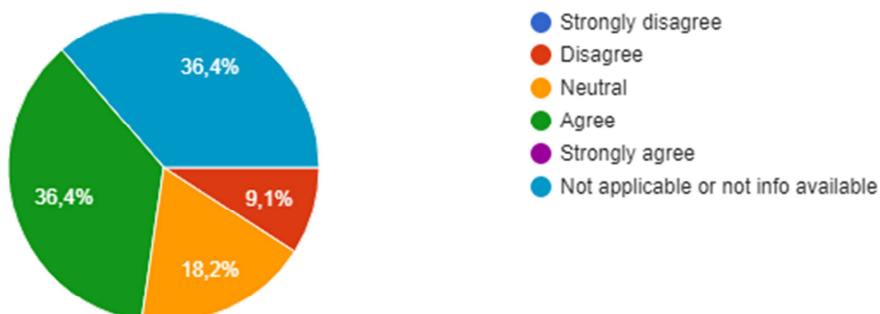
3.3 The Key Enabling Technologies (KET) identified in the S3 are adequate to foster the collaboration between the...d Sector and other regional industries

11 respuestas



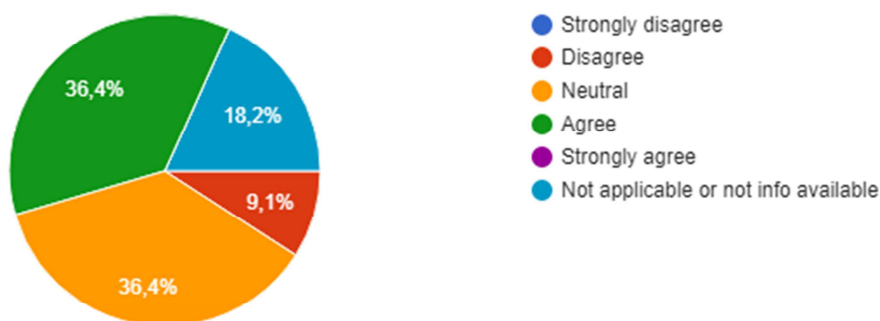
3.4 The strategy to implement the ITC in the Food Sector is clear and adequate

11 respuestas



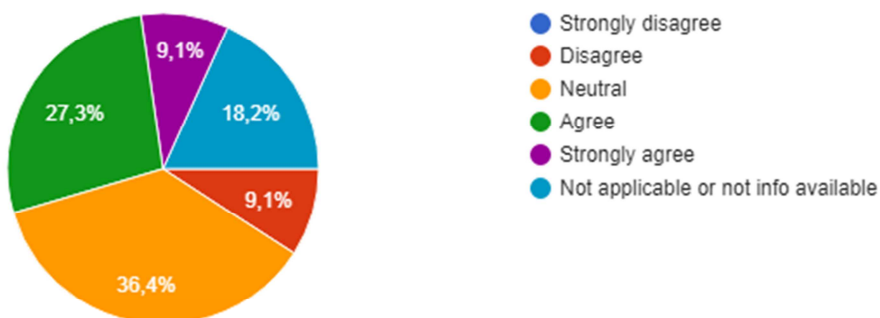
3.5 The enterprises have public funding instruments that are adequate to promote the development of solid R&D projects

11 respuestas



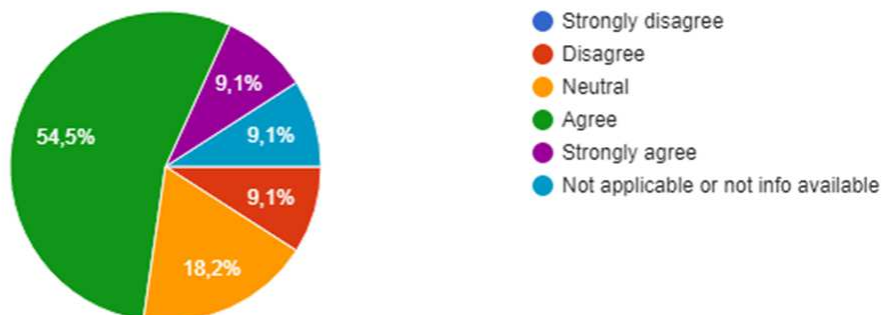
3.6 The Food Sector has enough and adequate human capital to lead the technology change

