"Development of an innovative network for the promotion of extroversion of agro-food companies in Adriatic – Ionian Area"

SWOT ANALYSIS

This report was prepared for and submitted to the "INNOVAGRO" Project by:

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The “INNOVAGRO” partnership consists of:

Name	Role	Country
Chania Chamber of Commerce and Industry	Lead Partner	Greece
Region of Crete	Partner 2	Greece
Technical University of Crete	Partner 3	Greece
Network of the Insular Chamber of Commerce and Industry of the European Union	Partner 4	Greece
Province of Potenza	Partner 5	Italy
E-institute, institute for comprehensive development solutions	Partner 6	Slovenia
Italian Confederation of Agriculture	Partner 7	Italy
Union of Chambers of Commerce and Industry of Albania	Partner 8	Albania
Chamber of Commerce and Industry of Serbia	Partner 9	Serbia
University of Basilicata	Partner 10	Italy

History Changes

Version Number	Date of Issue	Document Title	Author(s)	Controller
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INTRODUCTION

One of the most important objectives of INNOVAGRO project is to develop updated sectoral intelligence on the most important issues concerning agrofood sector that can be addressed at interregional level, in close interaction with the specific regional & national development policies of the participating countries, and this is the main aim of this deliverable.

To this aim, the project's partnership identified the S.W.O.T. analysis as the most appropriate approach to evaluate strengths, weaknesses, opportunities and threats within the agrofood sector, from a local/regional/national/interregional perspective, where:

•**Strengths:** characteristics that give the agrofood sector in the specific implementation area an advantage over others.

•**Weaknesses:** characteristics that create for the agrofood sector in the specific implementation area a disadvantage relative to others.

•**Opportunities:** elements that the agrofood sector could exploit to its advantage.

•**Threats:** elements in the environment that could cause trouble for the agrofood sector.

This S.W.O.T. analysis focuses on the following 6 macro topics:

- Agrofood Market/Business Environment
- Agrofood Structure
- Research/ Innovation/Technology
- Sustainable Development (environment/biodiversity)
- Human Resources
- Co-operation/Clustering/Networking

In addition, this Sector S.W.O.T. Analysis provides information about the relevance of the agrofood sector with the specific development characteristics of each participating region/country (Region of Crete, Region of Basilicata, Region of Puglia, Albania, Serbia, and Slovenia) and the relevant regional/national development policies.

Consequently, this S.W.O.T. analysis could be considered as benchmark for the cross-region/country comparison by providing specificities of the S.W.O.T. analysis at regional/national/interregional level.

1. DESCRIPTION OF PROJECT "INNOVAGRO"

Project details

Project title: "Development of an innovative network for the promotion of extroversion of agro-food companies in Adriatic – Ionian Area"

Acronym: INNOVAGRO

Programme Priority: 1) Innovative and smart region

Specific Objective: Support the development of a regional innovation system for the Adriatic - Ionian area

Project Number: 613

Project's completion date: 31st of October 2019

Project Total Budget: 1,060,000 €

Brief description – Project Objectives

The ADRION area is characterized by low innovation performance, limited capacity of SMEs, inadequate cooperation among companies and research institutes, low synergies among agro-food and tourism sector and low implementation of environmentally – friendly farming practices. On the other hand, there are some strong points, such as the existence of quality agro-food products, the existence of a number of competitive and highly active research and innovation clusters, albeit with poor intraregional joint activities, and also the existence of RIS3, where transnational cooperation can focus on, in order to find solutions in the common problem of SMEs extroversion. The field is complex and requires much learning in terms of internationalization, access to market, financing, networking, innovation capacity, business transfer, entrepreneurship, cross – border & cross – sector co-operation, and environmentally – friendly farming practices . It also entails incorporation of new forms of SME development, such as design, eco-conception and corporate social responsibility. The project focuses on the development of links and synergies between farmers, agro-food enterprises, Research Institutes and Public Authorities, for a) the promotion of agro-food products' extroversion, b) the development of agro-food companies' internalization, and c) the promotion of environmentally – friendly farming practices.

The **main objective** of the "INNOVAGRO" project is the development of an interregional system for the reinforcing of the interaction between research centers and universities, companies of the agro-food sector, as well as the rest of the institutions dealing with promoting extroversion and entrepreneurship in the participating countries, so as to provide SMEs with innovative services of marketing and management, in order to increase their extroversion and internalization. This main objective is further analyzed in the following sub-objectives:

- ✓ Development of innovative mechanisms and tools aiming at the amplification of the collaboration between the participant countries' SMEs and the reinforcement of their ability to do business abroad
- ✓ Development of innovative transnational business networking
- ✓ Development and dissemination of knowledge, aiming at improving the competitiveness of agro-food SMEs
- ✓ Reinforcement of the services that promote the innovation and extroversion of agro-food SMEs
- ✓ Creation of co-operation network between professional associations from the agro-food and tourism sector, Research Institutions, and Public Authorities
- ✓ Link farmers, agro-food and agro-tourism companies, as a transnational vertically intergraded chain
- ✓ Create awareness about the implementation of environmentally – friendly farming practices.

Outputs

Project's main outputs concern:

a. The establishment of a Transnational Cooperation Network in agro-food & tourism sector
b. The development of a Virtual Transnational Business Innovation & Entrepreneurship Center (VIBIEC), offering support through e-incubators, e-business network platform, and other self-assessment tools.

One of the main project's outputs is the development of a Virtual Transnational Business & Entrepreneurship Center (in a form of a computerized specialized Information Environment which will provide support through e-incubators, e-business network platform, digital tools for the self-assessment of an SME's level of extroversion, e-library system, etc.) in which all partners of the consortium will be involved and will continue to collaborate towards the implementation of future transfer activities, right after project's ending. This e-platform will also include a section offering or requesting cooperation among clusters or bodies and SMEs acting in agro food sector in all over Europe. The interested entities/cluster organizations are allowed to post contact details, a short description of the proposal/request/intention and type of cooperation, etc. With this tool the partnership would like to transfer to other territories the project's results trying to influence the EU agro-food policy space.

Results

Given the objectives that the project is intended to achieve and in order to help the SMEs to innovate and to access the international markets the partnership will work closely to improve the SMEs' competitiveness paying a particular care to synergy-building processes and the creation of links between Institutions, Public Authorities and the agro-food SMEs. Innovative services will be developed, that through internet, will be delivered strategic information about the targeted markets, the normative and legislative issues about the same markets' access, and strategic marketing actions. The "SMEs networking" process will finally materialize in concrete meetings and workshops where the enterprises will have the opportunity to create new trade and business relationships. Through project's interventions **the results will be achieved** by contributing to:

a. improvement of SMEs productivity, competitiveness and access to the international market leading to growth in the SMEs' turnover (derived from the transfer of successful experiences through the Transnational Cooperation Network in agro-food & tourism sector established by the project)
b. reducing the transactional costs
c. creation of new trade contacts and relationships (through entrepreneurial missions)
d. increasing the percentage of SMEs involved in internationalization and innovation processes
e. strengthening research and innovation activities and technological development in the targeted areas by assuring the interaction between R&D and SMEs needs

f. setting up the basis for new strategies/policies from local/regional authorities, to support SMEs innovation in agro-food sector
g. involving policy makers and stakeholders with increased awareness and enhancing their relevant knowledge, competencies and skills
h. increasing the implementation of environmentally – friendly farming practices
i. enforcing the link between agro-food (production) and tourism sector (consumption).

Partnership

In order to achieve project's goal and to assure effective implementation of the project methodology, in the consortium are including the appropriate types of partners: Institutions, SMEs Unions and Public Authorities. Within this framework, project's partners represent 5 (Greece, Italy, Slovenia, Albania, and Serbia) out of 8 Programme counties. Thus, within the consortium exists 3 Research Institutes and Universities (Partners 3, 6, & 10) with extensive experiences in business innovation and rural development, 3 Chambers of Commerce (Lead Partner, Partners 8 & 9) fully representing the agro-food SMEs of their territories, 1 Agriculture Confederation (Partner 7) specialized in eco-friendly farming practices, 2 Regional/Local Authorities (Partners 2 & 5) responsible for the local rural development, and 1 Network of Insular European Chambers (Partner 4) with a significant experience in the networking and clustering. The specific partnership covers the biggest part of the geographical Programme location and they have the Institutional jurisdiction and interest in the topic also after the project closure (activities continuation). For a most effective project methodology, a horizontal distribution of project activities and responsibilities has been achieved. The LP will coordinate and organize the other partners to guarantee the achievements of the projects' objectives and the monitoring of the achieved results. All partners will be responsible for the accomplishments of their objectives, administrative and financial duties. Also they will cooperate to the definition and diffusion of both the project start up and of an agreement for the sustainable development of the project. The Research Institute will cooperate to the development and pilot implementation of the innovative ICT, whereas the Professional Associations will participate in the networking and extroversion events, and the Regional/Local Authorities will be responsible for the capitalization actions. Finally the participant Network will transfer previous good networking/clustering practices.

2. AGRO-FOOD SECTOR DESCRIPTION / CURRENT SITUATION

2.1 Market size and trends at regional/national level

Region of Crete

In the Region of Crete, the largest percentage of employment is linked with agriculture and agro-food sector (49% of employment), while the tourism sector follows (31% of employment). The specialization in the rural economy is also confirmed by the export structure (59% of exports are referring to products from the primary sector). But if the approach is based on gross production value, tourism and trade accounted for 35%, while agriculture covers only 9% and is virtually equivalent to processing / energy and constructions that also cover 9%.

The majority of companies on agro-food sector are small enterprises. Specifically, 90% of these are mainly family businesses (1 -10 employees). The remaining 10% of them are larger companies (10 - 250 employees).

As far as the agricultural production the Region of Crete is characterized by extremely favorable conditions, due to the mild climate, the increased sunshine for the most part of the year, as well as the relief of the soil, which creates a variety of micro-environments. Thus, there are conditions of a prolonged period of vegetation, which favor the development of organic farming and the production of quality and certified products for high income markets. This comparative advantage is also reflected through the production and demand of PDO and PGI agro-food products.

More specific, the most important agro-food products in the Region of Crete are:

- Olive oil

With high nutritional and biological value, Cretan olive oil and, of course, the olive oil of the intervention area is a key ingredient of the Mediterranean diet with particularly beneficial properties for humans.

The main characteristic of Cretan olive oil, which makes it competitive, is its quality. Today over 95% of olive oil production in Crete is extra virgin olive oil (acidity ≤0.8%). It is a low acidity olive oil with a pleasant smell and excellent taste.

These qualities of Cretan olive oil are due to the mild climate prevailing on the island, especially during autumn and winter, a period in which oil is created in the olive. Also, due to the good weather conditions, the harvesting and transporting of the olives is done in a short period of time. The oil is obtained only by mechanical methods under conditions that do not cause oil alteration and have not undergone any other treatment. Therefore, "virgin olive oil" is the "natural juice" oil, which contains intact all the essential ingredients contained in the olives (vitamins, trace elements, microelements etc.).

- Vegetable and fruits

The vegetables tomatoes, cucumbers, courgettes, and other, are produced in the fertile plains of the island, where it is never snowing. The cultivation conditions of these products are almost ideal near the beaches of the South. The cultivator is favored by nature, making his difficult work easier. It does not need heating to keep up the temperature, because of the sun. The taste of Cretan vegetable products is authentic and very attractive. Early vegetables in Crete are grown in extensive greenhouses.

As far as oranges, there are produced in the particular microclimate (atmospheric humidity, great sunshine throughout the year and irrigation from the White Mountains). The harvest starts from the coastal zone in late October and reaches the end of May.

- Cheeses

Many Cretan are occupied with livestock farming and the production of cheese products is particularly widespread and renowned throughout Crete. The typical cheeses in Crete are made from sheep and goat milk.

- Wines and spirits

The Cretan vineyard, the most traditional of Europe and the oldest of Greece, is located at an altitude of about 600 meters and extends to the sea. The favorable climatic conditions prevailing in the region, with mild winter and dry and hot summer help to produce excellent local red wines (with top varieties: Kotsifali, Syrah, Grenache Rouge, Liatiko, Mourvedre, Mandilari, Cabernet Sauvignon, Merlot), white wines (with top varieties: Sauvignon Blanc, Chardonnay, Vilana, Moschat White, Moschat Spinas, Dafni, Malvazia, Plyto, Vidiano), and also rose wines.

More specific, the 68% of the wineries are located in the Regional Union of Heraklion which they produce the 80% of the total wine quantity in the whole island of Crete.

Finally, the cretan raki, also known as tsikoudia, is the most representative and recognized spirit of Crete island.

- Honey

Especially hygienic and nutritious food, honey is one of the local products of Crete. The honey produced on the island is of exceptional quality, due both to the knowledge and care of experienced beekeepers and to the ideal climatic conditions that prevail. Thyme honey is characterized by its amber color and its intense aroma, the honey of forest is light in color, rich in minerals and trace elements and full of flavor, and honey of sage, which is also light in color and rich in essential oil and organic acids.

- Traditional Cretan Rusks

One of the most characteristic products of the Cretan diet is the traditional Cretan Rusks from whole grain barley with olive oil. It is mostly used in the preparation of the original Cretan dakus.
Consequently, Region of Crete holds a high share of the total olive oil production in Greece. Also, other products, such as vegetables and fruits, cheeses, honey, maintain an important level of production over time.

