

# ***ACTION PLAN OF LA RIOJA GOVERNMENT. AGRI RENAISSANCE PROJECT***

  
**Agri  
Renaissance**  
Interreg Europe



**GOVERNMENT OF LA RIOJA  
JULY, 2020**



## Contents

1	INTRODUCTION.....	1
2	POLITICAL CONTEXT OF THE AGRIRENAISSANCE PROJECT.....	2
2.1	GENERAL CONTEXT .....	2
2.2	2014-2020 ERDF OPERATIONAL PROGRAMME. ....	3
2.3	LA RIOJA SMART SPECIALISATION STRATEGY. ....	4
2.4	MAIN FEATURES OF THE AGRICULTURAL INNOVATION SYSTEM.....	6
2.4.1	MAIN AGENTS OF AGRIFOOD INNOVATION IN LA RIOJA .....	12
3	ACTION PLAN. ....	15
3.1	ACTION 1: REVIEW AND IMPROVEMENT OF THE MANAGEMENT OF STRATEGIC SCIENTIFIC INFRASTRUCTURES IN LA RIOJA. ....	15
3.1.1	OBJECTIVE:.....	15
3.1.2	BACKGROUND .....	15
3.1.3	ACTIONS TO BE IMPLEMENTED. ....	19
3.1.4	PLAYERS INVOLVED.....	21
3.1.5	COSTS. ....	21
3.1.6	FUNDING SOURCES.....	21
3.1.7	TIME FRAME.....	21
3.2	ACTION 2: MAP OF SCIENTIFIC AND TECHNOLOGICAL TALENT IN THE FIELD OF BIOECONOMY IN THE AGRIFOOD SECTOR. ....	22
3.2.1	OBJECTIVE:.....	22
3.2.2	BACKGROUND.....	22
3.2.3	ACTIONS TO BE IMPLEMENTED. ....	26
3.2.4	PLAYERS INVOLVED.....	28
3.2.5	ALLOCATED RESOURCES.....	28
3.2.6	FUNDING SOURCES.....	28
3.2.7	TIME FRAME.....	28

## 1 INTRODUCTION.

The general objective of AGRIRENAISSANCE is to improve regional development policies and programmes in order to increase and optimise the RDI resources and capacities of the agri-food sector, stimulate partnerships and encourage the implementation of strategic technologies such as ICTs or Biotechnology. The interregional learning process will take place around three thematic areas:

- RDI infrastructure and capacities
- RDI public-private partnerships
- Hybridisation of the agri-food sector with other sectors within and across regions.

The project consists of 7 partners distributed among 5 regions in 5 European countries:

Project leader:

- Government of La Rioja

Partners:

- Association for Research, Development and Innovation of the Agri-food sector (CTIC-CITA)
- National Paying Agency under the Ministry of Agriculture, the Republic of Lithuania
- Mazovia Development Agency Plc (Poland)
- Mazowieckie Voivodeship/Office of the Marshal of the Mazowieckie Voivodeship in Warsaw
- Calabria Region. Department of national and community programming, sector S3
- ANIMAFORUM- Association for the Development of Agro-industry (central region, Portugal)



This project is divided into 2 phases, as follows:

### 1st PHASE:

Assessment, exchanging best practices and drafting an action plan

1 June 2018 to 31 May 2020.

### 2nd PHASE:

Implementation and monitoring of the action plan:

The first goal of the current first phase is to develop this action plan in order to improve La Rioja's agri-food sector in the three areas defined above, to be deployed over the two years of the second phase.

This document focuses mainly on the Rioja agri-food industry, in identified key sectors, such as wine and strategic technologies, known as KETs. Other auxiliary sectors and the fundamental role of the various sector stakeholders will also be taken into account.

## **2 POLITICAL CONTEXT OF THE AGRIRENAISSANCE PROJECT.**

### **2.1 GENERAL CONTEXT**

The reference context is primarily marked by the strategic importance of the agri-food sector in La Rioja. It is the first industrial sector in terms of GVA and turnover. The agroforestry sector has twice the weight in GDP compared to the Spanish average and one in three euros earned from La Rioja exports belongs to its agricultural sector or food industry. These figures represent the economic and social importance of the sector.

Given its relevance, the agri-food sector has been included in La Rioja's Smart Specialisation Strategy (RIS3) for 2014-2020 as one of the strategic areas to be developed from innovation. The 2014-2020 ERDF Operational Programme also identifies agri-food RDI centres as a priority infrastructure investment. Thus, in the deployment of Thematic Objective 1 of the ERDF OP for La Rioja, several lines of action are envisaged for implementing public policies within the scope of RIS3, the ERDF Operational Programme or the Rural Development Plan.

The Government of La Rioja is aware of the importance of KETs in the context of European RDI policies (Horizon 2020). For this reason, the implementation of these technologies as a driver of change in the different sectors of the region, including agri-food, has been taken into account in all its innovation programmes and plans.

Finally, it should be noted that the current situation regarding management of scientific infrastructures in the La Rioja food sector takes place within a narrow framework of public-private partnerships, given that the technology centres are owned by the Government of La Rioja and managed by two business associations that carry out the research activities. It should be noted that one of these associations, AIDISA, is a partner in this project, closely cooperating in this assessment and in the other tasks included in the first phase of the project.

The context of this action plan has therefore focused on improving technological infrastructures in the Riojan food industry, implementing KETs throughout the agri-food sector and improving cooperation between public and private players.

## 2.2 2014-2020 ERDF OPERATIONAL PROGRAMME.



The 2014-2020 ERDF Operational Programme for La Rioja was approved by the European Commission on 14 December 2017 and reviewed on 11 December 2017, based on the evaluation carried out that same year. This document plans all the funds to be implemented in La Rioja from the ERDF structural fund in the period from 2014 to 2020, (costs are eligible up to 2023). It is expected that an expenditure of 67.6 million euros will be implemented for this period, with 50% co-funding (given that La Rioja is considered among the most developed regions), of which 45% is expected to be implemented in thematic objective 1 of RDI, with a total of 30.68 million.

### ERDF 2014-2020 OP funding table.

Eje prioritario	Fondo	Categoría de región	Base de cálculo de la ayuda de la Unión (coste total subvencionable o coste público subvencionable)	Ayuda de la Unión (a)	Contrapartida nacional (b) = (c) + (d)	Desglose indicativo de la contrapartida nacional		Financiación total (e) = (a) + (b)	Tasa de cofinanciación (f) = (a) / (e)
						Financiación pública nacional: (c)	Financiación privada nacional (d)		
01	FEDER	Más desarrolladas	Total	15.340.750	15.340.750	11.840.748	3.500.002	30.681.500	50%
02	FEDER	Más desarrolladas	Público	6.916.925	6.916.925	6.916.925	0	13.833.850	50%
03	FEDER	Más desarrolladas	Total	5.401.245	5.401.245	0	5.401.245	10.802.490	50%
04	FEDER	Más desarrolladas	Total	3.742.501	3.742.501	3.242.500	500.001	7.485.002	50%
06	FEDER	Más desarrolladas	Público	1.729.094	1.729.094	1.729.094	0	3.458.188	50%
13	FEDER	Más desarrolladas	Público	676.000	676.000	676.000	0	1.352.000	50%
<b>Total</b>	<b>FEDER</b>	<b>Más desarrolladas</b>		<b>33.806.515</b>	<b>33.806.515</b>	<b>24.405.267</b>	<b>9.401.248</b>	<b>67.613.030</b>	<b>50%</b>
<b>Total general</b>				<b>33.806.515</b>	<b>33.806.515</b>	<b>24.405.267</b>	<b>9.401.248</b>	<b>67.613.030</b>	<b>50%</b>

Source: [www.larioja.org/hacienda](http://www.larioja.org/hacienda)

Within thematic objective 1, agri-food is one of the key sectors, being present in 2 lines of action as follows:

**LR01.1 Constructing, renovating and equipping technology centres and RDI research laboratories:** In this line, investments in improving and renovating RDI centres and agri-food laboratories of the Government of La Rioja are co-financed. Centres such

as the Haro Oenological Station, the Regional Laboratory in La Grajera and the Mushroom Technology Centre, are benefiting from these structural funds.

As of 31 December 2018, a total of 13 operations were submitted by the General Directorate of Agriculture and Livestock.