11 respuestas



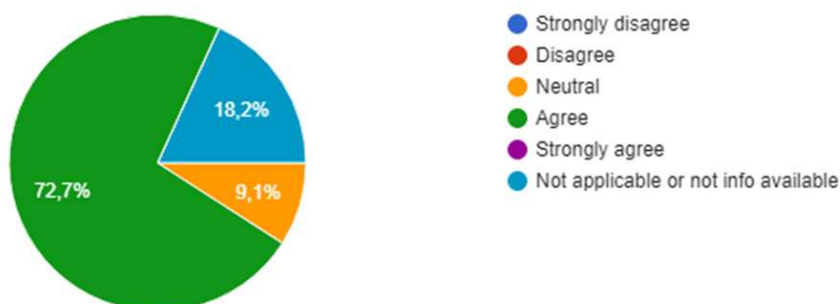
3.7 The policy mix supports adequately cross clustering

11 respuestas



3.8 The policy mix and policy instruments foster the development of pilot and/or driving projects among different sectors.

11 respuestas



***Objective 3. Hybridization of the agri-food sector with other sector within and across regions:
comments***

- Advanced Agri-Food Sector couldn't exist without cooperation with others sector. You have many examples of this cooperation but of course you can still search for new way, new products or new industry, which can cross with agri-food sector.
- The creation of a common data exchange system possibly would improve regional and interregional cooperation between research companies and possibly would reduce the need for funding, since there would be no need to duplicate research
- The Hybridization is fundamental to a sustainable growth of the Agri-food sector; however this process is still in the early steps.
- The La Rioja Government has great potential for introducing hybridization of the Agri-Food Sector with other sector within and across regions
- La Rioja has already put into practice the intercluster and cross-sectorial collaboration which together with a co-creating and co-deciding approach of the regional government is a great basis to boost and speed up the region's innovativeness, competitiveness and holistic development.
- Hybridization of Agri-food is natural with the eno-turistic vocation of the Region de La Rjoja, the S3 is major component for a integration and hybriwaste to circular economy.
- Inspiring examples of food & health cooperation, clusters and business support organizations.
- The main players of the Agri-Food sector are interrelated with other sectors of the region. Some instruments of the policy foster the development of certain projects.
- I think there is a connection between the different research centers, universities and technological centers that have allowed them to participate in joint R&D projects. Although some common efforts in have been taken in Industry 4.0 and also in the application of ICTs in the food industry, more efforts need to be done. As well as to find common points with other sectors that can suppose a common nexus of participation
- It would be interesting to have a more sectorial approach within public R & D policies, due to its importance within the socioeconomic context. The implementation of biotechnology and ICT is on the right track, but there is still a long way to go in its total integration in the agricultural sector and the food industry. The participation in European projects, the incorporation of qualified personnel, the execution of pilot projects and the regulated training of high value are fields to work.

2.2.3 - WORKSHOP & DISCUSSION - LESSONS LEARNED-ON LINE SURVEY & COMMENTS

A document was distributed between the beneficiaries after the meeting in La Rioja in order to identify good practices, ideas and suggestions to elaborate the future action plan.

The questionnaire invites to reflection on the lessons learned during the visit to La Rioja and the possible application in the policy instruments of each of the participating regions. The responses of the different partners are shown below.

POLICY 1

LESSON LEARNT	ACTION TO IMPLEMENT IN YOUR POLICY 1
In the Technology Centre of Mushrooms, there is a clear and consolidated knowledge of the needs of the Agrifood sector related to mushroom production. They are very well-articulated and in line with the private sector of companies. A very practical and pragmatic vision of the support that an R&I technological Center should provide to the private companies.	Good strategies of collaboration within the Technology Centre and the private sector, looking to provide answers to the identified problems.
Good practice is specialization in specific sectors, which are considered as the key ones in the region. When you know your strengths, you can special attention to its effectiveness, research and development. Good examples are, modern research centers, such as those for mushroom and wine products, are created. It helps to raise the quality of production, expand the competitiveness and capabilities of the local businesses.	Initiate the professional, national level analysis of food sector in order to purposefully stimulate the R&D in the most perspective areas.
Specialization in specific sectors, which are considered as the key ones in the region, is a very good practice. When you know your strengths, you can special attention to its effectiveness, research and development. Thanks to this, modern research centres, such as those for mushroom and wine products, are created. It helps to raise the quality of production, expand the competitiveness and capabilities of the local businesses.	Initiate the professional, national level analysis of food sector in order to purposefully stimulate the R&D in the most perspective areas.
One of the most important issues is a common interest in development of innovations between private and public sectors. The best way to the spreading of innovations is equal involvement of private and public sectors. The private sector should be interested in partnership with the researchers.	In the policy there could be established some support measures, which would foster public and private cooperation. Such measures should be properly discussed with the main stakeholders in order to construct these measures in the best way.