Slovenia

Due to its specific characteristics, Slovenia undoubtedly belongs to the circle of countries with fewer favorable conditions for agricultural production. These significantly affect the smaller production capacity of farms, a smaller selection of cultures and product orientations, and the overall, the adaptability and competitive ability of the agricultural sector is worse. Apart from the planar part of the Sub-Panama World in the northeast and smaller ones of the concluded areas in the bottom of the basins and planes, Slovenia has no significant areas, suitable for growing crops. Despite the favorable geographical position, which enables a large and especially quality production in fruit growing and wine growing, is the share land under permanent crops much smaller compared to countries with similar production conditions.
The natural conditions for agriculture are relatively unfavorable in Slovenia. Land suitable for agriculture is limited, as forests cover more than 60% of the territory, which according to the share of forest ranks Slovenia in second place in Europe (behind Finland). Agricultural land occupies less than 30% of all areas, and this share is steadily decreasing due to overgrowth,

expansion of building areas and new transport infrastructure. About 75% of agricultural land is located in areas with unfavorable conditions for farming, mostly in mountain and hilly areas. Although unfavorable conditions do not prevent full farming in these areas, however, their productivity is lower, the choice of agricultural policies is limited and the production costs are higher. In the structure of the agricultural land in use, permanent grassland prevails (around 60%). Only about 35% of all agricultural land is intended for the production of crops and vegetables, while the remaining 5% is covered by permanent crops.

For Slovenian agriculture, it is characteristic that we have large agricultural businesses on one side (legal persons) and, on the other hand, a large share in agriculture is family farms. (natural persons). Important stakeholder in Agro-food industries are also cooperatives.

Slovenia has a similar share of agriculture in gross value added (2009 2.4% together with forestry and fisheries), which is the EU-27 average (2009 1.7%), while the employment rate (2009 8.6%) is much higher than in the EU (2008 5.4%). Both shares are diminishing, mainly due to the faster development of non-agricultural economic activities.

Finally, Slovenia has an unfavorable property structure in the Slovenian countryside and consequently is inadequate economics of agricultural production volume and non-competitiveness of food processing industry, which depends to a large extent on imported raw materials.

Serbia

Agriculture in Serbia is at the heart of the economy and is an engine for development of rural areas. Agriculture's contribution to Serbia's GDP remains high. In 2016, agriculture accounted for 11.9 percent of GDP, 2.4 percent higher than previous year, mostly due to very favorable weather conditions and record crops. Observed by activities, in the second quarter of 2018, compared to the same quarter of the previous year, significant real growth in the gross value added was recorded in the section of construction – 22.9% and the section of agriculture, forestry and fishing – 14.8% This high participation in the country's GDP has mostly resulted from Serbia's fertile land and natural conditions for agricultural production, as well as the continued importance of the rural economy to Serbia's population and delays in structural reforms in other sectors of the economy.

According to the Serbian Statistical Office, there are 680,000 people employed in agriculture or 21 percent of the total labor force in the country. Agriculture also is the most important export sector in Serbia. In 2016, agriculture and food production accounted for 19.4 percent of all Serbian exports and enjoyed a surplus of $ 1.4 billion, $130 million more than in 2015 (mostly due to an increase in processed fruit and vegetable exports).

Approximately 60 percent of Serbia's agricultural land is used for cereal crop production including corn, wheat, barley, sunflowers, soya, and sugar beets. The major agricultural land is in the northern part of the country; Vojvodina accounts for 84 percent of total cultivable land in Serbia. The country has 5.05 million hectares (ha) of arable land. Approximately 90 percent of arable land is privately owned and 10 percent belongs to the government. According to the Serbian Agriculture Census from 2012, there are approximately 630,000 registered agricultural entities of which approximately 99.6 percent are family households and 0.4 percent are legal entities. The average size of the family holding is only 4.5 ha large and the average size of commercial registered farms is 10.6 ha.

In 2016, the total value of Serbia's agricultural production was $5.3 billion, or 15 percent higher than in 2015, mostly due to favorable weather conditions and record sized yields for most crops including corn, wheat, soya, sunflower, sugar beet, vegetables and fruit production. For 2016, corn production was valued at $1.3 billion annually (7.5 million MT). Wheat was the second most cultivated cereal, valued at $473 million (3 million MT). Sunflower production was valued at $166 million (650,000 MT per year), soybean was valued at $145 million (570,000 MT) and sugar beet production was valued at $94 million (2.5 million MT). Considerable revenues ($463 million annually) also came from the fruit sector, especially from raspberries ($105 million) and apples ($106 million).

Finally, Serbia's livestock production represents approximately 34 percent of the total value of Serbia's agricultural production. It was valued at $1.8 billion in 2016, approximately 20% higher than in 2015. Proportionally, Serbia's livestock sector is mostly divided as follows: pigs $700 million (41%), cows $680 million (40%), poultry $240 million (14%), and sheep $85 (5%). The food processing industry remains an attractive sector for investment, given the country's natural resources and traditional production background, but the industry still lacks modern technology.

Albania

Agricultural production and farm income have had a significant upward trend. Livestock production accounts for about 46% of the total sector output, followed by field crops by about 44% and livestock by about 11%. The highest growth rates of production are observed in livestock, followed by livestock.

As a result of the lack of some of the major producer factors, but also the low efficiency of the use of existing ones, productivity, output and agricultural income remain very low, especially compared with EU countries. Based on national accounts, the added value of agricultural and rural development products is around 155 billion ALL. Approximately 756,000 people are employed in agriculture and the annual value added per employee is about 200,000 ALL or 1,700 euros. This value is quite low, compared to about € 26,000 for the 15 EU member states (EU15) and € 6,500 for the new EU member states. The main farm's income from livestock farms is around 1.6 times more than crop yields.

The vast majority of agricultural products are mainly used for the individual needs of agricultural households, developing widely diversified and extensive agricultural activities. They continue to suffer from an underdeveloped service system and poor physical infrastructure. Greater priority they give to the fulfillment of the main requirements, while there are few surpluses of agricultural products for the market.

Main food products are grains (mainly wheat), vegetables, potatoes and beans. As a surface, wheat occupies the most important place, but it contributes little to income from the farm. Cereals are a bit market-intensive, while vegetables, potatoes and fruits are becoming increasingly important in securing the cash income for family farms. Fodder crops (fodder crops and algae) account for about 30-35% of the farm's surface and are even more stretched by shifting farmers' interest from grain production to forage crops.

A noticeable and persistent, but gradual, decline in the area planted with plow plants, in particular with wheat and tobacco. This is due to the low economic viability of wheat and foreign competition, as well as to tobacco due to lack of processing capacity in the country. Continuous, visible and gradual growth of the area planted with forage and potatoes, growing and then some stabilization on the surface planted with vegetables. This growth corresponds to the emergency and then the increase in the demand for livestock products and fresh vegetables.

Moreover, a significant growth of greenhouse vegetables, in response to the benefits of their production and the significant deficit of local vegetable supply, has already occurred.

Also, significant increases in yields in forage, potatoes, cow's milk and goats, eggs and generally in fruit trees and vineyards have took place. The rapid growth of the number of fruit trees and the area planted with vineyards (the latter especially after 1996). By speed, this sector has achieved the greatest growth.

In recent years there is a tendency to increase the number of specialized livestock farms. It is also noted the growth of fattening calves with number of heads 5-10, but also 11-50 cows, 11-50 goats and sheep above 500 heads, which is about birth and strength of agricultural development trends. Livestock farms with over 5 heads of calves grew by almost 50% in 2006 compared to 2004. During this period, the turkeys grew by 10%, farms with over 10 honey bees were reduced by 38%, farms with over 6 heads of cows increased by 22%, farms with over 6 dozen increased by 4%, the number of pea meats with over 5000 chickens increased by 18%, while the number of fatty-pig farms with over 50 heads decreased for almost 60%, as well as the number of big peoples with over 50,000 heads increased by 50%.

Region of Basilicata

Agriculture plays a fundamental role in the Basilicata regional economy, ensuring a contribution of 5.6% to the formation of added value, which has increased compared to 2010, both in absolute terms and in percentage terms. The strong agricultural and rural character of the region is confirmed by the percentage of people employed in agriculture (8.36%), which is much higher than the national (3.90%), Southern Italy (6.73%) and European (4.6%) statistics.

Productivity in the primary sector accounts for about 49.2% of the regional total and it is also growing in the decade 2000-2010. This trend is due, firstly, to the modernization of the sector and, secondly, to the development of auxiliary activities linked to the service sector (such as tourism). The growing weight of workers engaged in the tourism sector in agriculture and EUROSTAT employment results for 2012 show, indeed, an increasing importance of extra-agricultural activities such as tourism.

Another significant trend is that of productivity in relation to the corporate size: in fact, EUROSTAT data for 2010 show that it decreases with the increase in the size of the farm, going from € 21,850 for farms under 2 hectares to € 1,280 for those above 50 hectares.

It should be noted, however, that in the decade up to 2010 the number of small farms (less than 30 ha) decreased although this was accompanied by an increase in the number of farms with more than 50 ha.

From the point of view of cultivations, the Utilized Agricultural Area (UAA) of the farms is characterized by a prevalent use of arable land which, covering an extension of 312,618.47 hectares, represents 60.22% of the regional UAA; permanent meadows and pastures represent a further share of 29.64%, while agricultural woody cultivations represent only 9.94% of the UAA.

The cultivation of grain cereals is the most representative in terms of both UAA (183,127.23 ha) and the farms involved (23,177), followed by the cultivation of dried legumes (11,197 ha of UAA; 1,535 farms) and vegetable crops that use 7,447.61 ha of the regional UAA for arable crops.

The fruit trees are present in 4,752 farms and occupy 21.55% of the UAA with woody agricultural crops. Finally, citrus fruits and vine cultivation occupy, respectively, 12.47% and 10.79% of the UAA used for agricultural wood cultivation and a respective number of farms equal to 3,508 and 9,792. The cultivation of the olive tree is the most representative in the field of agricultural woody cultivations, as it is present in 32,753 farms and involves 28,002 ha, equal to 54.26% of the regional UAA used in agricultural woody cultivations.

The most important cultivation areas are located in Metapontum region, in the Ofanto-Bradano Valley and in the Agri Valley; smaller but emerging areas are the Mercure Valley, the Sauro Valley and the periurban horticulture of the S. Arcangelo and Senise. Metapontum area is the heart of fruit and vegetable production, representing three quarters of the agricultural area affected by these crops.

The area is characterized by the cultivation of peaches and apricots, whose fruits are highly appreciated both as early products and as raw materials for the processing industry, for the cultivation of strawberries, citrus fruits, actinidia, vines for table grapes and various vegetables (including asparagus, cabbage and salads).

Increasing interest is also shown by the organic and/or integrated production of high quality products such as cherry trees. The recognition of the Metapontum Quality Agri-food District also attests to the area's very high production specialization.

The Vulture Oil DOP chain is also particularly virtuous that has grown in recent years in terms of quality and entrepreneurial ability. Recently, in the regional panorama of extra virgin olive oils two other brands of certified oil have been added: the upper valley of Sauro and that of Montemurro obtained in the municipalities of the Upper Valley of Agri.

Finally, there are currently nine products with a designation of origin in Basilicata that have received European Community recognition and some chains (cereals, olives, fruit and vegetables) which constitute excellence in the national context even if they are still highly exposed to changes of the climate, of the market and of European funding.

Region of Puglia

Historically, Apulia is one of the most important Italian regions in the agricultural products sector. It is the main national producer of many agro-foods such as table olives, olive oil, wine and a lot of kind of vegetables. Although not all years are equally favourable to crops, Puglia is usually at the forefront of national production of olive oil, wine and table grapes. Apulian wines have a high alcohol content and therefore are mostly used as "cutting wines" (wines used to be mixed with other less alcoholic wines from other regions), there are many companies that market bottled wine directly for consumption (principally located in San Severo, Cerignola, Locorotondo, Martina Franca, Moscato, Aleatico). The production of cereals (principally durum wheat but also barley and oats), legumes (chickpea, fava bean, green pea, lentil) and vegetables is also high (artichokes, tomatoes, cabbage, peppers). Also fruits production is developed as concerning citrus, apricots, peaches, plums, as well as almonds, for which Puglia is second only to Sicily. Other food produces concerns tobacco (in the province of Lecce) and sugar beets.

Also, the sheep breeding, which was once widely practiced in the Tavoliere, was significantly reduced. Region authority tries to increase the breeding of cattle, which is still scarce.

Moreover, fishing includes the fishing along the coast and, with the fishing with big boats which also go to the high seas. Puglia supplies a significant part of the fish caught in Italy and most of the molluscs and crustaceans. Oysters and mussels are intensely bred in the Mar Piccolo of Taranto.

Consequently, agriculture in Puglia grows by 4% in the three-year period 2015-2017, recovering the drop of -9.4% in the previous three years from 2008 to 2014, according to the new SVIMEZ data, with an increase in the PLV (Gross Sellable Production) of 15.07 % that has returned to overcome again -3 billion in value, despite the tropicalization of the climate that has put a strain on all crops.

Professionalism and thoughtful choices of entrepreneurs have allowed the sector to bank a positive result that could even be extraordinary, if the climate had not been so ruthless with frosts and snowfalls of January 2017 and persistent drought of summer 2017With a PLV of 3.3 billion euros the Apulian agri-food industry proves to be an extraordinary driving force for the regional economy.