**LR09.2 Development of RDI projects in the agri-food sector:** As its name suggests, this line of action co-funds the development of RDI projects in the La Rioja agri-food sector. Currently, four operations have been presented in this line, in vine and wine innovation projects. These projects were implemented by the Vine and Wine Research Service (General Directorate of Agriculture and Livestock) that is integrated in the ICVV, in 2016, 2017, 2018 and 2019.

### **2.3 LA RIOJA SMART SPECIALISATION STRATEGY.**



The RIS3 Strategy is a plan that brings together the key priorities, challenges and needs of each region for knowledge-based development, relying on both technological innovation and practice-focused innovation. It is based on the Europe 2020 Strategy, which proposes the creation of an RIS3 by the European regions, where each one can determine their priority lines, as well as identify the activities eligible for support by Structural Funds and the Horizon 2020 programme for measures to promote innovation.

The La Rioja 2014-2020 Smart Specialisation Strategy was approved by the Interdepartmental Commission for Research, Technological Development and Innovation on 16 October 2013, and subsequently reviewed on 7 May 2015 by the same Commission with regard to aspects of the monitoring system.

In 2018, at the request of the Directorate General with responsibilities over innovation, the Strategy Governance bodies decided to submit the strategy to an intermediate evaluation and a review of the pattern of specialisation, in order to determine whether the areas of expertise and priorities required updating. On 13 March 2019, an update of the regional SWOT analysis in areas of specialisation and priorities was approved in the Interdepartmental Commission for Research, Technological Development and Innovation, and the monitoring system was also updated on those aspects that were necessary. The deployment of the strategy was carried out through the RDI plans, with the fifth RDI Plan (2017-2020) now in effect and fully current.

From all the analyses carried out, it is possible to identify the smart pattern that underpins the final formulation of the strategic review, which allows progress on the path marked

by the EU for the European regions, reinforcing the strengths of La Rioja by reducing strategic risks and creating new sustainable comparative advantages.

Each area of specialisation that makes up the pattern consists of different priorities for action. All of them are interrelated with each other, and allow for a unique strategy, with common governance and consensus indicators that constitute an effective management. They also make it possible to optimise investments of all kinds that must be undertaken to achieve real specialisation and, therefore, sustainable differentiation. The below table shows the three areas of specialisation and the twelve priorities for action.

The operational deployment of RIS3 is carried out through three large areas that, in turn, are divided into 12 priorities.

#### ÁREA 1

### LA RIOJA, TERRITORIO INTELIGENTE

#### PRIORIDADES DE ACTUACIÓN

PRIORIDAD 1 – ECOSISTEMA INNOVADOR PARA EL DESARROLLO DE LA INTELIGENCIA REGIONAL

PRIORIDAD 2 – ECOSISTEMA INNOVADOR PARA EL IMPULSO A LA INTELIGENCIA EMPRESARIAL

PRIORIDAD 3 – ECOSISTEMA INNOVADOR BASADO EN LA LENGUA ESPAÑOLA COMO HERRAMIENTA DE NEGOCIOS

PRIORIDAD 4 – MODELIZACIÓN Y MODERNIZACIÓN DE INFRAESTRUCTURAS INTELIGENTES

#### ÁREA 2

### LA RIOJA, TERRITORIO COMPETITIVO

#### PRIORIDADES DE ACTUACIÓN

PRIORIDAD 1 – CAMBIO DE MODELO ECONÓMICO BASADO EN LA BIOECONOMÍA

PRIORIDAD 2 – LIDERAZGO INTERNACIONAL DEL SECTOR VITIVINÍCOLA

PRIORIDAD 3 – CAMBIO DE MODELO ECONÓMICO BASADO EN LA INDUSTRIA INNOVADORA

PRIORIDAD 4 – INNOVACIÓN ABIERTA E INNOVACIÓN COLABORATIVA

PRIORIDAD 5 – CAPTACIÓN DE INVERSIONES BASADAS EN RECURSO HUMANO DE ALTA ESPECIALIZACIÓN

#### ÁREA 3

### LA RIOJA, TERRITORIO SOSTENIBLE

#### PRIORIDADES DE ACTUACIÓN

PRIORIDAD 1 – ECONOMÍA EFICIENTE

PRIORIDAD 2 – LIDERAZGO DE INICIATIVAS EMBLEMÁTICAS EN EL ÁMBITO DE LA ECONOMÍA CIRCULAR

PRIORIDAD 3 – CAMBIO DE PARADIGMA EN EL MUNDO RURAL

Being aware that all the priorities defined in the strategy affect the content of this project, we clearly see two priorities closely related to this strategic plan, namely:

**2.1 Change of economic model based on bioeconomy:** Creation, acquisition, development, empowerment of new proposals based on the agri-food industry, the main regional productive sector, leading to a model change that seeks research, innovation, specialisation, technification, incremental quality and sustainability of actions on the environment, with a broad, multidisciplinary approach based on the bioeconomy that includes organic production and seeks cost-effective responses to the effects of food on health in a context in which climate change shows a strong impact, creating new comparative advantages as a region and promoting a contribution of value to the EU as a whole for the transfer of technology and knowledge. La Rioja has specific conditions

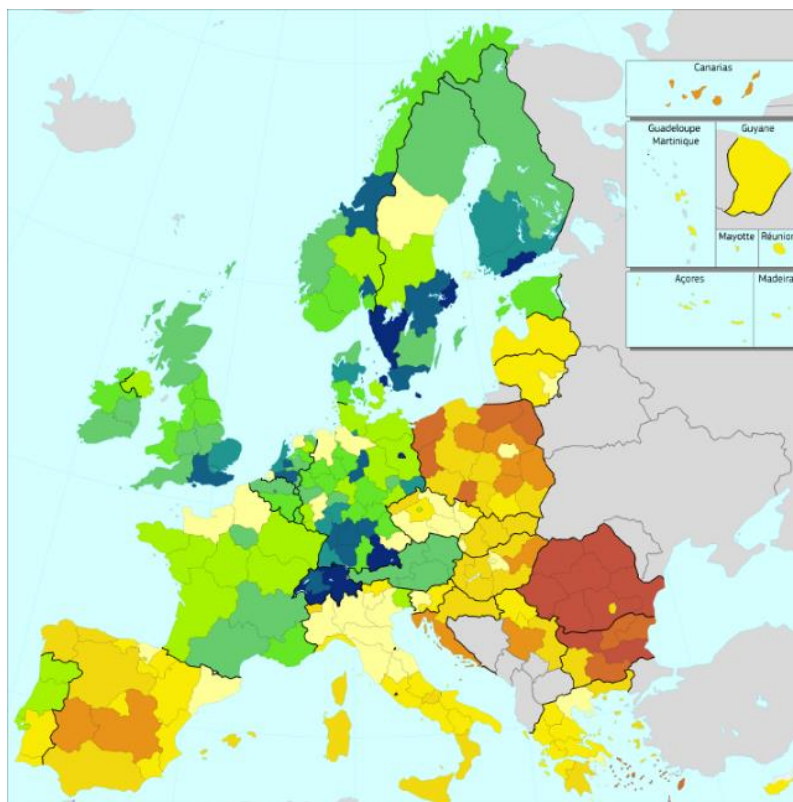
that are difficult to find in other European regions and its location in the Middle Ebro Valley makes it the ideal place to develop a bioeconomy sector applied to organic production and healthy food, with big producers, research centres, clusters, major operators in the packaging and packing segment and large logistics operators.

**2.2 International leadership in the wine sector:** The weight of the wine sector in the regional economy is significant (7.5% of GDP) and the role played by the *Denominación de Origen Calificada Rioja* and the power of a sector committed to quality, provides La Rioja with a differential based on viticulture, oenology and wine tourism until it becomes one of the three main world references, consolidating the large research infrastructures, such as the ICVV, a national and international reference initiative in which three public administrations collaborate, and developing others linked to innovation, sustainable production or quality tourism based on the comprehensive experience provided by the autonomous community like no other, competing with a spirit of leadership with Tuscany, Bordeaux and Napa Valley.

#### 2.4 MAIN FEATURES OF THE AGRICULTURAL INNOVATION SYSTEM.

According to the report of the Regional Innovation Scoreboard for 2019, La Rioja is rated as a moderate innovator. This puts the region in sixth place in Spain.

