# Agri and food: the engine for regional change

STRING details how the performance of regional development instruments and programmes depends on building strong agrifood innovation systems for creation and co-operation

he brand-new pan-European STRING project improves the performance of regional development instruments and programmes in building strong agrifood innovation systems across Europe and promotes agrifood innovation clusters as testbeds of cocreation and co-operation in the agrifood production sector.

The provision of smart, healthy and sustainable food is a top priority in Europe. The liveliness and dynamism of some European regions depend on the level of activity in the agrifood sector. STRING boosts competitiveness of agrifood companies through innovation and international development, stressing the importance of (new) clusters and co-operations.

The agriculture and food industry are challenging drivers for regional innovation and growth. STRING unifies European regions sharing the ambition to improve the international competitive capacity of their agrifood clusters because those clusters have enormous economic and societal impacts, both today and tomorrow!

All STRING regions are renowned for their food production traditions and their innovation potential. They are all engaged in food innovation and production through different roles. The overall objective of these partners is to improve the performance and implementation efficiency of development policies and programmes related to food research, development and innovation, and clusterisation to promote innovation value chains for the sector.

## Deepening cluster integration

By further clustering integration and creating more added value – contributing to smart growth – each region will reach this ambition. STRING promotes intensive interregional learning, knowledge exchange and ever-lasting intercluster

co-operation. The performance and implementation of the European Regional Development Fund (ERDF), as a result of STRING, has financed policy instruments related to agrifood innovation and to the vertical triplehelix clusterization — both supported by enhanced SME participation. Intra and intercluster cooperation is deepened, serving the proper operation of food innovation value chains in the seven partner regions and the EU more widely.

Strategies for creating added value are adopted and successfully applied also via new food innovation projects born at the interface of collaboration amongst economic sectors like health care, high-tech systems and big data

### **Engines for change**

High education levels and significant investments in R&D are important to create high level human capital in both the agriculture and food industry, facilitating boosts to innovation and competitiveness within international markets. High-labour productivity can only be reached when relevant resources are allocated to the creation of competent farmers and food industry managers.

Practical experience singularly is certainly not sufficient to sustain innovative development pathways and creates the ability to operate on extremely difficult export markets. North Brabant and Central Denmark are outstanding examples of highly-competitive regions where a high-level innovation ecosystem explains their production and export performance. Alsace and Emilia-Romagna, Italy, are following these two leading regions in a secondary position, which is largely attributed to lower levels of education and minor investments in R&D. Castilla y Leòn has moderate performances in productivity and exploitation of export potentials. Among the two Eastern European regions, the Northern Plain in Hungary shows decisively lower levels of economic development, but discrete levels of tertiary

## Fact check: Agriculture and food in the centre

In the European context food sector in general and food clusters (as test beds for innovation) in particular potentially prosper in those regions where the sector is positioned as central to regional development strategies.

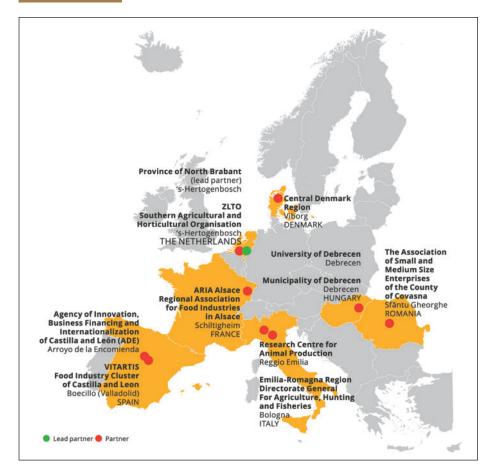
A number of accelerators:

- GDP per person employed varies from €19,900 (North Plain Hungary) to €74.000 (North Barbant, the Netherlands) in agriculture.
- GDP per person employed varies from €17,750 (North Plain Hungary) to €130.500 (Central Denmark Region) in the food industry.
- Average R&D as a percentage GDP: 1.6%. Most R&D investments are around 2.8% in the Central Denmark region, and investments of at least 0.2% in Covasna County, Romania.
- Average export of agrifood products as a percentage of total export: 28.4%. Varying from a range of 8.5% (North Plain Hungary) to 50% (North Barbant)
- Average percentage of agriculture amongst employment rates: 3.36%. With Castilia y Leòn, Spain, at the highest level (7.2%) and Area Alsace, France, at the lowest (0.9%).

education. The Central Region of Romania lags behind because of low levels of investments in R&D, and low levels of agricultural training for farmers and tertiary education.