Exports of agricultural products (+9%) and agri-food (+4.9%) gave impetus to Apulian exports, despite the significant reduction in production determined by climate tropicalization. Employment in agriculture also grows with the increase of 6% of the employed in 5 years.

In Puglia also the GDP has recorded +1.6% of growth - adds Coldiretti Puglia - after a disappointing +0.2% of 2016 In order not to disperse the extraordinary value of the agri-food sector a great action is required to make the entire supply chain accountable, from the field to the table, to ensure that all Italian and foreign food on sale on the shelves a quality path that concerns the environment, health and work, with a fair distribution of value.

There are 352,510 farms in the Puglia region, equal to 13.59% of farms present throughout Italy. The region is the second nationally as a number of farms (preceded only by Sicily). The total land area of the region is equal to 1,379,278 hectares (7.04% of the national total) and the agricultural land used (UAA) is 1,249,645 hectares (9.46% nationally).

In the region, the prevailing forms of management of farms turn out to be: a) "management with only family labour"; b) "management with prevalent family labour". Together these forms of management represent almost 90% of the agricultural holdings present in the entire Apulian region. Almost all farms in the Puglia region are constituted as an "individual farm" (350,295 companies out of 352,510).

In 2017 the added value of agriculture, forestry and fishing recorded a 3.9% growth at current prices and a sharp decline in volume (-4.4%), due in large part to the collapse of wine production (-14 ,00%) and fruit (-6.1%), in a context of significant increase in sales prices.

More specific:

- The prices of agricultural products sold rose sharply (+6.2%) while the prices of purchased products showed a much less marked growth (+ 1.6%); this resulted in a decisive recovery of margins compared to 2016.
- The added value of the agri-food sector, which in addition to the agricultural sector includes that of the food industry, grew by 1.2% in current terms, but decreased by 1.5% in volume.
- Due to the negative performance of the output, affected by the adverse climatic conditions, the work units decreased by a total of 1.2%. The increase in employees (+1.5%) was not sufficient to offset the decline in independent ones (-2.5%). Positive results were recorded, instead, for the food industry, where the work units increased by 3.0%.
- For the second year in a row, investments in the agricultural sector recorded a recovery (+ 3.3% in current values and + 1.7% in volume) after the pronounced contraction of the years prior to 2016.
- In 2017 almost all components of agricultural production suffered a marked decrease in volume. The decline was stronger in wood crops (-5.4%), fodder (-5.4%) and herbaceous (-5.1%). Only secondary activities recorded a favourable trend (+ 3.5%). Stationary support ones.
- At local level, production recorded a modest increase in volume (+ 0.6%) only in the South, while it decreased in all the other divisions: -3.4% in the North-East, -2.7% in the Islands, -1.9% in the North-West. The most marked decline was recorded at the Centre (-5.7%).
- With over 31.5 billion euros, Italy is confirmed in 2017 as the first among the EU countries for the level of added value of agriculture.

2.2 Description of competition

Region of Crete

As the products of Crete are Mediterranean products the most important competitors are mainly from Mediterranean Sea. More specific, the international competitors of the 5 most exported products of Crete: olive oil, vegetables, fruits, wines, and cheeses, are the following:

- Olive Oil

91% of total olive oil exports worldwide is covered by just 5 countries, with Spain leading. Among them is Greece, with a market share of 9.6%. Spain possesses 40% of exports, Italy 21,9%, Tunisia the 13% and Portugal 9,6%.

- Vegetables

The first exporter of vegetables is Spain. The next counties are France, Italy, Morocco, and Turkey. Greece is following in a lower level.

- Fruits

The first exporter is Spain. The next countries are Italy and Turkey, France, Egypt and Greece.

- Wines

The first exporter is France with a great distance from the other countries. Italy and Spain are following.

- Dairy products

The first exporter is Germany, Netherland and France are following.

Regarding the domestic competition, according the Hellenic Statistical Authority, the main competitors in regional and national lever are:

- Olive oil

The most important competitors in national market in Greece are the producers from Crete in Heraklion and Lasithi with production 18,6% of the total production of olive oil in Greece for the year 2016 (the total production in Crete is 26,9%), and the Region of Peloponnese with production 32.7%. Other important producers are from the Ionian Islands, Central Greece and North Aegean.

- Fruit and Vegetables

The main competitors in national market about tomatoes (the most important vegetable in Chania), are producers from the other areas of Crete island with 42% of production (the total production in Crete is 48,35%), the Region of Peloponnese with 21% production, Region of Western Greece with 8%, and Region of Central Macedonia with 6,5%. About oranges (the most important fruit in Chania) the main competitors are producers of Region of Peloponnese with a production 65,3%.

- Cheeses

About Hard Cheese the most important competitors are producers from the other areas of Crete island with 13,5% of production a production (the total production in Crete is 17%) and Region of Thessalia with 30%. As far as Mysithra the most important competitors are producers from the rest area of Crete with 21,4% production (the total production in Crete is 23%).and Region of Thessalia 32,7%.

- Wines and spirits

Region of Crete holds the 14% of the total production of must production in Greece for the production of wines and spirits. The most important competitors are producers from Region of Central Greece and Region of Peloponnese that possess the 15% of the Greek production, and Region of Western Macedonia that possesses also the 14%.

- Honey

The most main honey production area in Greece is the Region of Central Macedonia which produces the 22% of the total national production, instead of the Crete region which produces the 13,92% of the total national production.

- Traditional Cretan Rusks

The 100% of the producers of traditional cretan rusks is located in the island of Crete.

Moreover, the main competitive advantage of the agro food products in the Region of Crete is that these products are produced in the Mediterranean area, and constitute basic elements of the Cretan diet, which is the model of the Mediterranean diet. Mediterranean diet has been recognized internationally for its positive effects on the health and longevity of people. It has been described as "the intangible cultural heritage of humanity" by UNESCO (November 2011).

Furthermore the morphology of the territories where products are produced, the microclimate and the age-old tradition, have led to the production of products with special characteristics.

Finally, another competitive advantage of the agro food products is that many of these are certified according the regulation of Europe as PDO and PGI ensuring their origins and their quality characteristics.

Slovenia

Food produced in Slovenia is produced with less aggressive technology than the food we import. In Slovenia, food is still produced according to traditional methods, which is good from the point of view of food quality and safety. Producers achieve higher standards of breeding and production; breeding takes place in the natural environment of Slovenia, stables and farms are smaller, transport routes shorter. An important aspect is quality feed, which has a beneficial effect on the composition of meat and products.

From the main part of regional and global competitors, Perutnina Ptuj (poultry, with its 110-year tradition, is a key element in the agro-food business. For decades, they have been able to maintain a strong distinctive advantage in product quality. As a pioneer in its branch, the company introduced traceability to the consumer years ago, which they are able to prove throughout the chain within one hour from the parent flock to the product.

More specific, big multinational companies as well as discounted stores with own brands (often cheaper and of lower quality – but still solid quality) are competitors in Slovene agro-food market. The research also confirms that the Slovenian market for production, distribution and sale of foods shows saturation, but there are no specific obstacles to the entry of new companies into the market, they stress in the Public Agency of the Republic of Slovenia for Protection of Competition. With the entry of Slovenia into the EU, foreign competition came, especially from Austria and partly from Italy.

The largest agro-food producers in Slovenia are Droga Kolinska, Ljubljanske mlekarne, Perutnina Ptuj, Žito and Pivovarna Union, none of them are Slovenian owned. A branch with 15.000 employees remains fragmented, and in 20 years it has failed to connect and strengthen.

One of the few Slovene food companies that is successfully expanding to the Balkans and purchasing factories is Don Don, a majority company owned by the Mozetič family, and a 40% owner is a Finnish pension fund. After an unsuccessful attempt to take Žito, bought by Podravka, Don Don bought Pekarna Grosuplje. Don Don became the largest baker in Slovenia, with 350 employees. In Serbia and Croatia, the company has 10 factories, which, according to the co-owner Don Don Aleš Mozetič, invested 50 million euros. With this, they have increased the economies of scale, this year (2015) they expect EUR 90 million of revenue and 10 million profits. Mozetič said that they intend to expand to Romania, Bulgaria and the markets of the former Yugoslavia, where they want to become a leader in the production of fresh bakery products. In the expansion of production and new acquisitions, EUR 50 million will be invested in the next five years.

Serbia

Serbia is a net exporter of agricultural and food products, and agriculture sector contributes significantly to the balancing of the foreign-trade balance. The share of agriculture in total value of exports of the Serbian economy is about 22% and it is higher than the share of agricultural imports in some years, in some years even triple. The total volume of trade in agricultural and food products has been constantly increasing. With the increase in exports and imports growing surplus, since the pace of growth in the value of exports exceeded the increase in the value of imported agricultural and food products.

The highest value of export is oriented towards the European Union Member States since it amounts to 799 million dollars, which accounts for almost a half of the total export (47.3%). The European Union represents the most important market for the Republic of Serbia. The most important section in the structure of export include Vegetables and fruit that amounts to 298 million dollars on the average and accounts for more than a third (37.3%) of the total export into the above-mentioned economic group. It is followed by Cereals and cereal preparations with 183 million dollars (22.9%), and Sugars, sugar preparations, and honey with 155 million dollars (19.4%). The commodity section of Fixed vegetable fats and oils, crude, refined or fractionated with 56 million dollars and the share of 7% is also significant.

Since the high diversity of products, the competitors are different world wide countries. If we focuse on some fruits, we could say that biggest competitors are coming from Spain, Poland, Chile, Italy, but also and some countries from the Balkan and Asia. Crops are stock commodity and competition is on the world level.

Compared to neighboring countries, the prices of plant products in Serbia are lower. The price competitiveness is particularly noticeable in grain and industrial crops, while in vegetable and fruit production it is valid only for certain products and certain year.

High price competitiveness of Serbian agriculture can be explained by the lower costs of labor and number of market factors. This primarily refers to the monopoly position of buyers and the food industry, which is still highly protected from import. In addition, it should be noted that in Serbia there is no practice of payment based on the quality of grain, but the whole production is realized at the same price, thus it is lower than in European countries.

Competitiveness of livestock products is much lower, especially when it comes to beef meet. The reason for the relatively high price of beef is a drop in production, relatively low domestic demand, high cost of feed, and the fact that gray economy is still partly present in the sector.

Prices of pork and milk are highly competitive compared to other countries. High competitiveness of pork is caused by the lower price of corn as the primary feedstock in comparison to other countries, and the competition in terms of price of milk should be taken with high reserves (given the various payment schemes in terms of quality in some countries).

Albania

Albania has appropriate climate, microclimatic and land conditions, rich and diverse biological resources, which are the basis for healthy and productive farming activities. Our country has an old and valuable farming tradition that helps effectively in strategic development planning and promises that agriculture will be important craft in the future as well. Moreover, Albania has a relatively young, well educated, and low-cost agricultural population, which promises to be effective and productive in agriculture.

Based on the above reasons, Albania is relatively competitive on some agro-industrial and agricultural products. Seafood, eggs, organic products, essential oils, fish, medicinal plants, vegetables, fruits, milk and milk products, are some of the main products that are traded, exported by Albania to the other countries.

The products that are said to benefit more than other products in the European market are teas and herbs, or medicinal plants. The potential of medicinal herbs export was potentially low, but recently, there has been noticed a positive trend towards their export.

The agricultural sector reflected a significant increasing trend and it was not affected by the Eurozone crisis. Increased number of trademarks addressed for the export market

Moreover, Albania has bilateral agreements on agriculture with Iceland, Norway, and Switzerland (EFTA), North Macedonia, Montenegro, Kosovo, Croatia, Serbia, and Bosnia and Herzegovina (CEFTA). All customs duties on industrial products, including fish and other marine products are abolished from the entry into force of the Agreement.

Finally, the free trade agreement with Turkey defines no fee for industrial products and tariff-rate quota for agricultural products. This helps to restrict imports and protect a domestically-produced commodity.

Region of Basilicata

According to the National Statistical Office (ISTAT) data, since 2012 exports from the Region of Basilicata in the agri-food sector have not exceeded the value of 0.7% of GDP, a value well below the national average.

The productive context of Basilicata Region agriculture is strongly characterized by a high degree of fragmentation, by the large percentage of small family businesses and by the low propensity to entrepreneurship.

According to National Agricultural Information System SIAN data (2012), 98.05% (Italy: 54.44%) of the regional UAA is located in disadvantaged areas (Regulation (EC) No 1257/99). More specifically, 37.17% are in mountainous areas, 55.86% in less favored areas for other reasons and 5.01% in less favored areas for specific reasons.

Compared to 2000, the value of food industry exports increased by 48.28% (Southern Italy: +67.11%; Italy: +87.15%); a similar trend can be observed for exports as well of agricultural products which, in the last ten years, recorded an increase of +18.70% in Basilicata. Export flows are sustained, in particular, by the bakery products (over 21 million euros), while sales of wine and vegetable oils show a slowdown, not exceeding, together, the 6 million €.

Structural backwardness of the regional economy and loss of competitiveness compared to other territorial areas require the development of an environment conducive to the growth of entrepreneurial capacity and forms of support for business activities capable of encouraging the initiation of innovative processes and forms the most advanced organizational and managerial systems.

The low propensity of agricultural producers to associate with each other is a factor on which to influence in order to improve the competitiveness of the respective supply chains.

Although there are productive realities that are suited to entrepreneurship, only in a few cases (agricultural supply chain) are reached levels of product recognition such as to be able to go beyond the local market.