#### 2019 REGIONAL INNOVATION SCOREBOARD.

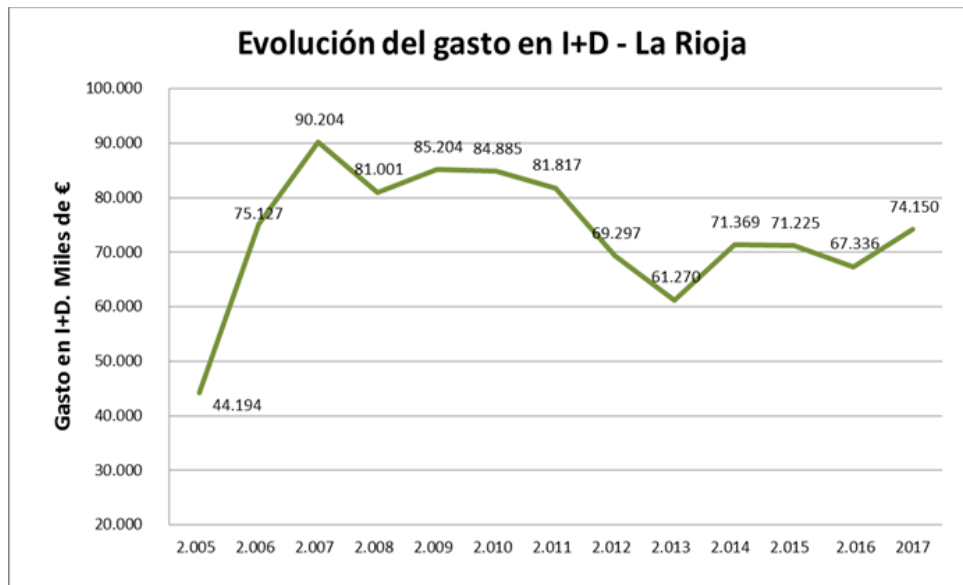


Source: [www.ec.europa.eu](http://www.ec.europa.eu)

In 2017, internal spend on Research and Development (R&D) in La Rioja amounted to €74.15 million, a 10.1% rise from 2016, while in Spain it grew by 6%, going from a total expenditure of €13,260 million in 2016 to €14,052 million in 2017. The Autonomous Community of La Rioja ranked as seventh fastest growing community in 2017.

In La Rioja, R&D expenditure represented 0.91% of GDP in 2017, compared to 0.84% in 2016. At the national level there is a slight increase from 1.19% in 2016 to 1.2%.

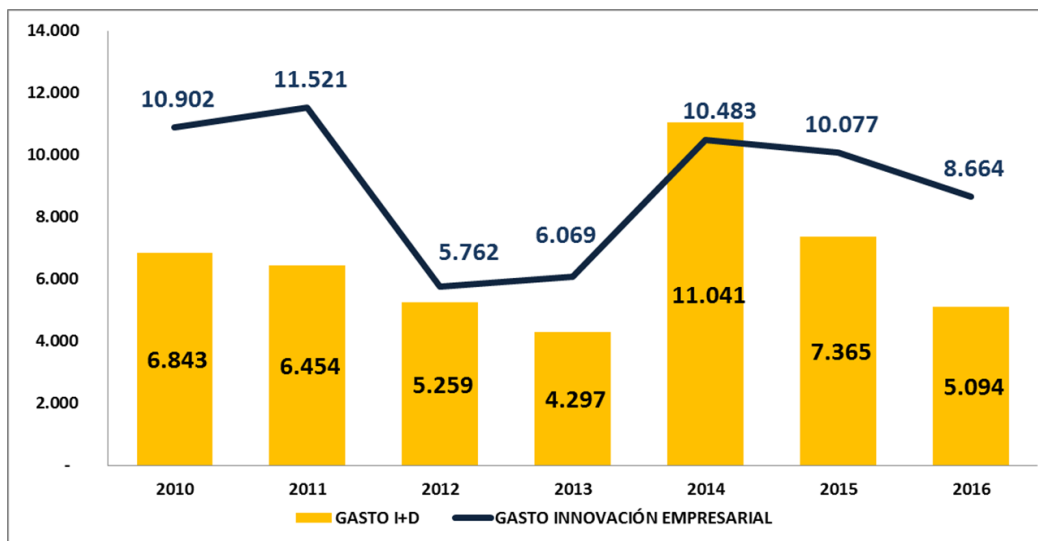
**EVOLUTION OF INTERNAL R&D EXPENDITURE IN LA RIOJA.**



Source: INE

In order to get a more accurate picture of innovative activity in the sector, the R&D and innovation expenditure in the La Rioja agri-food sector was analysed. Data from La Rioja Statistics Institute was used. Data from the agricultural sector and food industry are aggregated.

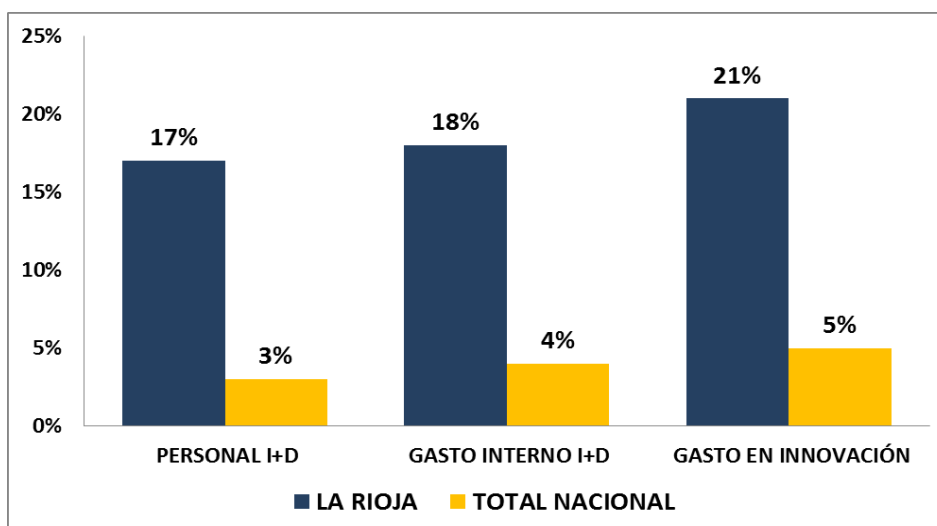
## EVOLUTION OF R&D AND INNOVATION SPENDING IN THE LA RIOJA AGRICULTURE AND FOOD SECTOR.



Source: IDER and in-house.

As shown in the previous graph, the expenditure on business innovation in the sector reached 8.66 million euros in 2016 and 5.1 million in R&D activities. The trend of the last 7 years has been irregular, with a maximum in 2014, falling progressively since then.

## COMPARISON BETWEEN LA RIOJA AND SPAIN OF THE WEIGHT OF THE AGRICULTURE AND FOOD SECTOR WITHIN THE BUSINESS SECTOR.

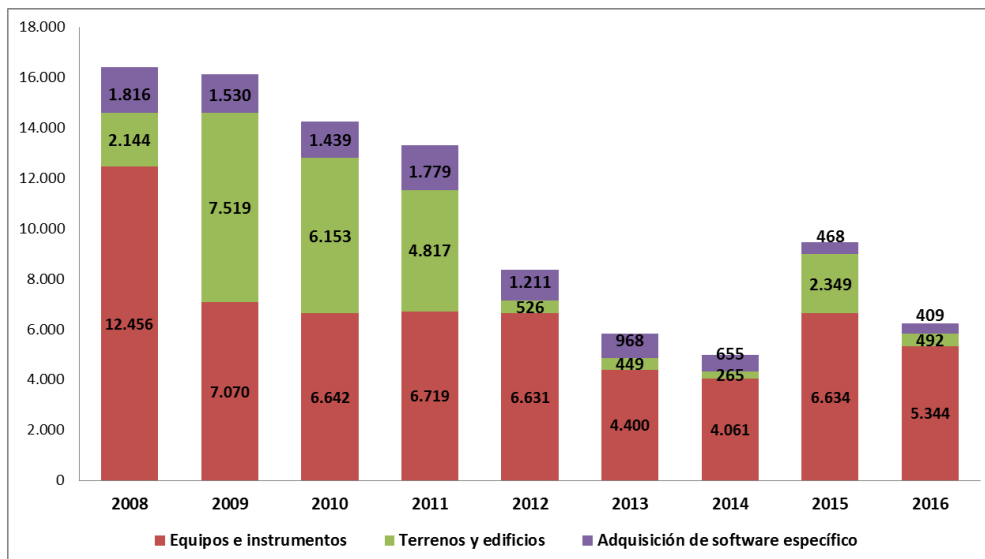


Source: INE and in-house.