#### The fellowship of STRING

The project development of STRING started at the initiative of province of North Brabant (NL) and the



Emilia Romagna Region (IT) in early 2015. The starting point was of innovation chains in regional food clusters. The project partnership involves seven regions of Europe and altogether eleven partners. For all the regions, agrifood was an important part of their Smart Specialisation Strategy.

In June 2017, the STRING project was launched in Bologna, Italy. In the first phase we developed Regional Engines for Change. Based on statistics, regional policies, best practices and learning needs, we built a framework for Phase 2, the Knowledge Exchange. Using information on good practices and learning needs, we matched regions, and together with regional stakeholders we are taking part in site visits and staff exchanges. By doing this we are able to have an in-depth learning experience with stakeholders.

In 2018, each region has two site visits:

- February 2018: We visited a site in Castile and Leòn; and
- In June, we will have one in North Brabant.

Next to that, each region also has at least one staff exchange with another region. In March, Central Denmark Region is hosting a staff exchange, Alsace will host one in June, and in September, Emilia Romagna will host a staff exchange. By doing this we learn on the spot how good practice is achieved and if — taking into account the regional aspect of your own region (i.e. social and cultural differences) — and how good practice can be implemented, perhaps partly, in individual regions.

We are only half way, but we have already have had some interesting learning experiences. After

three site visits in the Debrecen region, Hungary, it turns out that a lot of food companies have better understandings of the demands for current markets and are better equipped to respond to changing demands in comparison to some major food companies from the North Brabant region.

This learning experience and a lot of others will be integrated into regional policy advice for the next European programme period from 2021-2028. If you are interested, please follow us on social media or on our website and get in touch!

# Inspirational testbeds across Europe

- InnovationCamps (Central Denmark Region):
  Co-operation between SMEs, business academies and university colleges. Innovation Camps is a way of establishing added value for education institutions, students and SMEs with innovation ideas and ambitions. Creating a public-private triple helix partnership approach, Innovation Camps builds on one coherent innovation ecosystem in the Central Denmark Region and Denmark.
- Enjoy the taste of Alsace (Aria Alsace, France):
  Savourez l'Alsace® is a territorial brand of more than 2,500 products from 50 different food companies, in accordance with specifications. The aim of creating a collective brand is to improve business for food industries. As a matter of fact, promoting a collective brand is more efficient and powerful than promoting several different brands, even if they are strong in Alsace. This brand is

- available for every food business, with head office and production site located in Alsace.
- The Pharmaplis Innovative Food Cluster (North Plain, Hungary): This food cluster operates the so-called 'I-Bolt' store. The aim of 'I-Bolt' is to develop and sell new products, such as bread, certain cheeses, pizza with sorghum, traditional ice creams, purple corn, frozen wine, LactoMicroSel®, new forms of selenium, amongst others.), which are developed in cooperation with the university and SMEs. In order to sell these new products, they have created a shop and participate in exhibitions in order to meet consumers.
- Regional Network of Technopoles (Emilia Romagna Region, Italy): the CRPA LAB research unit in Reggio Emilia, Italy, operates in the agrifood sector with activities to support the technological development in the areas of processing and transformation of food, and in the management of effluents and organic waste with the aim of producing renewable energy from biomass.
- The Castile and León Entrepreneurship and Innovation Network (Castile and Leòn, Spain) is a new way to stimulate and promote a more competitive regional-economic model through smart specialisation, relating all key actors of innovation: administrations, universities and business-technology centres.
- Food Tech Brainport (North Brabant, the Netherlands) helps SMEs and larger SMEs to turn technology into money: technology used in the processing of plant waste, the extension of shelf life, and the separation of raw materials and/or waste streams. By doing so, we bring the best in food and technology from the high tech and chemical industries, for instance together.
- AgroFood Regional Cluster (Central Region Romania) is going to produce Europe's first gluten-free fibres enriched with natural mineral water and developed by co-operation.

Also improving the capacity of your agrifood cluster? Join in. STRING Interreg Europe





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