Moreover, the relationship between the agricultural component and the industrial one of the system concerning the number of enterprises is unbalanced: the considerable fragmentation of the first, based mainly on the direct family business runs counter to the greater relative concentration of the latter, largely characterized by small business and craftsmanship.

Due to this structural imbalance, only partially moderated by the presence of supra-company organizational forms (cooperatives, consortia) of the agricultural part, one of the most critical issue of the system, namely, the net imbalance of bargaining power in favor of the industrial part, with significant effects on the supply chain relations and on the redistribution of added value created in the production cycle.

Moreover, given the growing diffusion of the medium and large distribution also organized at regional level, it can be argued that the transformation phase is, in turn, increasingly conditioned by the contractual force of the commercial phase; from this point of view, the agri-food economy tends to take shape as a system "guided" by distribution.

Region of Puglia

Apulian Region has great tradition in agro-food produce and “Made in Apulia” is a trade mark well known and recognized concerning high quality traditional and safety products. Ancient expertise and climate conditions allow farmers and agro-food producers to be competitive at international level. The export of Apulian agro-food produce is over 8%.

Regarding the main competition, retail supermarket chains are for sure the main competitors of the Apulian agro-food companies as well as the new producer countries. Their strategy is principally based on low costs, standard quality but often lower than Apulian agro-food produce.

2.3 Human Resources in the enterprises of agro-food sector

Region of Crete

The human resources in Crete are able to support a dynamic development and diffusion of innovations in the key sectors of specialization of the local economy to improve the added value of products and services. The concentration of researchers is significant, with 1.05% of the total number of people employed (1st region in Greece in 2011) and employment in high-tech sectors is at the same level as the other regions of the country.

However, as regards the employees with tertiary education as a percentage of the total number of employees, Crete falls short of the others regions occupying the 7th place (2013). The reason for this lag is the composition of economic activity that absorbs mainly workers with a low educational level without special requirements of specialization. In addition the percentage employment rate of 52.8% (61% for men and 44% for women) is lower than the country average (2013).

The agro-food sector is affected by factors such as:

- Particularities of the agro-food sector, such as seasonality, product vulnerability, uncertainty about the height and quality of agricultural production, which also creates problems of storage and fluctuations in prices and demand, resulting in problems of saturation, oversupply or lack.
- New consumer habits shaped by population and demographic changes, changes income and living standards, changes in the composition and lifestyle of households, requirements for healthy eating and, in general, challenges related to the emergence of new 'healthier' foods, such as functional foods, etc.
- Other factors such as food safety legislation, food safety, globalization, new technologies, concentration of retailing in retail chains and the promotion of private label products, etc.

The following training needs/skills and competences of an employee in the agro food sector, connected with the previous factors, are required:

- Food safety and quality
- Food Marketing
- Scientific Counselling
- Research & Development
- Quality Control
- Legislation and Communication
- Raw materials
- Food Production Management
- Infrastructure & Maintenance Engineering

Finally, poor vocational training of employees leads to the reduction of the potential for local entrepreneurship. After a diagnosis survey18 about vocational training needs in Chania by Mrs Tsiknaki Maria from the Administration Department of the Technological Educational Institute of Crete in 2013, in a sample of 300 companies, the following results are presented:

- The 66.7% of enterprises had not participated in training programmes. The 17% of enterprises participated in subsidized seminars the 11.8% in self-financing seminars and 4.4% participated in subsidized and self-financing seminars.
- According the content of the training, the employees participated in the followings seminars: 15.1% technical training, 10,8% accounting, 10.2% marketing, 7,5% use of

PC, 6% foreign languages, 5.9% financially, 5.4% quality (ISO, HACCP), 4,9% security technician, 4,3% warehouse management, 4,3% organization business administration.

Slovenia

199.071 persons worked on farms in 2016, which is a good 2% less than in in 2013 and almost a quarter less than in 2000. The vast majority of them worked on family terms farms (97%) and the rest in agricultural enterprises and cooperatives. In the whole considered period 2000-2016, this ratio did not change significantly.

Work input together with seasonal and occasional work and machinery services, expressed in full-time workforce (FTW) in 2016 was 79.967 FTW. That's a good 3% less as in 2013 and a quarter (-26%) less than at the 2000 census.

In the last three years, the average number of FTW per farms is virtually nonexistent and amounted to 1.14 FTW per holding. For less than 4% it decreased the unit of work per unit of agricultural land in use, which is around 17 FTW per 100 ha of agricultural land in use (ALU). This is still a quarter less than in 2000, when the input was per unit area of agricultural land in use of 22 FTW per 100 ha of ALU.

The age structure of people working on family farms is still unfavorable or has even deteriorated over the last three years. The average age of masters is 57 years, which is one year more than in 2013.

In the last three years, the average age of other family members has worsened, which is now 46 years (in 2013, 43 years). Worryingly, the proportion of young people in the structure of the workforce from 25 years old, working on the farm, decreased by 3 percentage points. On the contrary, the proportion of older people aged 65+ years increased for 3 percentage points.

Regarding the education and training system, In Slovenia there are 11 secondary schools in the field of agriculture, horticulture, forestry, veterinary and food industry, which besides secondary school programs also offer some higher education programs and 5 higher education programs institutions or faculties that implement programs in these fields.

In the years up to and including the year 2011, the Ministry provides practical training to educational institutions in it co-financed from 22 to 25% of implemented programs on the basis of legally requested funds. The same co-financing share was also made in the implementation of the qualification measure with the purpose investing in the equipment of classrooms of practical lessons, or workshops and estates. In 2012, the reduction of co-financing happened as well as shrinkage of financing the practical lessons, which was between 16 and 18%.

The areas where enhancing competence are needed are: safety and health working in agriculture, food and forestry, the introduction of modern technologies, sustainable farming, economics, horizontal and vertical integration, modern marketing approaches, promotion, entrepreneurship, environmental protection, diversification into non-agricultural activities and the like. Farmers from the perspective knowledge transfer are not a homogeneous group. The range of additional knowledge needs is extremely large, from highly specialized knowledge, to a fully elementary knowledge.

Chamber of Agriculture and Forestry organized in 2017 numerous training programs (over 500) on different topics.

However, the following new skills and competences are required:

- food safety, traceability and quality
- handling change, improvement and development, and innovation
- sustainable development and a circular economy
- energy efficiency and ecology
- optimizing work and work processes
- communication, interpersonal cooperation and personal effectiveness
- management, transfer of knowledge, intergenerational cooperation
- digitization of entrepreneurship, industry and e-commerce
- the implementation of a circular economy
- design management

Moreover, Slovenian Companies emphasize the need to raise competences in the following areas:

- Improving the work process by integrating sustainable development guidelines
- the transfer and development of new technologies and products with greater added value
- knowledge and use of materials, raw materials, equipment
- optimization of work processes

- mentoring and staff development
- management of human potentials
- computer skills
- specific skills needed in the technological processes of individual companies.
- specific personnel management competences are also exposed.

Consequently, slowly but steadily the educational level of masters on family farms is improving. Farm masters who are without education or have only elementary education were in 2016, a good quarter (28%), which is 4 percentage points less than in 2013. Compared with 2000, this share decreased by 42 percentage points. At the same time, it has increased the share of masters with vocational or secondary education, as well as those with higher education.

Similar changes occurred in agricultural education in the same period for the masters. In the period 2000-2016, the share of masters who have only practical experience in agriculture decreased by as much as 34% points. That means almost half of masters completed at least one of the agricultural education levels. Over the last three years has markedly increased the number of masters with various forms of formal agricultural education.

Finally, it is necessary to connect academic communities with industry - It is precisely the cooperation and integration of science in the development of agro-food industry that can bring that urgent shift in the provision of larger quantities of Slovenian quality food.

Serbia

Agriculture is still one of the most important industries of the Serbian economy. According to Serbian Agriculture Ministry data, this industry actually employs 10% of overall work force and accounts for 21% of Serbian GDP.

Universities and colleges in Serbia produce around 43.000 graduates annually, one third of which comes from technical universities.

According to preliminary results of the 2012 Census, the number of members and full-time employees on farms in the Republic of Serbia is 1.44 million people. Of this number, about 98% are farm owners and members of their households, and only 1.9% of persons are regularly employed in agriculture.

Expressed by the number of annual work units (AWU), the number of employees in the agricultural sector is 646.283 people. Of these, approximately 40% of AWU realize people who are 100% engaged in agriculture, while about 28% of AWU is formed by persons who are engaged in agriculture occasionally (less than 50% of working time). Of the total amount of AWU, 91% is work done by household holder, i.e. members of their households (44:47%), 4% work full-time employees and 5% seasonal workforce.

Regional distribution of the total work is very uneven, and shows that the largest number of farms and full-time employees on farms are in the Central and Western Serbia, which are normally characterized by lower average holding size and larger agricultural population. It is also an area in which the structure of agriculture is oriented towards labor-intensive sectors, such as fruit, vegetable and livestock productions.

Preliminary results of the Census indicate that the level of qualifications of the farms/household managers for agricultural activities is not particularly high. The data indicate that 60% of household administrators gained experience only in agricultural production, 2.5% have completed high schools of agriculture and 1.4% graduated from the Faculty of Agriculture. Only 3% of household managers received some kind of education and training during the census year.

The combined number of people employed in agriculture (7%) and in the food processing industry (4.5%) represents approximately 11.5% of the total labour force of 2.1 million people. Around 150,000 people are employed in the agro-processing and agricultural service industries. Food-processing enterprises are the largest single employer in the industrial sector, with more than 90,000 employees.

The labor market in Serbia has become truly vibrant with an increasing number of international investors relocating their businesses to the country. Recruitment of young graduates and undergraduates is simple given the high unemployment rate, especially among those from the 20-30 age group. Many are keen to work for international companies. Serbian workers have a strong work ethic and demographics are favorable for foreign companies: a wealth of ambitious and educated people coupled with a high unemployment rate keep wage expectations at competitive levels.

More specific, there is a demand for new skills, such as:

- Management Skills (Business Planning, financial Management, Sales and Marketing, Human Resources and Negotiation).

- Clustering and networking skills (internationalization, organization of matchmaking events, exhibitions at international fairs and trainings on exports and investment opportunities).
- Quality & Food safety assurance skills

Finally, intracompany trainings are implemented much more in bigger companies rather than in smaller ones. Topics of the trainings differ and depend on the structure of the company and specialization. In general, the trainings can be divided on processing part, marketing and supply and management. Trainings related to processing are organized for workers and managers in order to introduce them with new technology and innovations and related to standards in the sector of food production. Automatization in the food processing industry requires more skillful workers. Marketing related trainings and programs are organized for management staff and marketing units of the company. Programs are related to soft skills and also for specialized training topics in sales and promotional activities. Part of these trainings are covering organizational skills and management improvement programs. These programs are internal and not visible to statistic data.

Albania

The availability of labour, its quantity and quality at the periods of demand have great influence on the agricultural land use and decision making process of the farmer. Labour is the most important factor of agricultural development in Albania district. In the district, there are various types of agricultural laborers i.e. unskilled, illiterate and poor. But, gradually it is seen that skilled workers at Agro Food SME are growing latest Years. Mostly family farmers have the lowest education but large farms have a good administration with the respective education in Agriculture.

Awareness of the right education has also come as a rush of the need to improve not only the working conditions but also to be the main actor on the international market. Certification of farmers' production has also played a role in the education of managers and trained technical staff, See tab Human Resources.

So, Albania offers not only a very skilled workforce but also the lowest cost in the region. The labor relations between the employer and the employee are regulated by individual or collective work contracts, based on the Labor Code of the Republic of Albania and Law no. 8549, dated 11.11.1999 "On the Status of Civil Servants”. Albania adheres to all core labor organizations and international conventions on the protection of workers' rights. 41.4% of employees are employed in the agricultural sector.

The modernization of agricultural production, either in this form or in its more conventional manner, faces many challenges. Today's farmers in Albania have a low starting base in their professional training, due to the past regime which organized labour in agriculture through communistic-type cooperatives that sharply divided technical skills from manual labour. The lack of formation, in turn, does not allow for new and adequate technology to find its way, especially in remote areas of the country, where family farming occupies all agricultural land. Other challenges are related to the good functioning of free market mechanisms like the ones connected with the economy of scale, access to domestic and foreign markets through efficient collection and storage of products, or the lack of a suitable financial environment in the form of credits and other financing tools for the development of agricultural family enterprises.

Moreover, the agricultural sector employs more than 54 percent of economically active women. Women are overrepresented as contributing family workers in agricultural activities, with 87 percent of women working in agriculture in these roles. Off-farm employment opportunities are scarce in rural Albania and women are less likely to obtain off-farm employment in comparison with men. In the context of men being more likely to be recruited in off-farm jobs, women have taken over the responsibilities in agricultural production that used to be associated with male gender roles. However, they do not always have access to the necessary extension services, agricultural inputs, technology and land.

The prevailing methods used in Albania to train employees were regular in-house training (80%) especially when they were new entries, followed by mentoring/apprenticeships (65%) and workshops/seminars (20%).

The most required profession was that of a technologist for production at different levels. As mentioned earlier this skill was articulated as absent from Agro-processing businesses. The demand came explicitly from milk processors and in a way from meat processors.

Furthermore, soft skills are needed to support the innovation of technology and processes for the whole of the agro-processing industry and for these two subsectors in particular as the standards offered are by far behind the international markets.