The agri-food sector is included in the business sector, so the percentage is measured over the total of the private sector. As shown in the previous graph, 18% of R&D expenditure in La Rioja companies is implemented by companies in the agriculture and

food sector, while this figure is 4% for the whole of Spain. This means that the weight of the sector in La Rioja is 4.5 times greater than that of the national sector. This proportion is similar if we analyse R&D staff figures or innovation expenditure. One out of every five euros spent by La Rioja companies in innovation is implemented by the agri-food sector. The following graph reflects the evolution of capital expenditures in R&D activities in La Rioja within all sectors (administration, companies, PNPIs and universities). It shows how it has fallen steadily since 2008, with amounts falling by 60% between 2008 and 2016. By type of expense (equipment, constructions and software), investments in new equipment represent 83% of the total in 2016. Only 2009 and 2010 had an investment in land and buildings equal to or greater than equipment.

**EVOLUTION OF INTERNAL EXPENDITURE ON R&D CAPITAL EXPENDITURE ACCORDING TO EXPENDITURE CONCEPT.**



Source: INE and in-house.

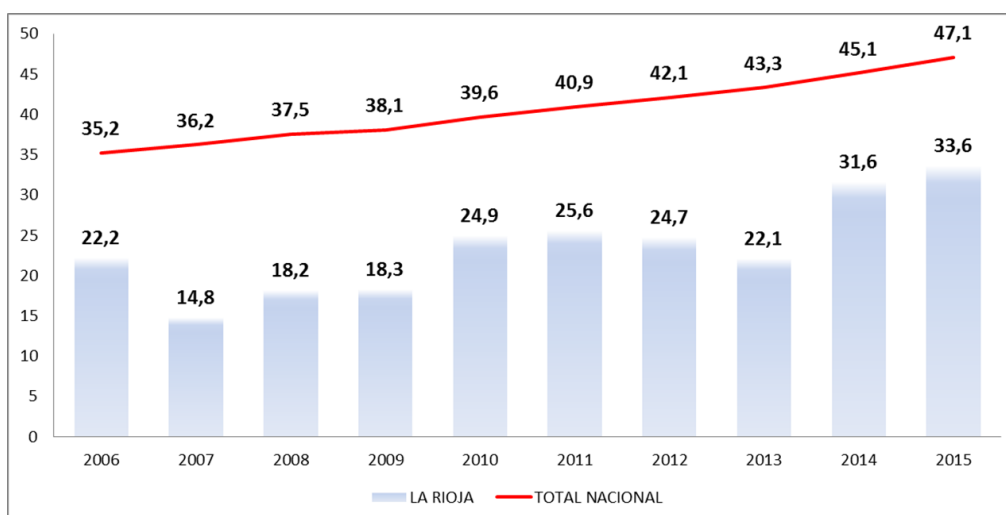
Given the economic resources allocated to R&D, we will analyse the cooperation between players both nationally and internationally. In the first place, the preference of partners of La Rioja companies when developing technologies is examined. According to the INE business innovation survey, when developing new technologies, La Rioja companies prefer to cooperate with suppliers and customers, leaving the public sector entities last. Survey data reflect a clear distancing between the public and private sectors when innovating, so this should be taken into consideration for future decisions.

## PERCENTAGE OF INNOVATIVE COMPANIES THAT COOPERATE TO DEVELOP TECHNOLOGIES ACCORDING TO TYPE OF PARTNERS.

TIPO SOCIO	2012-2010	2013-2011	2014-2012	2015-2013	2016-2014
Coopera con proveedores	10%	18%	11%	17%	10%
Coopera con clientes del sector privado	7%	10%	7%	9%	8%
Coopera con consultores o laboratorios comerciales	7%	14%	8%	12%	8%
Coopera con otras empresas de su mismo grupo	5%	3%	4%	6%	6%
Coopera con universidades u otros centros de enseñanza superior	5%	7%	8%	8%	5%
Coopera con competidores u otras empresas de su misma rama de actividad	4%	7%	5%	4%	4%
Coopera con clientes del sector público	1%	2%	3%	1%	0%

Source: La Rioja Statistics Institute.

## PERCENTAGE OF SCIENTIFIC PUBLICATIONS IN INTERNATIONAL CONTRIBUTIONS.



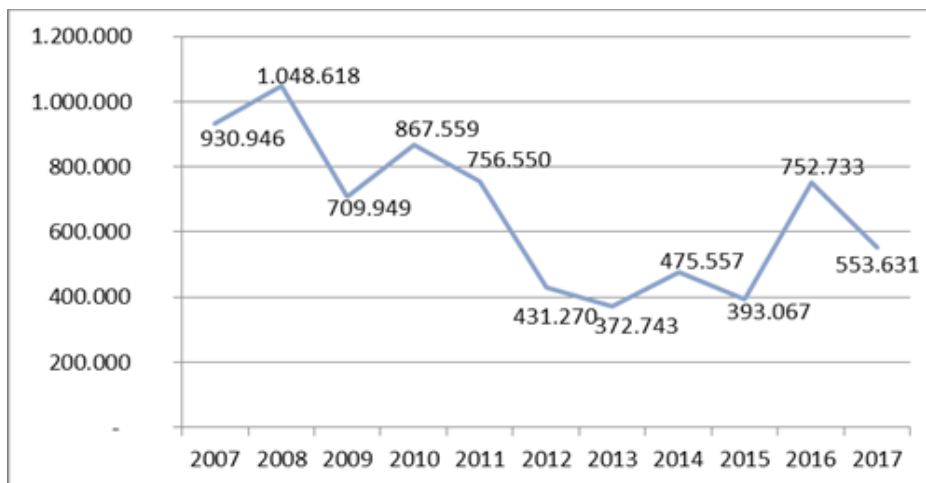
Source: FECYT

In the field of scientific research, the metrics of international publications is considered one of the main quality indicators. In this area the indicator of percentage of publications in international contributions has been selected because it gives a faithful image of the degree of openness of our research groups abroad. As seen in the previous graph, La Rioja is below the state average, but it is experiencing a process of convergence given its continued growth over the last 10 years.

Finally, in order to analyse the partnerships with universities, the amount of the RDI contracts of the University of La Rioja (UR) with companies is taken as a reference indicator. According to the latest details provided by the OTRI (Research Results Transfer Office), in 2017 the UR reached the figure of €553,631 in research contracts with public administrations, private companies, universities and other players. This amount is distributed among a total of 69 contracts with an average of 8,023 euros per

contract. Comparing the data for 2017 with respect to 2016, there has been a 26% increase in the total number of contracts, exceeding 53 in 2016. On the other hand, the average amount per contract has decreased by 43% compared to 2016, which has led to a global decrease in revenues, going from a figure of €752,733 in 2016 to €553,631 in 2017. Next, its evolution is shown, which shows a downward trend. It is important to indicate that these are partnerships in all sectors, not only the agri-food sector

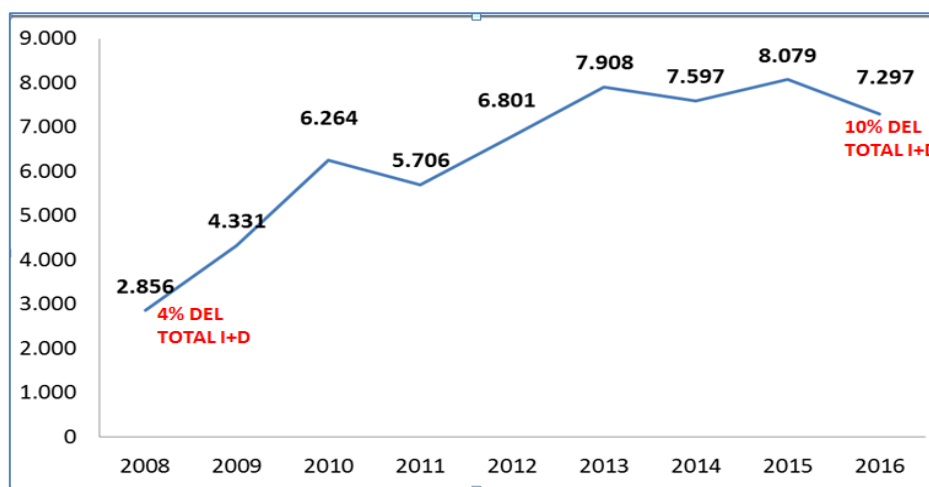
**PROGRESS OF TOTAL AMOUNT OF RDI CONTRACTS SIGNED BY THE UR (IN €)**



Source: OTRI, University of La Rioja.