<p>A very important issue is the broad cooperation on the entrepreneur's line - research centers. The lack of such cooperation is an impediment to progress on the path to development and makes companies that do not use the possibilities of research centers, may be left behind and fall out of the market. The lack of products in which the latest innovations-based solutions can be used deprives entrepreneurs of an element of competitiveness in the offers of their products. On the other hand, research centers that do not know the needs of entrepreneurs and markets can not develop their research work to provide innovative solutions or help entrepreneurs on the way to obtain these needed innovations.</p> <p>Public / regional administration can play an active role as a liaison, which will enable the development of cooperation on the entrepreneur's line - research centers. Such an action may bring many benefits, especially to a company classified as an SME sector, which often has no facilities and opportunities to cooperate with research centers. In addition, very often companies from the SME sector are not aware of the possibility of such cooperation and do not know the offer of research centers. Public / regional administration activities should focus on creating / raising awareness of the possibilities for entrepreneurs to cooperate with research and development centers. The focus on understanding the needs of entrepreneurs and the market, while engaging the possibilities of action in research centers of research and development should be treated as one of the pillars of regional development.</p>	<p>Creating conditions / platforms for wide cooperation between entrepreneurs and research centers. Public / regional administration as a connector that creates conditions for the interpenetration of these two environments, while acting as an observer. In addition, public / regional administration can collect information that will allow the creation of development policies in the region, based on emerging trends and changes in the field of technology development or market demand.</p>
<p>The possibility to create as much as possible opportunities for the participants of the regional innovation system to exchange experiences and enable them to provide expert support in their activities is an important issue in increasing the region's innovativeness. The regional administration should play an important role in the process of exchange experience and improvement of knowledge and skills. This particularly applies to the involvement of entrepreneurs from the SME sector, which often does not have sufficient resources and infrastructure to conduct research work independently. Local self-government should also emphasize the crucial role of ICT in the process of increasing the innovation of the agri-food sector in the region. The use of modern technological solutions is able to increase the competitive advantage of local producers or reduce the distance between them and competition from better developed regions.</p>	<p>Strengthening instruments to support local market should be sought, using the synergy and complementarity of individual actors influencing the diffusion of knowledge and innovation in the agri-food sector. The cooperation should involve participants from various sectors of the economy and knowledge fields and create the opportunity to continue such cooperation in the long term.</p> <p>The voivodship self-government should seek and support the possibilities of intensifying cooperation between various entities belonging to the local innovation ecosystem in order to develop strategies for promoting and implementing innovative solutions in the agri-food sector in the region. This applies in particular to the involvement of entrepreneurs from the SME sector, who often do not have sufficient resources and infrastructure to carry out research work independently. Local self-government should also emphasize the key role of ICT in the process of increasing the innovation of the agri-food sector in the region.</p>