Moreover, agro-processing industry needs to update their production lines (technology and processes) thus maintenance staff such as production line technicians and engineers needs to upgrade their knowledge as well.

Additional to the core skills for the Agro-processing industry missing as per results of the interviews and findings from the validation workshop, some managers (milk processing, collecting and freezing rooms) mentioned the auxiliary positions that are far from skilled workers. Workers in the production lines, packing and others auxiliary processes lack the minimal skills of any employee such as working discipline, hygiene and sanitary standards, etc.

Consequently, some of the main training needs are:

- Marketing Training
- Managerial training
- Join appearance on the market
- Market research and training for innovative technologies in agriculture and food production
- Legislative practice for export
- Building networks
- Standardization of product
- Training about the latest technique or pesticides for goods that they produce
- Information about the soil and environment

Region of Basilicata

As regards the age structure of business owners, only 5% of all entrepreneurs are under 35 years. Analyzing the number of farmers by age group, it can be seen that in 2010 young people under 40 years were only 10% of the total, a percentage that drops to 3% if only female farmers are considered. Moreover, in the inter-censorship period, young farmers decrease by more than 42%. The young people's lack of interest in the primary sector inevitably leads to an ageing of the agricultural workforce, which is not the norm in other sectors.

As regards training in agriculture, only 5.84% of farmers in the 35-54 age group have full agricultural training (EUROSTAT, 2010). In this age group 93.78% have basic training and 0.27% only field experience.

Agricultural entrepreneurship is made up for 64.9% by men and the 35.1% by women. That number is significantly higher than that found in extra-agricultural companies, where women entrepreneurs represent 26.5%.

A feature of agricultural employment is its high variability from one year and the other, which is coupled with the characterization of the production of the sector itself. Another structural fact to be noted is the high presence of female labor in the sector.

The ISTAT labor force survey also indicates a higher incidence of independent employees (self-employed and family workers), that represents 54.4% on the total employment, 5 more points than the national average and over 18 more points than the southern average.

Moreover, the main skills demand in the agro-food sector in the Region of Basilicata are:

- cultivation practices with particular attention to the medium and long term effects of sustainable practices (integrated production, minimum tillage, sowing on hard, etc)
- basic training on programming tools with particular attention to the Common Agricultural Policy and the Regional Development Plan.
- knowledge of methodologies and tools for controlling business costs
- knowledge of virtuous agricultural practices
- new services to improve other rural activities
- marketing and network creation
- use of ICT technologies
- saving costs

Finally, due to the low level of generational turnover, the indicator on the training of farmers shows a certain lack of training. A solution to these problems is represented by the associationalism that in the territory of Metapontum, in particular, is represented by Producer Organizations that have been able to orient production and provide answers in terms of training and development of contacts with research institutions.

Region of Puglia

According to ISTAT (the Italian National Statistical Institute) in Apulia Region there are over 350,000 farms for cultivating about 1,200,000 of hectare of cropland. Agro-food give job to almost 900,000 workers, despite, they are principally low qualified workers (over 73%).

In Apulia there are numerous high schools and educational organisms that implement technical and professional courses about agro-food:

- The foundation for superior technical training (“Fondazione ITS Caramia”) https://www.itsagroalimentarepuglia.it
- Training courses arranged by Private Educational Institutes (e.g. Enac Puglia http://www.enacpuglia.org/)
- High specialized courses arranged by Universities (University of Foggia, University of Bari, University of Salento).

The areas where enhancing competence are needed are: safety and health working in agriculture, food and forestry, the introduction of modern technologies, sustainable farming, economics, horizontal and vertical integration, modern marketing approaches, promotion, entrepreneurship, environmental protection, diversification into non-agricultural activities.

It should be mentioned that farmers from the perspective knowledge transfer are not a homogeneous group, The range of additional knowledge needs is extremely large, from highly specialized knowledge, to a fully elementary knowledge. Apulian agro food need for not only knowledge on technological and economic aspects of agricultural and agro-food processes but also marketing and merchandising expertises.

Finally, skills that could help to improve apulian agro-food sector can be listed as below:

- food safety, traceability and quality
- Marketing, web marketing and merchandising
- handling change, improvement and development, and innovation
- sustainable development and a circular economy, industrial symbiosis
- energy efficiency and ecology
- optimizing work and work processes
- communication, interpersonal cooperation and personal effectiveness
- management, transfer of knowledge, intergenerational cooperation
- digitization of entrepreneurship, industry and e-commerce

2.4 Business environment of the agro-food sector

Region of Crete

The economy in Region of Crete and in the intervention area grew rapidly and stabilized its position in the Greek economy in the period 2005-2010. It is at an intermediate level of development in the EU and is characterized as a transition region. The per capita Regional income accounted for 87% of the average in 2011 and about 69% of the average of the 28 countries in the EU. Economic activity and employment peaked in 2008.

The economy is specialized in economic activities linked to the rural economy, tourism and trade.

Today in terms of policy is applied the Operational Program Crete 2014-2020, that aims to implement actions of smart applications and services that are in line with the National Strategy for Digital Development and support the priority areas of RIS3Crete:

The main development needs that must be met by the program are2

A. Thematic Objective 1: "Strengthening Research, Technological Development and Innovation"

Business innovation is promoted in established and emerging sectors by exploiting research results through targeted actions. The business innovation is targeting at both knowledge and entrepreneurship.

B. Thematic Objective 2: "Improving access to, use and quality of information and communication technologies". Specifically the intervention concerns:

• Agro-food sector: Modern control, management, marketing, logistics and modern production-processing practices (automation)

• Tourism: Introduction of ICT for upgrading hotel services, tourism visibility, interconnection of sectors and businesses involved in the tourism chain and design of personalized and diversified tourist services

C. Thematic Objective 3: "Improving the competitiveness of small and medium-sized enterprises and the agricultural sector and the fisheries and aquaculture sector". Specifically the intervention concerns:

(a) support for new businesses

(b) enhancing the competitiveness and extroversion of businesses

Regarding the agrofood sector, Crete is dominated by small and micro enterprises. The small size of enterprises does not create economies of scale and makes it difficult to organize production, to introduce innovations and to promote products in international markets. In addition, limited product standardization, weather conditions affecting primary products, fragmentation of promotional policies, limited systematic penetration of local products into tourism businesses are factors that affect negatively the internationalization of the market .

Moreover, Region of Crete has significant educational and research potential, which can further enhance the development of the productive sectors of the island. At the level of publications, Crete's educational and research institutions have achieved the first place in Greece in terms of resonance and international collaborations.

However, the transformation of research results into marketable products and services is limited and the connection of the R&T system to the local economy is weak. Agro-food companies seem to focus on small-scale innovative activities around their core business while research centers are occupied at a higher level of research that is hardly usable by local businesses. A recent investigation of the intentions of a significant sample of businesses active in Crete for innovation and prospects of collaborating with research institutions has revealed a significant positive propensity but also problems. It is resulted the absence of substantial relations between the two sides.

Furthermore Crete, as most of the European Southern Regions, maintains the "per capita" patent at low levels, confirming that a strong concentration of research institutions does not automatically lead to operationally exploitable knowledge.

But some patents are used in agro food sector. A best practice in Crete Region is CRETAFARM SA, which is a processing company of meat products. According to data uploaded in the website of the company every year, more than 7 million euros are invested in innovation, and until today it has secured 20 global patents. More specific, in meat products of CRETAFARM SA the fat has been removed and replaced with extra virgin olive oil.

Finally, as mentioned in a previous text, the main exportable product of Crete is olive oil. Especially, for the olive oil the producers have the following characteristics:

• Due to their small size, they are unable to negotiate and penetrate to international markets.

•The sale of the largest volume of Cretan olive oil is made in bulk, resulting a loss of new international markets

Slovenia

From 2007 to 2012, the number of companies in the food processing industry gradually increased, so that in 2012 617 companies operated in this industry in Slovenia (the growth index of 2007/2012 is 123,6). On the other hand, in the mentioned period, the number of employees decreased. In 2007, in the industry was employed 15.217 workers, and in 2012 only 12.886. It follows from the foregoing that, in recent years, the structure of companies has been changing, and smaller companies are being set up with smaller number of employees.

In 2012, revenues from sales of agro-processing companies amounted to EUR 2.01 billion, which compared to 2007, shows a real decrease of 9%. During that period, the export, which stood at 19% in 2007, rose to 22.3% and recorded 17.5% real growth. In line with the growth in export orientation, the export earnings also increased in 2012 EUR 499 million, which is a 7.3% growth in real terms compared to 2007. The reason for the shift to foreign markets is mainly in the stagnation of sales on the domestic market and the search for new market routes abroad.

In recent years, the industry has recorded by the most important indicators of economic efficiency a decline, which is mainly the result of intensified competition both in domestic and export markets. Significantly, in the negative sense, the effects of ownership consolidation are also affected by the results in some of the largest food companies.

The Slovenian food processing industry has too few brands products to successfully cope with trade pressures and competing companies from abroad. Successful overseas companies are mainly engaged in intensive export activities and exploit the positive effects of economies of scale and vertical coordination with suppliers agricultural raw materials, which are only in Slovenia in the initial phase and limited to only a few sectors.

One of the important factors for lagging behind for a considerable part of Slovenian food processing industry is also the lack of competitiveness and the difficulties of Slovenian agriculture, which provides a significant part of the raw materials for the food processing industry.

Regarding the purchase of raw materials is the lagging factor also dependence on prices and accessibility of certain raw materials on world markets, such as sugar, which we do not produce in Slovenia anymore. With the abolishment of the sugar quotas from 2017, the possibility of re-establishment opened in Slovenia sugar beet production and hence the production of sugar.

Another important reason for the lagging behind of the Slovenian food processing industry is the noticeable rising pressure from the commercial sector, also due to the price pressures of competing products from abroad. Price pressures from abroad have a higher weight mainly due to the small size of the Slovenian market. In recent years, there are also noticeably long payment periods with which dealers burden the business of suppliers.

It is also remarkable, that very little innovation and technological changes and research results are integrated into agrofood enterprises.

The main Key System Issues are:

- insufficient innovation culture in agriculture and food industry
- a lack of innovation logic that would cover all the articles in the value chain
- raising awareness and knowledge of innovation and its impact on competitiveness
- the gap between the economy and basic knowledge
- missing incentives for researchers to cooperate with agriculture and food companies
- low interest and demand for innovation
- weak systematic and complex transfer of knowledge from R&D institutions to agricultural and rural development food companies
- weak promotion of the establishment of new R & D departments
- poor management of innovations in agricultural and food companies
- a low share of patents
- weak financing of agricultural and food companies to adopt innovative technologies, including patent applications

The key measures needed are:

- increasing sales activities, especially in foreign markets, cash flow management and further optimization of business processes.
- Development of interesting, competitive, innovative food products will require development or implementation of suitable and efficient technological solutions. In

the processing sector, less aggressive technologies will be needed to ensure food safety and to produce products with improved nutritional value and greater functionality.

Finally, Slovenia will in 2018 give 8,6 mio EUR for innovation in agriculture plus 5 mio EUR in the environment. Slovenian Ministry wants to facilitate the direct linking of institutes and knowledge directly with their advisory services to specific farms. In addition, they want to encourage farmers to co-finance a lot of things together - whether it be technological development, a common product of sales, the development of other products, in the areas where they currently see the greatest risk. Slovenian Ministry therefore wants to work together to adapt to existing climate change, to work together to find market opportunities and to develop new products.

Serbia

The structure of companies in the food industry is dominated by micro and small enterprise: 75% of all businesses employ fewer than 10 people, while 90% of companies are with less than 50 employees and/or less than 10 million euro turnover. Exceptions are the milling industry, sugar, beer and tobacco industry, where medium and large companies represent more than 10% of the companies within respective industries.

The rate of utilization of the installed capacity of the food industry is below 65%. Industries with higher degree of capacity utilization are industries of meat, sugar and milk, and tea and coffee, beer and mineral water and soft drinks; they use of 75-85% of installed capacities. All other food sub-sector industries that are not mentioned have low capacity utilization, which indicate the low efficiency. Main sub-sectors in terms of turnover are meat, milk, mill and beverage industry (beer, water and soft drinks).

The most important branches of Serbian food industry are comparable, by the size and performance, with those in the reference countries. Looking at the added value by industry, all parts of the Serbian food industry are well positioned comparing to their competitors in the reference countries and generate similar percentages of added value. However, as there are no further detailed information on profitability, investments, product characteristics and other relevant indicators, this comparison in share of turnover and added value too small basis for making clearer conclusions about the competitiveness of Serbian food industry.

An important characteristic of the food sector is expressed by dual structure, with a lot of (very) small and medium enterprises and with only a limited number of large, modern enterprises. Regardless of the typically fragmented structure of the food industry, it's over sizing in almost all sectors and relatively modest financial resources to invest in modern technology (to improve production efficiency and product quality) adversely affect future prospects of most existing food companies. In many cases, foreign direct investments acted as initiators of the positive change, bringing capital and technical innovation.

In the food industry in Serbia, significant foreign investments were made in the last decade. Most of them are associated with acquisitions and greenfield investment (new factory and/or retail chains) in the beverage industry and the retail sector. In addition, foreign investors have acquired significant stakes in the companies, among other, in the sugar industry, in the dairy and meat industry.