Biotechnology is a strategic technology in all RDI plans, and it is also of interest in this project. Investment in R&D has been examined to analyse it. The following chart shows a constant evolution of investment in the region, in both absolute and relative terms. Between 2008 and 2016 investment went from 4% of total regional R&D spending to 10%.

**EVOLUTION OF DOMESTIC R&D EXPENDITURE IN BIOTECHNOLOGY IN LA RIOJA.**



Source: INE

The study of the sector employs the monitoring report prepared by the La Rioja Statistics Institute, "La Rioja Digital Economy and Society", published in February 2018. It uses the La Rioja Digital Economy and Society Index (DESI-Rioja). It is a composite index developed by the European Union to assess the progress of countries towards a digital economy and society. It groups a number of relevant indicators around five dimensions: Connectivity, Human Capital, Use of Internet Services, Integration of Digital Technology and Digital Public Services.

Following the same methodology of the European indicator (DESI), the La Rioja Statistics Institute has developed its own indicator (DESI-Rioja) based on the results for 2016, which were published in March 2017. In order to place our region in the European setting, the indicators for La Rioja were calculated and, in those cases in which the information is not available, an estimate was made based on national values.

#### **BREAKDOWN OF LA RIOJA DIGITAL ECONOMY AND SOCIETY INDEX (DESI-RIOJA).**

	DESI-Rioja 2017			
	La Rioja	España	UE	Posición en la UE
ÍNDICE	55,89	56,77	53,68	13
Conectividad	68,72	66,29	60,72	9
Capital Humano	45,34	53,62	59,56	24
Uso de Internet	45,74	46,86	47,82	19
Integración de tecnología digital	48,32	43,08	38,76	8
Servicios Públicos Digitales	72,32	74,29	57,88	7

Source: La Rioja Statistics Institute

#### **2.4.1 MAIN AGENTS OF AGRIFOOD INNOVATION IN LA RIOJA**

Within the La Rioja Innovation System there are numerous players involved in agri-food innovation. Below they are listed according to typology.

##### **TECHNOLOGY CENTRES.**

- Mushroom Technology Centre (CTICH). [www.ctich.com](http://www.ctich.com)
- Food Technology Centre CTIC-CITA. <http://ctic-cita.es/>

##### **PUBLIC RESEARCH CENTRES.**

- Institute of Grapevine and Wine Sciences. (ICVV, run by the UR, CSIC and La Rioja). [www.icvv.es](http://www.icvv.es)
- La Rioja Biomedical Research Centre (CIBIR). <https://www.cibir.es>

## **UNIVERSITIES**

- University of La Rioja (UR). [www.unirioja.es](http://www.unirioja.es)
- Campus IBERUS. <http://www.campusiberus.es/>

## **PUBLIC ADMINISTRATION.**

- Regional Ministry of Economic Development and Innovation. General Directorate of Innovation, Labour, Industry and Commerce (La Rioja Government). [www.larioja.org/innovacion](http://www.larioja.org/innovacion)
- Regional Ministry of Agriculture, Livestock and the Environment (General Directorate of Agriculture and Livestock). [www.larioja.org/agriculture](http://www.larioja.org/agriculture)
- Regional Ministry of Public Administration and Finance (General Directorate of Digital Agenda). [www.larioja.org/tecnologia-comunica/es](http://www.larioja.org/tecnologia-comunica/es)
- La Rioja Economic Development Agency. [www.ader.es](http://www.ader.es)
- General Directorate of Budget Control. Regional Ministry of Public Administration and Finance.

## **LABORATORIES AND PUBLIC INFRASTRUCTURES TO SUPPORT RDI.**

- Government of La Rioja Regional Laboratory: [www.larioja.org/agricultura/es/investigacion-tecnologia/laboratorio-regional](http://www.larioja.org/agricultura/es/investigacion-tecnologia/laboratorio-regional)
- Haro Oenological Station. [www.larioja.org/agricultura/en/investigacion-tecnologia/estacion-enologica](http://www.larioja.org/agricultura/en/investigacion-tecnologia/estacion-enologica)
- Government of La Rioja Institutional Winery.
- Government of La Rioja Experimental Olive Oil Mill.

## **CLUSTERS.**

- Cluster Food+I. [www.clusterfoodmasi.es](http://www.clusterfoodmasi.es)
- Agrupación Empresarial Innovadora del Sector TIC de La Rioja (AERTIC) [www.aertic.es](http://www.aertic.es)
- Grupo Biorioja.

## **AGRARIAN TRADE UNIONS AND ADVISORY BODIES.**

- Asociación Riojana de Agricultores y Ganaderos (ARAG ASAJA). [www.asaja.com](http://www.asaja.com)
- Unión de Agricultores y Ganaderos de La Rioja (UAGR). [www.uagr.com](http://www.uagr.com)
- Unión de Pequeños Agricultores de La Rioja (UPA). [www.upa.es](http://www.upa.es)
- ASEGAR 2020 UTE. [www.asegar2020.com](http://www.asegar2020.com)
- Servicoopr UTE. [www.Servicoopr.com](http://www.Servicoopr.com)

## **BUSINESS FEDERATIONS.**

- La Rioja Business Federation (FER). [www.fer.es](http://www.fer.es)
- La Rioja Federation of Federation of Agricultural Cooperatives (FECOAR). [www.fecoar.es](http://www.fecoar.es)
- La Rioja Chamber of Commerce [www.camaracomerciorioja.com](http://www.camaracomerciorioja.com)

## **INTERPROFESSIONAL AGRICULTURAL ORGANISATIONS.**

- Rioja Wine Interprofessional Organisation (OIVPR). [www.riojawine.com](http://www.riojawine.com)

## **BUSINESS ASSOCIATIONS AND NON-PROFIT INSTITUTIONS.**

- Agrupación Riojana para el Progreso de la Viticultura (ARPROVI). [www.arprovi.com](http://www.arprovi.com)
- Asociación de Investigación para la mejora del cultivo de la remolacha azucarera (AIMCRA). [www.aimcra.es](http://www.aimcra.es)

## **OTHER ORGANISATIONS (SUPRA-REGIONAL OR FROM OUTSIDE THE AUTONOMOUS COMMUNITY).**

- Spanish National Research Council (CSIC). National public research agency [www.csic.es](http://www.csic.es)
- National Institute for Agricultural and Food Research and Technology (INIA) National public research body <http://www.inia.es>
- National Centre for Food Technology and Safety (CNTA). Technology Centre in the Autonomous Community of Navarre [www.cnta.es](http://www.cnta.es)
- Food For Life-Spain technology platform [www.foodforlife-spain.es](http://www.foodforlife-spain.es)
- Wine Technology Platform [www.ptvino.com](http://www.ptvino.com)
- Spanish Federation of Food and Beverage Industries (FIAB). [www.fiab.es](http://www.fiab.es)

### **3 ACTION PLAN.**

#### **3.1 ACTION 1: REVIEW AND IMPROVEMENT OF THE MANAGEMENT OF STRATEGIC SCIENTIFIC INFRASTRUCTURES IN LA RIOJA.**

##### **3.1.1 OBJECTIVE:**

This action is posed in the context of the main objective of the AgriRenaissance project, which is to improve the management of infrastructures and scientific resources in the agri-food sector through the ERDF Regional Operational Program.