POLICY 2

LESSON LEARNT 2	ACTION TO IMPLEMENT IN YOUR POLICY 2
CTIC-CITA Agrifood Technological Center is well equipped with superior technology concerning the treatment of food by radiation, which we consider to be an alternative in food preservation with great potential in the future. Through various pilot tests will allow validating an option currently prohibited, due to legislative reasons.	This technology should be used to do several Pilot Tests in order to validate this type of food preservation, so it can change the policy regarding the use of radiation in food preservation.
The successful collaboration between public and private sector in Food Industry R&D creates great results and helps to grow the competitiveness of the sector faster and more effectively	Stimulate the private and public sectors collaboration in Food industry. Facilitate their communication, find the ways to reduce the administrative burden.
The successful collaboration between public and private sector in Food Industry R&D creates great results and helps to grow the competitiveness of the sector faster and more effectively	Stimulate the private and public sectors collaboration in Food industry. Facilitate their communication, find the ways to reduce the administrative burden.
It is very important that business and researchers could find each other in the easiest and shortest way. Also it is important that business would be informed about the possibilities of researches. For a better cooperation, it would be useful to create a common R&I demand and supply platform.	Improvement of communication between researchers and business could be done through the creation of a common R&I demand and supply platform.
It is very important to create an innovation system that will be based on a broad participation of participants representing all interested entities and industries. At the same time, the entire system should be described in detail so that each participant has a strictly designated role. The system should have control and monitoring mechanisms so that you can check the correctness and effectiveness of its operation at any time. The system should take into account the possibility of cooperation between various sectors and have incentives to develop such cooperation, also at the supra-regional level. Reviews of the innovation development system should focus on correcting its shape, so as to best capture the existing needs and trends in the development of technology and the needs associated with innovation in all areas, including the social level.	Control of the innovation system, aimed at reviewing its participants and the shape and areas that have been identified as crucial. Checking mechanisms of cooperation between sectors, including trans-regional cooperation. Checking the areas of activity introduced in the innovation system with development trends, which are beginning to play an increasingly larger role and are considered long-term perspective.
Emphasizing pro-ecological solutions and health-safe for inhabitants of the region may positively contribute to the promotion of research conducted in the region, as well as to promote local products as good for health and environmentally friendly. The promotion of research conducted in the region in the agri-food sector and the search for solutions that can be applied in the economy and strengthening cooperation between the scientific community and local food producers, will allow increasing the innovation of the products	Designing an innovation system whose purpose will be an efficient knowledge distribution system for its transformation into specific economic goals. Local self-government should strive to undertake activities aimed at networking scientific units and local producers. Local self-government should also promote and encourage the use of scientific research results, referring to such values as healthy lifestyle and nutrition, new or better environment-friendly solutions.

POLICY 3

LESSON LEARNT 3	ACTION TO IMPLEMENT IN YOUR POLICY 3
Collaboration bet ween different sectors (food & health).	To promote cooperation (public & private), especially in different sectors.
The results of R&D should reach as much target audience as possible, so the right communication is the key.	Mentoring, coaching and showcase of examples to motivate the entrepreneurs and farmers to develop and innovate their businesses. Organization of the international conferences and meetings for sharing the good practices and hearing information about the trends from external experts.
There are a lot of research centers and institutions, but the communication and sharing of the information is not sufficient. It could occur that the same research would be done in a few different centers. It would be a waste of resources. The creation of a common data exchange system would possibly improve regional and interregional cooperation between research companies and would possibly reduce the need for funding, since there would be no need to duplicate research.	Create one center coordinating other research centers in order to coordinate all researchers and resources (financial, technical and human).
Another important issue is the creation of infrastructure that can be used as a place for creating new ideas and meetings and exchanging ideas. At the same time, the existing infrastructure should be used as effectively as possible and available to anyone interested in creating new solutions. At the same time, one should also take care of financing mechanisms to undertake that have an innovative potential, so as to enable the implementation of emerging ideas. The mechanism of financing innovative activities from public funds should also be supported by the involvement of experts and capital groups. At the same time, the evaluation mechanisms should take into account the effectiveness of the proposed new solutions, in the context of existing solutions and the costs of their introduction to the market.	Undertaking activities that will enable effective use of the infrastructure and creating opportunities for cooperation between the participants of the innovation system that will allow seeking funding sources outside public funds.
Wine Institute. A combination of knowledge and experience in the field of wine production. Establishment of a place equipped with modern laboratories but also a place of cultural meetings during which local products are promoted. A unique place where quality is the most important value and goal of the activity. A place where science connects with tradition. The other good practice is that students not only from Spain but also from other countries can gain knowledge and experience. This is a very good example of diffusion of knowledge also.	Regional self-government should support regional products based on modern / innovative methods of their production. Care for the development and support of local products based on the centuries-old tradition of the region is one of the most important tasks of local self-government. This is a good example of innovation for unique values that are important for the inhabitants of the region. In my opinion, each regional innovation strategy should be based on promoting and supporting values that are important for the inhabitants of the region.