Technical-technological equipment varies by the industry, but in general it can be said that the larger capacities are better equipped. It is primarily referring to the milling-baking industry, sugar refineries, confectionery industry and dairies. In the production of edible oil significant investments were made in modernization and equipment, both in large, and small capacities for production of cold- pressed oils, while the technology of production and processing of meat, except for some facilities, is not at the satisfactory level. Significant investment in technical and technological equipment were not made in the industry for fruit and vegetables processing, and in most facilities equipment is below required standards for export, especially for export to the EU market.

Retail chains introduced stricter criteria for buying and trading with food products, what caused massive adoption and implementation of standards by the food industry. The modern sector of retail chains in Serbia requires more stringent guarantees on the quality and safety of food at competitive prices. Main challenge for the agricultural and processing sector is to meet increasing number of requirements and standards of the food supply chain, in order to prevent the increased imports.

In addition, the existing structures and systems of knowledge transfer are not efficient enough and fail to adequately fulfil the needs of dynamic technical and technological restructuring of the sector. However, the existing scientific and educational institutions have relatively good quality staff that has developed a number of results recognized and acknowledged internationally (new varieties, breeds and strains, scientific papers and technical solutions).

The innovation system is not essentially directed towards the business sector. Research and development (R&D) activities in the business sector tend to remain marginal. Indeed, only 14% of R&D is undertaken in the business enterprise sector. According to the Global Competitiveness Report (2013-2014), Serbia has limited capacities in almost all aspects of innovation. Only 14% of R&D is undertaken in the business sector even though this figure may not capture the entire R&D performed by businesses. By contrast, a total of 55% of R&D is carried out in higher education institutions, which makes higher education institutions the largest R&D performers in Serbia.

Finally, in 2014, the Serbian government adopted a new Agricultural and Rural Development Strategy 2014-2024. The strategy, a requisite for receiving EU funding, sets guidelines for adjusting Serbia's agriculture to meet EU and WTO requirements and defines the basic reforms needed in the agricultural sector. The strategy is focused on reforms that will improve Serbia's business environment and competitiveness, raise living conditions, and introduce greater stability for farmers in rural areas.

Albania

Enterprises of Agro Food SMEs are all over Albania, but in some areas such as: Korca Region, which has historically been an Agro-processing Area where the main factories focused mainly in the production of sugar, alcohol, Starch products, Pickles, Caramel, Beer, and Milk etc. Also in this region we also have agricultural collection and processing companies such as: Wheat Processing Plant, Tobacco Processing Factory, collection and manipulation line of medicinal and ethereal plants with capacity over 1000 tons per year. Moreover, in this region it is worth mentioning the sausage processing plant 500 tons per year or even the large refrigerator with processing capacity 5000 tons per year.

Region Korca is duly represented in the country and with a wide range of companies in the production of beers and by-products of meat, milk processing or even alcoholic beverages. Many of these companies have also obtain the relevant HACCP certificates for food safety and quality.

Apples also are the most cultivated fruit in the region of the pit, as far as fruits are concerned Kavaja is the town that has been farming for Kermili since 2007 and so far, Stavri

Lala in Bashtove in Kavaja has 12 farmland dyes that cultivate only Kermill which is mainly for export. Today there are about 30 farms for the cultivation of Kermil for market mainly outside Albania. While the Kukes and Diber regions are known for cultivating and gathering potatoes and apples.

Moreover, the region of Lezha, Vlora, Saranda is the largest fish cultivation site. The Myzeqe region is one of the largest regions of cultivating tomatoes, and strawberries, and also important in Ulli. The county with the highest annual income from agricultural production results Fier, which provides about 14.9 billion of farms, with 43% of revenues coming from agricultural production and 57% from livestock production.

Meanwhile, the region with the lowest income from agriculture is Kukes, which provides about 2 billion lek a year. At country level, about 62% of income is provided by livestock farming, and 38% from agriculture.

Regarding livestock products, Fier Region is the main producer of Albania because it accounts for approximately 16.9% of the amount of milk, 13.3% of meat and 8.8% of the quantity of eggs at the national level. Livestock is an important part of Agro Industries, too, where chickens lead followed by turkeys or sheep and goats. The rest local food processing industry is represented mainly from the processing of cereals, grapes, olive, sunflowers, etc.

Consequently, the number of enterprises operating in agriculture and livestock is counted at 37.684 in 2017, and compared to 2013 with only 1.690 enterprises, this sector has experienced significant growth.

Consequently, It is noteworthy the crystallization of some agricultural development poles, such as the Korca district, Berat and Dibër for fruit trees, Fier for cattle breeding, Elbasani, Shkodra, Dibra and Vlora for pasta, Shkodra and Lezha for pigs, Fieri Tirana and Durres for vegetables, Fieri, Albat, and Vlora for grapes, etc., which speak of important steps in regional specialization in the production of various agricultural products.

Finally, according to the relevant employment data, 37.535 enterprises have employed under 4 employees, 131 enterprises from 5 to 49 employees, and only 18 enterprises have over 50 employees. This fact shows that in Albania the agro food base is small farms.

Finally, the Inter-Sectoral Strategy for Agriculture and Rural Development II 2014-2020 (ISARD II 2014-2020) is the current policy and strategy framework for agriculture and rural development in Albania. Since Albania was granted official candidate status in June 2014 by the European Union, ISARD II 2014-2020 has been aligned with the EU's 2014-2020 Common Agricultural Policy, and the European Commission is also supporting Albania in aligning with the European Model of Agriculture (EMA).

Region of Basilicata

The use of ICT is still limited, although the need to consolidate the few existing bases and expand the catchment area is widely recognized. In addition to supporting accommodation and tourism activities, the greater diffusion of ICT can favor e-commerce tools for agri-food production. There can be countless advantages, both for people and for businesses, connected to a greater use of new generation technologies. In this case, the use of ICT would also be a way to mitigate the effects of the poor infrastructuralisation of the territory and of the difficulty of accessing the large distribution.

Agricultural enterprises in Basilicata have invested and continue to invest very little in innovation and technology, failing to cover the investment with the proceeds of agricultural production. In addition, the results of the research are not very connected to the business realities, being often of little applicative power and being the farmers poorly trained and not very receptive.

Moreover, the business structure of most of the farms in Basilicata is not such as to be able to aspire to international markets. In cases where cooperatives have been well structured, it has been possible to create a commercial distribution network at regional and extra-regional level (e.g. the Vulture olive oil).

The international market is reserved only for niche products, products of excellence whose production is very limited despite demand.

In this regard, it is worth mentioning the case of IGP Bread produced in Matera, for which a profitable territorial marketing project has been able to combine the excellence of the product due to the quality of raw materials and the traditional production process with the designation of Matera as European Capital of Culture for 2019.

The Rural Development Programme Basilicata 2007-2013 through measure 214 act. 1 has supported the commitments to integrated production allowing the finance, in total, 432 farms for an area of 7,681 ha.

The RDP programme 2014-2020 aims to encourage generational turnover by financing new companies also introducing bonus criteria based on the level of education and specific training of the company business manager. The expected effects are a greater ability to intercept possibilities for European funding and to penetrate larger markets qualifying their company for sustainability and product excellence.

Further funds have been dedicated by the Programme for measures to implement seeding regimes on firm soil and minimum tillage. In conservative agriculture, both with the technique of minimal processing and with the direct sowing on firm ground, few or no tillage is carried out, with the result of a clear improvement in the structure and fertility of soils and their ability to retain water.

Consequently, in the last programming cycle and in the present, the number of farms has increased also thanks to the funds allocated for the establishment of new businesses.

Region of Puglia

Apulian agro food companies present different level of organization as concerning the capacity of operate in the international markets. There are some big and well-structured enterprises that play an important role in export, and on the other hand small enterprises that have various difficulties (lack in language skills, international markets knowledge etc). Apulian Institutions try to favourite the internationalization of agro-food companies with different initiatives such as broker meeting, events, training and so on.

Moreover, Apulia shows a good level of integration between research bodies and agro food companies. An important role is played by public institution in promoting calls and funding projects about agro-food.

Finally, the Programme of Rural Development support cooperation between academia and private companies and this allows to transfer innovations.

2.5 Existing business networks/co-operations/clusters/chains

Region of Crete

As far as the networking with research institutions, companies seem to focus on small-scale innovative activities around their core business while research centers at a higher level of research that is hardly usable by local businesses. The two poles seem to be moving alongside without any systematic effort to meet.

A study suggests that businesses are calling for closer links with research institutions. Friction between businesses and researchers is access to important information, ownership of copyright, and the sharing of benefits from commercial exploitation of results.
In the Region of Crete business clusters have been formed, but the critical mass and the participation of the knowledge sector are missing.
Important is the effort to create networks/clusters 4 on the basis of specific products or on a larger scale around an idea. Some networks are:
A. Agro-Food Partnership of the Region of Crete, http://agrocrete.com, is a nonprofit corporation of the Region of Crete and was established on 2012.

Its aim is the strengthening of the agro-food sector and of the products of Crete, focusing on the strategic development of the primary and secondary sector and their connection with tourism and catering services. More specific, Agro-Food Partnership of the Region of Crete:

• Designs and implements integrated programs for the promotion of Cretan products and the gastronomic culture of the island (seminars and informative events).

• Implements and manages national and European programs. Example: «The European Food Masters- Taste the authentic" is a promotion action of Crete's products on the domestic and German markets. Http://www.agrocrete.com/efm/el/

• It is an integral part of the Greater Operational and Strategic Design "Agricultural Products Basket" of the Region of Crete.

Moreover, Agro-Food Partnership created and maintained the brands:

- "Cretan-Birth of Values (Criti-Genetira axion»,
- "Cretan cuisine, (Critiki kouzina)",
- "Cretan groceries, (Critiko Mpakaliko)» and
- "Accessible wineries, (Episkepsima oinopoioia)».

B. Cretan olive oil Network www.cretan-oliveoil.gr. This network has the ambition to make the Cretan olive oil the best ambassador of Crete in the rest of the world.
The aims of Cretan olive oil network are:
• Joint promotion, awareness, and training

• Promotion of the historical, social, environmental and cultural importance of olive products and especially of Cretan olive oil

• Increase consumption within and outside Greece

Furthermore, the initiative of the Crete Region operates the Agro-Food Partnership that coordinates the promotion of local products and the intangible nutritional heritage below from the brand name "CRETE".

C. PRAXI Network, which provides services to small and medium-sized enterprises, research laboratories and public bodies in the fields of technology transfer, innovation and research cooperation. PRAXI Network acts as an autonomous unit under the Central Management of the Foundation for Research and Technology (it is one of the largest and most well organized, equipped and staffed research centers in the country, under the supervision of the General Secretariat for Research and Technology of the Ministry of Education and Religious Affairs, whose headquarters and central management are located in Heraklion, Crete). Its foundation dates on 1991, as a joint initiative of the Hellenic Foundation for Research and Technology (HEI) and the Federation of Enterprises and Industries and later of the Federation of Industries of Northern Greece. The mission of the PRAXI NETWORK is to enhance the competitiveness of Greek businesses and laboratories by linking research with production, promoting innovation and entrepreneurship as well as transnational cooperation. Since 2008, it is a member of the Greek Enterprise Europe Network.

Slovenia

At the end of 2015, there were 91 cooperatives in the field of agriculture, of which 65 were united in Cooperative Association of Slovenia. At the end of 2011, the entire Cooperative system employed 2.900 employees. The Cooperative Association linked 15.500 members of individual cooperatives. Annual traffic of all cooperatives joined in the Cooperative Union amounted to EUR 700 million in 2013. Capital in owned cooperatives joined in the Cooperative Association at the end of 2011 amounted to EUR 199 million. Cooperatives that are members of the Cooperative Association, are also managing 350 shops, which are mostly in rural areas. Cooperatives in Slovenia are general, multifunctional purchasing and selling agricultural cooperative, and specialized (forestry, fruit growing, dairy and other cooperatives).

The basic activities of agricultural cooperatives in Slovenia are:

- marketing (buying and selling) of agricultural and forestry products
- the processing of agricultural products (in particular wine, as well as milk and meat)
- supplying farmers with reproductive material for agriculture (fertilizers, animal feed, seeds, plant protection products) and the provision of support services
- limiting and reducing business risks
- improving the negotiating and income position of primary producers in the supply chain
- developing short supply chains
- transfer of knowledge, experience, technologies and methods of production
- development of various non - agricultural activities in the countryside and hence diversification of employment and income sources

In the future, more attention will need to be paid to the entrepreneurial organization of cooperatives that would be focused on developmentally more advanced and project-linking cooperatives, with large enough production potential in a particular sector. At the same time, it is necessary to ensure the same treatment of cooperatives as economic operators in economic policy measures. For collection needs and the distribution of agricultural and food products should be supported by rationalization and integration trade flows of cooperatives at the purchasing and sales level. In doing so, we would implement the principle of short chains. With greater co-operation of cooperatives we would achieve a more uniform appearance on the market. Special care will be required for the creation of cooperatives of the so-called second-order cooperatives, which will enable larger quantities of agricultural products and foodstuffs. By offering larger quantities, they can provide co-operatives competitive prices and thus become a stronger partner in the food supply chain.

<u>Best practice examples:</u>

The main purpose of the **Cooperative Dobrina** is the development of small farms and fair food trade. The objectives are to connect the countryside with the urban center, promote and develop organic farming, the principles of sustainable local food supply and socio-entrepreneurial activities in the field of food production and processing. The cooperative was founded by growers and processors from small traditional farms in the area of Slovenske gorice. Their key activities are the provision of kindergartens, schools and other institutions, weekly crates with vegetables and fruits, a shop in the center of Maribor and rural catering.