This initiative seeks an intervention in a strategic area of the region (such as viticulture, the main industrial sector of La Rioja) by improving management efficiency in its scientific infrastructures. The specific objectives would be as follows:

1. Improve the management of scientific infrastructures in a strategic sector through the ERDF structural funds.
2. Study the feasibility of unifying laboratories in a single center, in order to improve the competitiveness of the R&D center and the ability to return European funding.
3. Review and improve the line of action 1.1 Investment in scientific agri-food infrastructures of the ERDF Operational Program of La Rioja

##### **3.1.2 BACKGROUND**

The main reason why the Government of La Rioja embarked on this project was because it was identified as an opportunity for improving the management of its agri-food scientific infrastructures. The opportunity of seeing how public policies are carried out in other countries was a very tempting challenge for a government that was looking for a way to review agri-food scientific policy.

##### **IDENTIFIED BEST PRACTICES:**

During the process of learning and exchanging experiences, we have been very attentive to the study visits both with regard to public management models in the other participating regions and to the inputs obtained by the project partners in the peer review. The experience has allowed us to see best practices in places such as Lithuania and Calabria, that have served as a guide to define this action. Among the visited infrastructures, special mention should be made of [The Lithuanian Research Centre for Agriculture and Forestry](#). In March, we had the opportunity to visit it extensively and see its benchmark laboratories, which cover both the public and private sectors in areas of strategic economic activity for the country. During the visit, we observed that continuous investments were made in these laboratories and that they served as a pole of attraction for research talent.

## SLIDES OF THE PRESENTATION OF GOOD PRACTICES IDENTIFIED IN THE LITHUANIAN STUDY VISIT. STAKEHOLDERS MEETING, APRIL 5, 2020 (spanish)

### Algunos aspectos a conocer



Es un país relativamente joven (1990) todavía con rasgos de la época comunista pero con muchas ganas de innovar y de aplicar nuevas ideas.

#### Fortalezas:

- Es un país pequeño (3 M habitantes) con una marcada tradición agrícola principalmente de cultivos extensivos. Al estar descentralizado, el gobierno y los diferentes ministerios tienen más facilidad para ejercer sus acciones.
- Muy avanzados en tecnologías ICT para aplicación al sector agrícola
- Infraestructuras científicas bien orientadas y coordinadas.
- Población joven y con alto nivel de cualificación.

#### Debilidades:

- Precios de materias primas muy caros para el precio de la vida, poca industria desarrolladora, más basados en servicios y en sector primario.
- Falta de comunicación entre fondos estructurales y fondos FEADER
- Sistema de innovación aún incipiente, con bajo desarrollo cluster industrial.

### LECCIONES APRENDIDAS Y BUENAS PRÁCTICAS IDENTIFICADAS

1. PLATAFORMA WEB PARA CADENAS CORTAS DE COMERCIALIZACIÓN EN EL SECTOR AGRARIO.

2. LIDERAZGO EUROPEO EN EL SECTOR TIC APLICADO AL CONTROL DE CULTIVOS MEDIANTE TÉCNICAS DE TELEDETECCIÓN: APLICACIONES A PAC, GESTIÓN HÍDRICA, FORESTAL...

3. SISTEMA UNIVERSITARIO ORIENTADO AL SECTOR AGROALIMENTARIO CON UN MARCADO GRADO DE INTERNACIONALIZACIÓN.

4. UN ÚNICO CENTRO DE I+D+I REFERENTE EN MATERIA AGROALIMENTARIA, CON 6 CENTROS QUE TRABAJAN EN RED.

5. PLATAFORMA DE I+D QUE AGLUTINA LAS CAPACIDADES, PERSONAL Y EQUIPOS DE LOS DIFERENTES SECTORES Y UNIVERSIDADES DEL PAÍS



Resource: Presentation of study visit in Lithuania to our stakeholders. April 5, 2019.

Furthermore, it should be pointed out that, during the project implementation, the Institute of Vine and Wine Sciences (ICVV) was identified as best practice. The Haro Oenological Station has also been identified as a best practice in national level communication in the La Rioja ERDF OP.

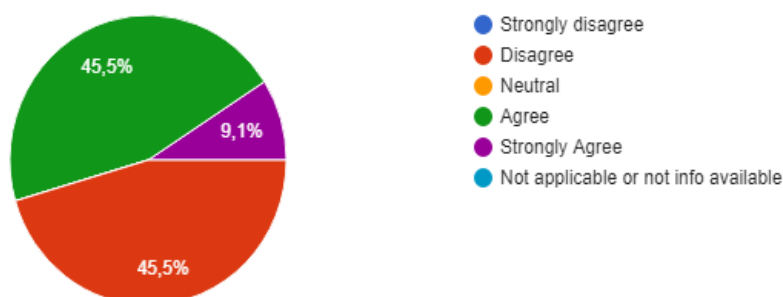
The management model of this Lithuanian Research Centre was presented at the stakeholder meeting in April 2019 ([link to meeting](#)). The Government of La Rioja and the stakeholders saw an opportunity to improve the management of the wine station, studying the possibility of unifying its laboratories as the Lithuanian model. Furthermore, synergy arises between this improvement in infrastructure and line of action 1.1. of the La Rioja ERDF Operational Program for the improvement of scientific agri-food infrastructures.

## PEER REVIEW.

The extensive list of recommendations and assessments from the peer review ([link to peer review report](#)) has served to provide feedback on this action. All the observations and proposals for improvement from the project partners, aimed at two things. The first was to improve and regroup the management of public scientific infrastructures. An example is this graph that asks about efficiency in our surveys:

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

11 respuestas



Another process that leads us to reflect is internationalisation within the framework of the scientific policy of our community. A deficit in internationalisation was identified by the partners, both in the capacity to market our services and technologies and in attracting financial resources for projects. This led us to understand that the action we have to implement is on those of our infrastructures that today have a greater potential for internationalisation.

## DIAGNOSIS AND SWOT ANALYSIS.

From October 2018 to April 2019 ([link to stakeholder meeting in October 2018](#)), the Government of La Rioja and CTIC –CITA worked on the regional diagnostic process and SWOT analysis, which had the direct participation of more than 15 stakeholders from the university, technology centres, administration and business clusters. Both the diagnosis and the SWOT analysis have allowed us to make a detailed map of what our main scientific resources are, where we can grow more or what are the possible threats and weaknesses that are present in the agri-food industry.

As we have seen in the previous action, the wine sector is strategic in terms, economic, social and territorial. During the SWOT analysis all the agents involved in the process of agri-food innovation of La Rioja were also mapped, also describing their capabilities and scientific equipment.

As a result of the strategic SWOT analysis, 6 possible lines of action were developed. One of them was the following:

INVESTMENT AND MODERNISATION OF SCIENTIFIC INFRASTRUCTURES (AGRICULTURAL RDI CENTRES AND LABORATORIES). Here are the reasons.

#### IV. Propuesta de líneas de trabajo

#### 1. INVERSIÓN Y MODERNIZACIÓN DE INFRAESTRUCTURAS CIENTÍFICAS (CENTROS Y LABORATORIOS DE I+D+I AGROALIMENTARIOS) (ESTRATEGIA DEFENSIVA)

##### MOTIVACIÓN:

- Riesgo de comunidades limítrofes que están trabajando de manera muy eficiente (A.1.3)
- Existencia de personal investigador y centros de investigación de referencia a nivel nacional e internacional con capacidad de incorporar esa experiencia a nivel regional (F.1.2)

**DESCRIPCIÓN:** Realizar actuaciones de inversión en materia de nuevo equipamiento científico y reforma de instalaciones, preferentemente cofinanciadas vía FEDER, en las distintas infraestructuras científicas agroalimentarias. El fin es hacer más competitivos los centros de I+D+I permitiendo desarrollar nuevos proyectos, servicios y poder atraer talento. Estas actuaciones se podrían enmarcar dentro de la línea de actuación del P.O FEDER *LR01.1 Construcción, rehabilitación y equipamiento de centros tecnológicos y laboratorios de investigación I+D+i.*

Resource: Presentation of SWOT results. Stakeholder meeting April 5, 2019.