3. CONCLUSIONS

➤ Regarding the **R&D&I facilities**:

Technological and research centers are well-equipped, and they've been created in response to specific sectors from the region and they collaborate to increase the competitiveness of the local companies. However, 45 % of the respondents answered that improvements could be implemented in scientific facilities' management.

➤ Regarding the **collaboration between research/technological centers and companies**:

Even though in general terms there's a good coordination and collaboration with companies, it is worth highlighting that 54 % of the respondents are positioned neutral or opposed to the statement that public-private partnership in infrastructure management is good.

82 % agree or strongly agree with technological centers to be involved in the technological implementation process in the food industry. A positive evaluation to the work done is reported, highlighting that they're connected to the economic and social structure of the agri-food sector in La Rioja.

In view of the assessments, it would be interesting to boost the resource use and the knowledge existing between technological centers. This fact, could lead to the development of new products, services and applied knowledge, making the sector become more sustainable.

Positive references are made to the Institute of Grapevine and Wine Sciences (ICVV) taking it as a model not only of infrastructures but also of management since ICVV integrates all agents in a unique space. With regards to the rest of infrastructures, an opportunity is identified in what could be the unification of the management of these infrastructures, which could have a beneficial impact in economic terms and in terms of R&D&I results.

➤ Regarding **public-private collaboration**:

The governance system in the field of innovation in La Rioja is considered adequate when it comes to involving all the agents. On the other hand, it considers clusters as a key element in collaboration dynamization of the collaboration among agri-food sector of La Rioja and Ebro Valley

The greatest differences of opinion are found in the tools for promoting collaboration between agents. The definition of public-private collaboration tools are identified as a scope to be improved (see graphs 2.8 and 2.9 and observations from questions from block 2.)

Based on what partners have shown, it would be advisable to check tools for funding and promoting collaboration between public-private agents (universities, companies, public R&D&I centers). It is also advisable to consolidate the role of existing governance mechanisms and promote the development of clusters.

With regard to internationalization as a collaboration element, it can be seen that there is no clear vision of whether the current measures are accurate or not. It is advisable to consider this element within the collaboration between agents. With the contributions of the partners, it could be said that it is not strength, but, in the context of this project and the possible synergies with others, it can become an opportunity.

➤ Regarding **hybridization of other sectors in the agri-food sector**:

It is raised that the public administration could give more importance to the collaboration between ICT in the agri food sector, in order to improve the competitiveness of primary producers and local companies. Some references to industry 4.0 as the engine of change have been shown.

With regard to **human capital**, some divergences are found regarding if the existing human capital is accurate to face with the new current technological change. There are references to the need to train qualified staff.

Based on the results, another aspect to highlight is the need for revision of the current public policies regarding technological implementation. There are suggestions to apply specific sectorial policies for the agri-food sector, promoting the integration of technologies such as ICT or biotechnology in the different subsectors. Finally, we would like to highlight the positive evaluations made on the hybridizations between health and agri-food sector. In this context, several of the partners gave a very positive feedback. Their answers, also invite to look for the crossing of the agri food sector with other branches using the KETs as a nexus.

➤ As **final conclusion**, it should be noted that there are multiple opportunities shown by the partners and future recommendations for implementation in our policies. In addition, there are strengths in terms of coordination among agents or management models identified as good practices. There are also opportunities in the area of internationalization, human capital training or the integration of industry 4.0 in the agri-food sector.

Finally, we would like to emphasize that all the suggestions and comments from partners will be taken into account when prioritizing areas of action and they will be also put into value in the different meetings with the local stakeholders, together with the rest of the results obtained from our regional diagnosis.

ANNEX I: PHOTOS

Study Visit (5th September 2018)

1. TECHNOLOGICAL CENTRE FOR RESEARCH ON MUSHROOMS (CTICH)



2. AGROFOOD TECHNOLOGICAL CENTRE (CTIC CITA)



3. INSTITUTE OF GRAPEVINE AND WINE SCIENCES (ICVV)



Workshop & Discussion (6th September 2018)

INSTITUTE OF GRAPEVINE AND WINE SCIENCES (ICVV)