The **Guardian of the seeds** is a society for the conservation of the biotic variety of cultures derived from the idea of community preservation of old, locally-adapted varieties of crops, which respond to the problem of the rapid disappearance of plant genetic resources and increasingly endangered food self-sufficiency. The Guardain of seeds strives to raise awareness among the general public about the value of old varieties of crops and their importance for local food self-sufficiency. By educating, raising awareness, using the Seminary Library and other activities, they reinforce the awareness of the importance of participating in the achievement and upgrading of the mission.

The purpose of the **Cooperative Konopko** is to link existing and future producers and processors of cannabis, innovators, researchers and other interested in the field of cannabis The cooperative is working to develop the cultivation and processing of cannabis for various socially useful purposes, to support small and medium-sized producers and processors of cannabis, to fair trade in cannabis and products from cannabis, and to connect rural areas with urban centers.

Serbia

Although cluster development in Serbian economy started in 2005, for the time being (middle of 2013) clusters in Serbia have not been developed. According to the survey of business infrastructure in Serbia (Mijačić,): (1) clusters in Serbia lack the lowest common denominator in terms of defining the interests around which the cluster members are gathered, (2) cluster capacities are not developed enough, with low intensity of activities, given that companies are usually not active in cluster functioning and are rarely willing to invest their time in cluster activities, (3) the vast majority of clusters have failed to build trust and close relationships with their members, and participation of connected institutions is mainly symbolic, with no significant results in improving the competitiveness and developing new products for cluster members. However, there is some clustering operation in Serbia, like the Serbian Cluster Association – SCAN that has been created on the foundation of long-term cooperation of clusters in Serbia.

As a national-level Association, SCAN serves as a platform for cooperation among clusters, and support creation of new cluster initiatives and their development. Building a partner network with national and international institutions, donor community, as well as creating platform for lobbying toward governmental structures, including business and academia, will certainly be some of the primary activities of the Association.

Finally, there are many agro food clusters such as: Clusters: "Šumadija Flower" - Kragujevac, "Alco Cluster of southern Serbia" - Leskovac, Cluster "Fruit Land" - Subotica, Agriculture Cluster "Agro-South" – Nis, Cluster "Pannonian Spirits" Fruška Gora cluster of vineyard growers and wine producers "Alma Mons "- Sremski Karlovci, 2010.

Finally, the Cluster House is an initiator and a coordinator of the Serbian Cluster Network, based on the signed MoUs with the Serbian Clusters Community and the Serbian Chamber of Commerce and Industry supported by governmental institutions, academia and international organizations such as LEDIB and LEADER in 2012.

The Cluster House is an innovative business development organization for support to cluster –based economic development in the Balkan and Black Sea Region, founded upon the initiative of seven clusters from South East Serbia with technical support of the Danish LEDIB Program for Local Economic Development in the Balkans in 2011.

Albania

Moreover, the business and innovation infrastructure in Albania is represented by: Regional Development Agencies (RDAs): There are 10 Regional Development Agencies operating since 1995 in 10 regions of Albania with the status of NGOs. The RDA's mission is "to serve as an intermediary bridge to business, donors, local authority and civil society, improve business climate and enhance the regional economic development through the implementation of common efforts for the coordination of programs serving as sourcing centres". The activities of RDAs are coordinated also by the Regional Development Agency Tirana. For more information about RDAs, please contact the Director of National Center of the RDAs.

Local Economic Development Agencies (LEDAs): Local Economic Development Agencies are foundations, established with the support of the UNOPS-PASARP Programme. They are independent and owned by local public and private member institutions in the region. Their aim is contribution to the definition and implementation of the objectives for the local economic development of the region of Shkodra, Durres, Vlora. They focus their activity on the improved exploitation of local resources, and the inclusion of disadvantaged population and depressed areas into the formal economic circuit. The core object of LEDAs is identification, analysis and implementation of initiatives favouring the development of economic activities and the creation of employment opportunities, within a framework that combines poverty reduction and the promotion of an integrated and sustainable development of the territory. Business incubators and clusters: There were 2 business incubators created in late 90`s, but there are not existing anymore. Four new industry clusters were established in Tourism Industry, Meat Processing Industry, Herbs and Spice Industry and Leather Goods Production Industry in the frame of the Enterprise Development and Export Market Services Project (EDEM) financed by U.S. Agency for International Development (USAID). This programme aims to promote the competitiveness of small and medium enterprises (SMEs) in domestic and foreign markets, and accelerates the entry of Albanian agricultural and manufactured exports into global markets through developing inter firm clusters and networks, enhancing the co-operation between small enterprises, spreading best practice via co-operative forum meeting, and offering adequate training. Over and above the business support centres identified earlier, there are also several initiatives providing technical advice and/or funds to specific sectors or clusters that are funded by international donors. However, there is currently little awareness of the business advisory services available to start-ups and established SMEs.

However the level of cooperation among these authorities still is in the level of the obligation to provide the legal documents; for example: AKU (National Authority of Food) provide licenses for products production; These enterprises have a close cooperation with many NGOs, through which they issue trainings, participation on national and international fair, etc.

Moreover, there is a number of clusters/networks operating in AgroFood such as the Agro Labs cluster, ALUEDA Vlore, and Agrinet Albania.

More specific, **Agro Labs cluster** contribute to make the Balkan Med agro-food sector more attractive, productive and international. In addition, it will support cross border cooperation in the agro-food sector by promoting innovative technologies, strategies and products as well as it will support and increase the know-how of agro-food SMEs and parties in the entire value chain. This will lead to a more competitive Balkan Med region.

This can be achieved through the development of Agro Food innovation clusters, a place where research, industry and authorities can meet to co-create the Balkan Med area's competences in innovation of agro-food sector.

To achieve these aims towards the sustainable growth of the Agro Food sector, all relevant parties should be engaged.

The AgroLabs clusters will be developed and operate in the regions of Imathia, Greece; Lemesos, Cyprus; Blagoevgrad, Bulgaria and Fier, Alabania.

Region of Basilicata

We may distinguish between institutional network and operational ones.

Institutional

In the region are present the Agency for Development and Innovation in Agriculture of the Basilicata Region (ALSIA) and the Centre for Agricultural Research and Analysis of Agricultural Economics (CREA). They mainly provide consultancy, technical assistance and training for agricultural entrepreneurs even if they often carry out research activities funded by the Basilicata Region or by European Community funds. Their activities are often linked to intensive production in the Metapontum area or in specific sectors such as olive growing.

Operational

Consortiums of producers are the most functional reality on national level today while in the Basilicata region during the past years they have decided to focus on another model, that of POs (Producers' Organizations) that has proved to be a model not so effective. Consortium have indeed as their mission the protection of producers and their products, becoming the main interlocutors with the large-scale retail trade and foreign and domestic markets.

The role of POs in Basilicata, on the other hand, has been limited to acting as an intermediary between the individual company and the large-scale market.

Despite the fact that the organisational system has not been fully effective, there are virtuous realities such as the extra virgin olive oil POs in the Vulture area whose functioning is very similar to that expected by a consortium.

The context analysis also shows a lack of integration between school/university paths and the business world. The number of computerized farms is rather small and this limits the application of research results that would lend themselves well to the efficiency of production cycles, to the improvement of production quality, to the efficiency of production costs, etc.

More specific, In Basilicata, under the coordinating function of the Region and in the framework of the Regional Strategy for the smart specialization (SSS) of research and innovation 2014-2020, the Cluster of Bio-economy was established on the initiative of various public and private entities.

Five thematic areas of potential development have been identified based on the structuring of specific clusters that include the themes of water resource management, genomics for sustainable agriculture, precision and integrated, nutrition and health, green chemistry, non-technological innovation in the agri-food sector.

The strategic themes identified are: cereals, fruit and vegetables, animal husbandry, milk and meat products, viticulture, olive oil, forest and wood, water resources management, precision agriculture, sustainable and integrated, official plants and green chemics.

The products that have obtained recognition for their origin, production cycle, quality and typicality (PDO, PGI, DOC, DOCG, IGT) are protected and promoted by consortia that often do not fully exploit their potential in the area. The ineffectiveness of these forms of cooperativism has its effects not only in terms of profitability and market share of the products, but also on the trust that individual producers place in the association that is created thus undermining the possibility of penetrating the market in a more incisive manner even in the medium to long term.

An association of municipalities that over time has proved virtuous and profitable for all is the Metapontino Quality Agri-food District - a tool for the enhancement of fruit and vegetable production - that attests to the area's very high production specialization. It brings together 12 municipalities and involves about 5,000 businesses, for a total agricultural area of 74,000 hectares, of which about 21,000 are invested in fruit and vegetables.

Region of Puglia

The capacity of cooperating and networking is a very important weakness of the agro-food companies. Therefore, some cases of clustering and cooperation with research institutes and public authorities can be mentioned, this is the case of the label Made in Apulia”

In recent years, synergies between agro-food and tourism were on the basis of the development for the economy in Apulia Some examples are:

- Le strade del gusto http://www.lestradedelgusto.com/
- Girolio http://www.girolio.it/
- Calici sotto le stelle https://www.calicisottolestelle.it

Other cases are carried out at national level with and international sound such as:

- Vinitaly (https://www.vinitaly.com/)
- Cibus (https://www.cibus.it/)
- Sana (http://www.sana.it)

Finally, at national level there is the platform https://www.clusteragrifood.it/it/ and www.procapitanata.it in order to promote clustering in agrofood sector.

2.6 Main challenges of the agrofood sector

Region of Crete

Agrofood sector is a mature sector of the regional economy in Region of Crete, which requires significant restructuring and exploitation of new opportunities, mainly in the direction of standardization, product identification, strengthening of interconnections with tourism and the development of new high value products and activities.

In addition, enhancing access to ICT technologies will help the competitiveness of small and medium-sized enterprises at the level of knowledge and technological expertise aiming the boosting of entrepreneurship in the agro-food sector.

More specific, the main challenges of the agro-food sector in the Region of Crete are:

- The growing demand for quality products from the market and the current consumer demands for healthy and diversified products,
- The use of new technologies and innovations for the benefit of productivity and consumer needs,
- The funding opportunities from Greece and the EU,
- The interconnection of agro-food and the tourism sector, which can have a remarkable positive effect on direct sales in the short term, and on long-term exports,
- The expanding of contract crops,
- The Networking of international and regional cooperation's through National and European Technology Platforms and European funded programs.

Finally, investment in education and lifelong learning can partly be geared to the agro-food sectors, in order to create an effective human potential.

Slovenia

The vision of Slovenian agro-food politic is to have sustainable concept and:

- competitive agro-food chains in efficient vertical links between agriculture and the food processing industry;
- cultivated agricultural land and an appropriate level of food security;
- a varied structure of agricultural holdings, whose backbone will form economically efficient farms;
- preserved natural resources and recognizable biological diversity;
- a landscaped cultural landscape;
- vital countryside.

More specific, the main challenges of agro-food sector in Slovenia are:

- Exploitation of natural conditions and geostrategic position of Slovenia
- Linking primary producers and food processing companies into effective forms of business and market cooperation
- Improving the transfer of knowledge into practice
- Increasing market chains at the level of horizontal and vertical integration across the food chain
- Improving the use of high-quality raw materials for the production of high added value products
- Adaptation to climate change and the promotion of efficient use of raw materials with an emphasis on a low-carbon economy.
- Ensuring food security

Moreover, agricultural holdings will need to be integrated into efficient marketing chains: horizontally in the direction of exploiting the market advantages of a joint venture and vertically in the direction of offering safe foods of higher quality and local characteristics at competitive prices. An important part of the new sustainable agriculture concept is the efficient production organization, the basis of which is a competitive cooperative society and the food processing industry.

Finally, one of the challenges of the agro-food sector in Slovenia is also a trend of the decline in the volume of agricultural land. Smaller rural households will be important for securing public goods related to agriculture, combining income sources with an adequate standard of living and maintaining rural population. The social situation in the countryside will also be sustainable for marginalized groups. One of the important conditions for this is effective coordination with other policies (regional development, education, infrastructure, etc.), which have a decisive impact on the coherent development of rural areas.

Serbia

Based on the Serbian Strategy for Agriculture and Rural Development, internal and external challenges were identified. Internal ones are:

- **Resources.** Small areas of land, low level of technical equipment, neglected infrastructure, small number of cattle per agricultural land unit and appreciated crops, are only some of the examples of long neglect of agriculture in terms of investments.

- **Competitiveness.** Lack of organized market, low level of product finalization and inefficient knowledge and technological solutions transfer system have been identified as main limiting factors of production and competitiveness growth. Establishing the efficient market chain, introducing the missing parts of the logistic support system in the form of innovative solutions, modern management systems and strengthening of horizontal and vertical connections, would help the Serbian agriculture transform from raw-based into a modern sector that can offer goods recognizable by quality. The development of the most important sub-sectors of agriculture is going in the following direction:

• improvement of domestic seed production through introduction of quality schemes, development of organic and integral production and products with geographic origin;

• fruit and grapes production in Serbia- adjustment of production technology to the climate change, introduction of the new sorts, increase in areas with intensive production and reaching the quality adequate for international and domestic markets.