Analysing such intense learning process as we have undergone in the last year and a half, and seeing that the improvement of the competitiveness of our scientific infrastructures is necessary, we have reached the conclusion that the chosen action is the most appropriate for the following aspects:

1. It is necessary to review the public management model of our public RDI infrastructures, since they are a pole of attraction for research talent and economic development in the region, which is able to optimize the management of funds ERDF.
2. During these years the Haro Oenological Station has been identified as a national and international reference laboratory (partnerships with the OIV, ERDF best practice, ICVV support, international partnership with Mexico, and so on). This places it as one of the main internationalising vectors of wine innovation (together with the ICVV). Investment in this centre would catalyse its potential and multiply its development possibilities.
3. The possibility of being eligible for the ERDF OP, the alignment with the La Rioja Smart Specialisation Strategy (RIS3) and its identification as ERDF best practice by the Ministry of Finance, position the Oenological Station as the reference laboratory when focusing our efforts within the infrastructure area of this project for its impact on the La Rioja business sector, its potential for internationalisation

and the need to improve its management as it is a centre with an exponential demand for work

### **3.1.3 ACTIONS TO BE IMPLEMENTED.**

The final result of this action is to improve the management of our scientific infrastructures through the ERDF operational program. For this, the feasibility of unifying strategic laboratories will be studied, based on a management model identified in the study visit of Lithuania.

Taking advantage of this action, a review of line of action 1.1 of the ERDF Operational Program will be carried out, which is the one that directly affects the R&D centers and the agri-food laboratory in La Rioja.

The EEH is a laboratory specialising in viticulture. It is owned by the Government of La Rioja and managed by the General Directorate of Agriculture and Livestock of the Government of La Rioja, and works closely with the ICVV.

This centre, which celebrated its 125<sup>th</sup> anniversary in October 2018, provides testing and technical assistance services to public and private organisations in the wine sector. It is considered a national reference in the field. In addition, it carries out the grape ripening control tests and the quality controls determined by the DOC Rioja Control Board to certify wines. This positions it as a key element within the first industrial sector of La Rioja, providing direct support to the wine companies.

## TO REACH A DOCUMENT.

- 1. KICK-OFF MEETING.** Government stakeholders (Regional Ministry responsible for agricultural research, ERDF Operational Programme funding managers, representatives of the ICVV and the management of the Oenological Station) shall meet to determine the scope of the study to be undertaken and the spaces and equipment to be reviewed. The result of this meeting will be a base document that will define the scope of the study to be developed.
- 2. HIRING TECHNICAL ASSISTANCE:** Once the scope of the work to be carried out has been determined, an external technical office will be designated, employing the appropriate public procurement procedure. This office will prepare a proposal to improve existing infrastructure.
- 3. WRITING OF THE DRAFT TECHNICAL REPORT AND PRELIMINARY PROJECT:** The Company would deliver a draft document to the Government of La Rioja with a preliminary project.
- 4. ANALYSIS BY MONITORING COMMITTEE AND ASSESSMENT OF PRELIMINARY PROJECT:** The members of the monitoring committee will analyse the report or preliminary project and determine the different steps deemed necessary to carry out the improvements in the centre. These will always be subject to budget availability. In addition, a report of recommendations will be prepared to streamline the management of ERDF funds aimed at improving the financing of investments in scientific infrastructures through ERDF funds.

#### **3.1.4 PLAYERS INVOLVED.**

The following players would be involved in the implementation of this action:

- General Directorate of Agriculture and Livestock (action coordinator).
- Institute of Grapevine and Wine Sciences.
- General Directorate of European Funds of the Government of La Rioja, as responsible for the EFDR Operational Program.
- Company to be determined by procurement procedure.

#### **3.1.5 COSTS.**

A maximum cost of €25,000 is estimated to be disbursed for the planned studies in 2020-2021.

#### **3.1.6 FUNDING SOURCES.**

The planned studies, and other possible current expenses (excluding personnel) arising from the implementation of the action are subject to 50% co-financing by the ERDF Operational Programme of La Rioja.

#### **3.1.7 TIME FRAME.**

From the 2<sup>st</sup> semester of 2020 to the 2<sup>nd</sup> semester of 2021.

## **3.2 ACTION 2: MAP OF SCIENTIFIC AND TECHNOLOGICAL TALENT IN THE FIELD OF BIOECONOMY IN THE AGRI-FOOD SECTOR.**

### **3.2.1 OBJECTIVE:**

The main objective of this action is to improve the governance and monitoring system of the Rioja smart specialization strategy. The action is focused on increasing information systems within the bioeconomy knowledge area, which is considered strategic in RIS3 in La Rioja.

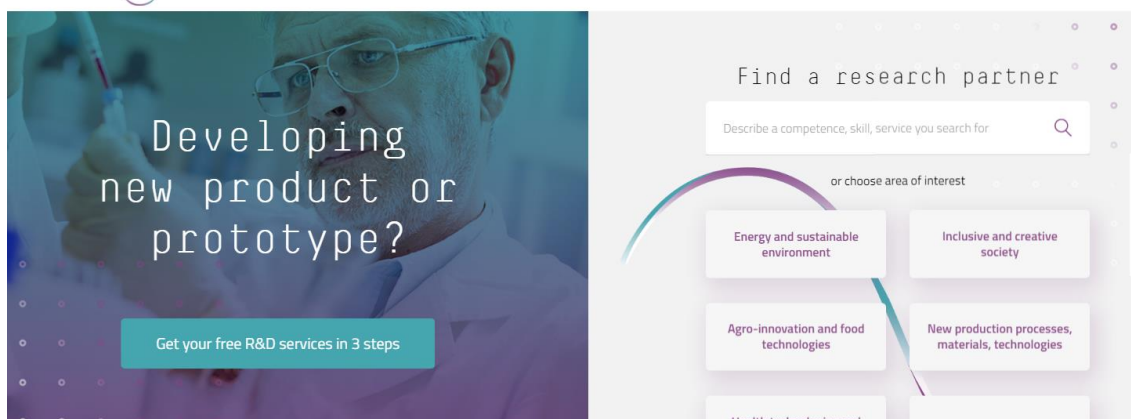
According to the definition developed by the [FAO](#) in the [Global Bioeconomy Summit 2018](#) '*bioeconomy is the production, utilization and conservation of biological resources, including related knowledge, science, technology, and innovation, to provide information, products, processes and services across all economic sectors aiming toward a sustainable economy*'.

### **3.2.2 BACKGROUND.**

This action stems from four inputs. First of all, the best practices identified in the study visit to Lithuania, secondly the inputs sent by the project partners regarding our biotechnology potential, thirdly the SWOT analysis. This is explained in detail below and finally the most important, the alienation with the La Rioja Smart Specialization Strategy (RIS3). We will explain it in detail.

#### **IDENTIFIED BEST PRACTICES.**

One of the best practices that we highlight in this project is the project [OPEN R&D LITHUANIA](#). It is a project based on the open data philosophy with a clear approach to the internationalisation of innovation. This project has mapped the main scientific resources of the country, structured them and systematised them for constant updating. This way, it becomes a powerful tool to disseminate and market its technological resources both nationally and internationally, as it is translated into the English language.



Our stakeholders validated this good practice in stakeholder meeting April, 2019. In addition, thanks to a proposal made by the La Rioja cluster in May 2019 (stakeholder attending all the project meetings) the opportunity was seen to guide this good practice in the field of bioeconomy. In this way we could deepen the monitoring of the scientific resources of La Rioja in bioeconomy.

#### PEER REVIEW.

During the study visit of La Rioja, an effort was made to publicise the main agents of the La Rioja Innovation System, with special emphasis on agents related to Bioeconomy such as CIBIR, CTICH or the FOOD+I cluster. When the partners assessed our strengths and our potential development there were numerous references the empowerment of KETS, particularly biotechnology and related areas, such as health.

The following table shows the recommendations made by the partners regarding KETS and their hybridisation with the agri-food sector:

LESSON LEARNT 3	ACTION TO IMPLEMENT IN YOUR POLICY 3
<p><i>Collaboration between different sectors (food &amp; health).</i></p>	<p>To <b>promote cooperation</b> (public &amp; private), particularly <b>in different sectors</b>.</p>
<p><b>The R&amp;D results should reach as wide a target audience as possible, so the right communication is the key.</b></p>	<p>Mentoring, coaching and showcasing of examples to motivate entrepreneurs and farmers to develop and innovate their businesses. Organisation of international conferences and meetings for sharing best practices and gathering information about trends from external experts.</p>
<p><i>There are a lot of research centres and institutions, but communication and sharing of information is not sufficient. It could be the case that the same research was carried out in different centres. It would be a waste of resources. The creation of a common data exchange system would possibly improve regional</i></p>	<p><b>Creating one centre coordinating other research centres in order to coordinate all researchers and resources</b> (financial, technical and human).</p>

<p><i>and interregional cooperation between research companies and would possibly reduce the need for funding, since there would be no need to duplicate research.</i></p>	
<p><i>Another important issue is the <b>creation of infrastructure that can be used as a place for producing new ideas, carrying out meetings and exchanging ideas</b>. At the same time, the existing infrastructure should be used as effectively as possible and made available to anyone interested in creating new solutions. At the same time, one should also take care of financing mechanisms with 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</i></p>	<p><i>Undertaking activities that will enable effective use of the infrastructure and <b>creating opportunities for cooperation between the participants of the innovation system</b> that will allow for seeking funding sources outside public funds.</i></p>

In summary, we are told that we have to produce new structures to allow for an increase in cooperation, to strengthen the scope of bioeconomy (health and biotechnology) and to increase public-private cooperation.

## DIAGNOSIS AND SWOT ANALYSIS.

As a result of the SWOT analysis, the stakeholders proposed a work line titled **‘PROMOTION AND COORDINATED DISSEMINATION OF THE AGRICULTURAL SCIENTIFIC RESOURCES OF LA RIOJA’**.

### IV. Propuesta de líneas de trabajo

#### 3. PROMOCIÓN Y DIFUSIÓN COORDINADA DE LOS RECURSOS CIENTIFICOS AGROALIMENTARIOS DE LA RIOJA (ESTRATEGIA DEFENSIVA)

##### MOTIVACIÓN:

- Desconocimiento mutuo de las actividades entre los agentes que dificulta la colaboración (A.2.3).
- Tamaño y número de agentes reducido, facilitando la conexión de alianzas y simplificando las colaboraciones (F.2.4).

**DESCRIPCIÓN:** Desarrollar actividades encaminadas a coordinar esfuerzos para posicionar los centros regionales de I+D+I agroalimentarios en el panorama global de la innovación. Se busca coordinar, encontrar sinergias y mejorar el posicionamiento de la I+D+I riojana en un sector estratégico.

This possible line of development has been discussed and selected by the stakeholders in April 2019. Being in tune with the above in study visits, peer review.

Finally, we must highlight the consistency of the action with the reference policy framework of the project; more, specifically with priority 2.1 of the La Rioja Smart Specialisation Strategy (RIS3). The priority is called **‘CHANGE OF ECONOMIC MODEL BASED ON BIOECONOMY’**

## ALINEATION WITH THE SMART STRATEGY SPECIALISATION.

The La Rioja Smart Specialization Strategy was approved in 2015 and revised in March 2019, during the course of the Agri Renaissance project. In the revision of RIS3, this action was defined as a priority “Change of economic model based on the bioeconomy”. This priority is integrated into one of the three major strategic areas "La Rioja Competitive Territory".

### Description of priority 2.1 “Change of economic model based on the bioeconomy”.

#### PRIORIDAD 1



#### CAMBIO DE MODELO ECONÓMICO BASADO EN LA BIOECONOMÍA

Creación, captación, desarrollo y potenciación de nuevas propuestas que tengan como base la **industria agroalimentaria**, el principal sector productivo regional, propiciando un **cambio de modelo** que busque la investigación, la innovación, la especialización, la tecnificación, la calidad incremental y la sostenibilidad de las actuaciones sobre el entorno, con un enfoque amplio y multidisciplinar basado en la bioeconomía que incluya la producción ecológica y busque respuestas rentables a los efectos de la alimentación sobre la salud en un contexto en el que el cambio climático muestra una fuerte incidencia, creando nuevas ventajas comparativas como región y propiciando una aportación de valor al conjunto de la U.E. por la transferencia de tecnología y conocimientos. La Rioja reúne unas **condiciones específicas** difíciles de encontrar en otras regiones europeas y su encuadramiento en la almendra central del Valle del Ebro hace que sea el lugar idóneo para desarrollar un sector bioeconomía aplicada a la producción ecológica y la alimentación saludable, contando para ello con grandes productores, centros de investigación, clústeres, grandes operadores en el segmento de envase y embalaje y grandes operadores logísticos.

Source: <https://www.larioja.org/larioja-client/cm/innovacion/images?idMmedia=1121992>

### 3.2.3 ACTIONS TO BE IMPLEMENTED.

The main objective of this action is to improve the governance and monitoring of RIS3 in La Rioja. This improvement will be made through optimizing stakeholder monitoring, being able to quantify existing resources and having this information available for better decision-making.

Efforts are focused in the area of bioeconomy in the agri-food sector. Since it is a novel process, it is given a limited, sectoral scope.

A total of eight actions are contemplated for this action, listed below.

TASK	DESCRIPTION	STAR	ENDING
<b>BENCHMARKING OF GOOD PRACTICES IN INVENTORY OF SCIENTIFIC CAPABILITIES</b>	Review of the different existing policies regarding the cataloging of talent and scientific resources in the field of the bioeconomy and other resulting technologies. The result will be a proposed report with the fields to be exploited at a quantitative and	<b>nov-20</b>	<b>mar-21</b>
<b>ASSESSMENT THE DRAFT REPORT AND REVIEW.</b>	Once the benchmarking is closed, a specific information model to be collected is reviewed and	<b>abr-21</b>	<b>abr-21</b>
<b>DEFINITION OF METHODOLOGY AND FINAL STRUCTURE OF DATA TO</b>	From the Government of La Rioja, once the enhancement has been heard, the fields to be defined will be specified	<b>may-21</b>	<b>jun-21</b>
<b>ASSESSMENT BY THE RESEARCH CENTERS</b>	Before the data collection, the information to be collected will be exposed to the R + D + I centers so that they are knowledgeable first hand.	<b>jun-21</b>	<b>jun-21</b>
<b>SURVEYS AND DATA COLLECTION</b>	A survey model will be proposed with a collection period of one month. (CIBIR, CTICH, CTIC-CITA, ICVV)	<b>sep-21</b>	<b>oct-21</b>
<b>DATA ANALYZING</b>	The results will be planned in an executive summary report that clearly and synthetically reflects the results of the surveys. This report will be submitted to an ad hoc study commission for this action.	<b>oct-21</b>	<b>feb-22</b>
<b>THE COMMISSION WILL VALUE THE DATA IN THE AGRO-FOOD SECTOR</b>	The ad hoc commission made up of officials and researchers will analyze the potential of the report and its possibilities of application to public policies of the regional executive: public planning, promotion of public-private collaboration, registration and	<b>feb-22</b>	<b>mar-22</b>
<b>DISSEMINATION OF RESULTS</b>	The results will be disseminated virtually in a format accessible to different targets (civil society, researchers, R & D & I centers ...)	<b>abr-22</b>	<b>abr-22</b>

They will be executed through the Government of La Rioja, given that it is the entity responsible for planning Smart Strategy Specialisation and developing agri-food innovation policies. In addition, there is the “KNOW HOW” of the CTIC-CITA that has extensive technological knowledge of the agri-food sector.

The results of this action will have a direct impact on the following aspects:

1. Improvement of the planning and monitoring of the Smart Specialization Strategy of La Rioja, specifically of area of action 2 "La Rioja Competitive Territory".
2. Potential improvement of the registers and public information of the regional executive regarding R + D + I-
3. Generation of synergies between structural funds such as ERDF and EAFRD, since the bioeconomy is identified in both areas of financing.
4. Generation of knowledge and dissemination of the Smart Specialization Strategy of La Rioja.

#### **3.2.4 PLAYERS INVOLVED.**

This action will be led by the Regional Ministry of Autonomous Development and the Regional Ministry of Agriculture, Livestock, Housing, Territory and Population. For this, it will also have the close cooperation of the CTIC-CITA Technology Centre.

The possibility of having external support from an entity with expertise in scientific information management is also envisaged.

#### **3.2.5 ALLOCATED RESOURCES.**

There are plans for implementing the project with own resources, although it is true that a maximum expenditure of €1,000 (without VAT) are contemplated for possible dissemination or communications events.

#### **3.2.6 FUNDING SOURCES.**

This action is planned to be co-financed with own funds from the Government of La Rioja, within the framework of the Smart Specialization Strategy of La Rioja.

#### **3.2.7 TIME FRAME.**

From the 2<sup>st</sup> semester of 2020 to the 1<sup>st</sup> semester of 2022.

It is the action that will take the longest, during the two years of the second phase.