• cattle breeding development should be based on entering new markets, application of standards for facilities the animals are kept in, application of products quality standards and meeting the procedures in production and placing the products.

- Market chain and logistic support to the sector. The most important challenges in market chain development in the future are: involvement of the small producers into modern retail chains, competitiveness improvement on the levels of production and processing, creation of the environment for investing and EU standards application.

- **Rural areas.** Serbian rural areas are characterized by biodiversity, rich cultural heritage and natural resources. On the other hand, they suffer the consequences of the demographic drainage. It is the reason for their lagging behind in development, for all types of deprivation and increasing poverty. Their economy boils down to exploitation and further degradation of the natural resources, based on agriculture and accompanying activities, with poor offer of quality jobs and with modest possibility for generating external income.

And the external ones are:

- **Climate change**. Although the climate change was noticed globally decades ago, and although its effect on crops, cattle, hydrological balance, production costs, production resources and other components are very well known, the awareness of issues and climate change effects on agriculture is still undeveloped, the investments in addressing the issues are insufficient, and systemic multi-disciplinary research can be found only in the most developed countries .

- **Economic globalization**. The globalization process has exposed the agricultural sector to fundamental changes. Those changes are opportunities for some countries and threats for some other. The 21st century, when it comes to agriculture, will be characterized with global competition, industrialized agriculture expansion, differentiated products production, changes in scope and and structure of the food demand, establishing the new food supply chains and growing production risk.

- **Membership in the World Trade Organization**. In this moment, Serbia is out of this system and has no protection from, for example, economic sanctions or illegal measures any country could impose on Serbia. Bearing in mind Serbia is a small country with poor negotiating position in bilateral disputes, the WTO protection system is far more efficient since the disputes are resolved in a systemic way on a multilateral level (the WTO system has proved to be very efficient, and the proof for that is the fact that smaller countries are suing bigger and more developed ones more often).

- **Common Agricultural Policy – Integration process requirements and review of the CAP measures after 2013**. Constant conceptual changes to CAP on one hand, and complex transitional problems the candidate countries are facing on the other, are reasons for the process of adjusting the agricultural policies for membership to be very demanding. From the moment a country starts applying the CAP, its agricultural policy has become fully harmonized with EU members' policies. This position means that the national agricultural policy should be regulated through common bodies, according to unique principles, and that there is a common budget for it. Due to complex policies, procedures and mechanisms CAP is based on, it is necessary for the EU candidate countries to start taking over CAP gradually from the very beginning of the EU accession process.

Albania

One of the main problems for value chain development is the lack of linkage / co-ordination between growers and processors, high production costs and lack of standardization. Many cantons face difficulties in coordinating with farmers (inadequate crops, irrigation before harvesting, etc.). Consequently, many wineries create their vineyards to reduce transaction costs associated with co-ordination with farmers. Fruit and vegetable production still faces various challenges, including the informality of the seeding material sector, high costs of purchased inputs and fuels (especially heating greenhouses), low productivity and major post-harvest losses, especially in the case of fruit. Fruit and vegetable food safety standards are also a challenge to address exports to the markets of member states and those expected to become EU members. The development of the fruit and vegetable processing industry is hampered by the difficulties to secure the raw material for the processing industry in sufficient quantities and the required quality.

With the increase in supply from the farm, this difficulty is less important than in the past, but the industries in this sector are still struggling with many difficulties; Poor value chain management - formal or informal contracts between industry and farms - did not help in securing the supply of raw material from the farm to the processing industry. The sector of Olive faces some challenges. One of them is the fragmentation of soil planted with olives. Farms are too small to be efficient, have high costs, and yields are low, which makes the olives to be sold by farmers at high prices. Production is low mainly due to shortcomings in agronomic practices, especially in pruning.

The quality of the olives is not what is required due to shortcomings in agronomic, harvesting and post-harvest practices. Knowledge and awareness of producers on market quality criteria are insufficient (compared to traditional quality criteria). High quality olive oil represents a very small percentage of demand and supply.

Grain production faces high production costs, especially the costs of mechanical tools. Grain production in Albania remains insufficient compared to the demand from the processing industry, increasing the fragility of the industry (especially for small and medium-sized operators) from the price fluctuations in the regional market.

Finally, some of the sector's challenges include the high percentage of informal production and high production costs. Constant consolidation of the trading and distribution of beverages and food favors big producers and import wine, while in the bottled wine segment is dominated by imported wine and competition from producers in the region is increasing.

Region of Basilicata

Main challenges in agro-food sector in Region of Basilicata are:

- The low propensity of agricultural producers to associate with each other is a factor on which to influence in order to improve the competitiveness of the respective supply chains.

- Although there are productive realities that are suited to entrepreneurship, only in a few cases (agricultural supply chain) are reached levels of product recognition such as to be able to go beyond the local market.

- Another strong point that is exploited still widely below its potential is the high level of naturalness of the context in which the agricultural sector is located.

Region of Puglia

Main challenges in agro-food sector in Apulia Region are:

- Exploitation of natural conditions and geostrategic position of Apulia Region;
- Improvement of linkage between primary producers and food processing companies into effective forms of business and market cooperation;
- Improvement of Agriculture 4.0;
- Adaptation to climate change and the promotion of efficient use of water and raw materials with an emphasis on a low-carbon economy and carbon, water and environmental footprints of production;
- Increasing market chains at the level of horizontal and vertical integration across the food chain;
- Improving the transfer of knowledge into practice;
- Improving the use of high-quality raw materials for the production of high added value products;
- Enhance the processing system at regional level
- Developing a social security system against “caporalato”

- Improving the sustainable practices in an optical of industrial symbiosis and circular economy.

3. PRESENTATION OF THE IMPLEMENTATION AREA/ STRUCTURE & DEVELOPMENT CHARACTERISTICS

3.1. Development challenges and opportunities

Region of Crete

The main development challenges of the Crete Region are:

- The number of agro food companies is large, but their size is very small, so that these companies do not have the opportunity to negotiate and penetrate in to international markets.
- The sale of the largest volume of Cretan products, as olive oil, is in the form of bulk.
- Co-operation & networking activities among agro food enterprises in Chania and Adriatic Ionian area is very limited
- The majority of SMEs is poorly integrated in international networks
- The transformation of research results into marketable products and services is limited and the connection of the R & T system to the local economy is weak.
- The lack of export orientation of the agro-food companies
- Strategic geographical location between East Europe, Mediterranean and Asia
- The desertification of the hinterland of Crete.

Moreover, the main opportunities of the Crete Region are:

- The increasing demand for certified, quality and innovative products
- The strengthening of interconnections between tourism, high value products and environmental goods management system
- The access to information technologies in relation to the competitiveness of small and medium-sized enterprises
- The exploitation of new opportunities, mainly in the direction of standardization, product identification
- The transfer of research from universities / laboratories to private sector

- The increasing training opportunities in the field of enterprise creation, technology transfer, organizational and management innovation
- The Design and the implementation of targeted, real needs training and counseling actions for farmers, livestock farmers and fishermen
- The growing demand for alternative forms of tourism
- The utilization of the possibilities offered by the port of Souda as a port of international interest and national importance. Also, Characterization of the port of Kissamos as a port of national significance.
- In terms of policy is applied the Operational Program Crete 2014-2020, which aims to implement actions of smart applications and services that are in line with the National Strategy for Digital Development and support the priority areas of RIS3Crete.

More specific, the following elements drive job creation:

<u>Tourism that is the most dynamic sector of the economy</u>

- Targeted tourism promotion,
- Expanding-diversification of the tourist product
- Improvement of the services provided.

<u>Research and Technology</u>

- Development of new (start-up) enterprises based on innovation
- Cooperation of local economy with the strong research teams of Crete
- Agriculture is a mature branch of the regional economy which requires significant restructuring
- Exploitation of new opportunities, mainly in the direction of standardization,
- Product identification,
- Strengthening interconnections with tourism,
- Development of new high value products and products with integrated innovation.
- Setting up producer groups, cooperative structures, clusters, networks.

On the other hand, the following elements drive job loss:

- Limited liquidity that reduces the financing of companies and affects their operation and their investment plans.

- Brain drain.
- Limited momentum towards innovation. More specifically, transformation of research results into marketable products and services is particularly low, the connection of the R&T system to the local economy is weak
- Very small businesses which result no economies of scale and make it more difficult to organize production and to introduce innovations and to promote products in international markets.

Consequently, the traditional pillars of the Cretan economy are the agro food and tourism sector. Adding in these strong existing sectors the emerging domains the following key sectors are resulting:

- The whole range of agro-food complex
- The exploitation of the cultural and environmental stock
- New areas linked to climate change, natural resource and energy management
- The exploitation of ICTS
- Innovative and high-quality business activities especially in tourism.

Slovenia

Improving competitiveness is a key development challenge for Slovenian agro-food industry, since agriculture is lagging behind the EU-25 average by about three times, while the agro-industrial sector lags behind more than 50% in terms of added value per employee for the EU average. Low structural competitiveness of the Slovenian agro-food industry is due to the fundamental structural deficits, restrictive natural conditions, and in the food industry, the strengthening of competitiveness has been hampered by a high level of foreign trade protection before accession and the increasing dominance of trade. Competitive pressures will continue to increase in the future, and agro-food industry must develop new development approaches. A strategic paradigm that shows the potential for accelerating the competitiveness of the Slovenian agro-food chain is the introduction of the principles of vertical supply chain coordination. The inadequate correlation between producers of agricultural raw materials and the food processing industry is a constant problem in Slovenian agro-food industry. The advantages of strategic cooperation are reflected in more stable economic conditions and the reduction of business risks, as well as in providing safer and better quality food. Growth of income can only be expected in the long term with higher cost efficiency and, above all, productivity growth, while strategic vertical co-ordination can provide an important contribution.

There is not a lot of efficiently functioning vertical systems in Slovenian agro-food industry, and in addition to the observed delay in the implementation in practice, there is also a research deficit.

The central issue that we deal with in the research project is what are the characteristics of the supply chains and what changes are needed and possible in order to lead to increasing the competitiveness of all members in the chain, improving profitability, reducing risk and ensuring optimum quality. The study was done of the supply chain of beef and pig meat, which includes the economically most important orientations at the level of agriculture and the food processing industry. Other factors, including the challenges it faces, the structural characteristics, as well as the estimated development potentials arising from the relatively high level of technology, the quality of raw materials and products, and the reputation, have also been encouraged by the selection of this supply chain.

On the basis of secondary sources (statistical bases) and primary sources (four series of surveys), the first working set defined the characteristics of the existing red meat supply chain models in Slovenia.

Based on the latest structural survey of agriculture at 2016, the number of agricultural holdings is still reducing. Average agricultural holding cultivates 6.9 hectares of agricultural land, which is almost a quarter more than in 2000. Size the structure of economies is slowly improving as the share of holdings that handle more than 20 hectares of utilized agricultural area (UAA) has increased by more than 2.5 times since 2000. The economies now process one third of all UAAs, which is 17 percentage points more than in the year 2000. Livestock holdings, on average, were fed by 7.5 livestock units (LSU) in 2016 the economy, which is almost a quarter more than in 2000. Also, the size structure is in compared with the 2000 census, significantly improved. Share of holdings holding more than 30 LUW increased by 2.5 times in the years 2000-2016, with 39% of all these holdings LSU (16 percentage points more than in 2000).

The production of herbs in Slovenia is modest, as according to SORS data in 2007, spices, herbs and medicinal herbs produced only 17 ha (37 agricultural holdings). At present, the American strawberries are growing in Slovenia, which requires immediate removal to the

larger Slovenian customer, and rosemary, practically completely exported to foreign markets. The cultivation and processing of herbs offer many developmental possibilities, since herbs are interesting in several aspects (nutrition, active ingredients, health, colorings).
In the world, a new market niche is being opened in the world for the cultivation and processing of so-called "functional foods", as this becomes an important technological advantage, while the weakness of the Pomurje region is small and fragmented. Growing and processing functional foods requires a "garden-greenhouse approach". Due to geothermal resources, the Pomurje region has a very high potential in this niche with high added value.
An integral activity that links agriculture and tourism is technology. the rheology of bio and synthetic polymeric materials, where the "bio" refers to the processing of functional foods, and the "synthetic part" to the packaging of food and the production of medical consumables necessary for products and services related to the tourism of health and well-being.
It is also remarkable that Slovenia and Slovakia are the only countries in the EU that managed to stop the negative demographic trends in agriculture. Slovenia developed 4 measures that should preserve farms and encourage young people to be farmers.
First measure is additional payment for young farmers (up to 40 years) where 3.000 farms are involved. With this measure young farmers become 20% higher payments up to 90 ha which in real life means that he/she becomes for average ha extra 60 to 70 EUR.
Second measure is a start-up action when the farm is taken over (for a full time farmer about 45.000 EUR).
Third measure is by basic investments: in working capital, marketing or processing. Young farmer becomes additional 20% co-funding so all together 50% of subsidy.
Fourth measure is to improve position of young farmers. 400 young people enter agriculture annually. With that we are preventing the overgrowing of land in Slovenia.
Moreover, organic farming is a big generator of green jobs which are also emerging in vertical links to the consumer: in the food processing industry and in the industry, in the market sector, in the machinery and equipment industry, in research, in the transfer of knowledge, etc.
Consequently, processing of dairy products and cattle breeding are the strongest sectors in Slovenia. There is also a potential in vegetables and fruits.

Serbia

Agriculture is the most important economic sector and a primary source of employment in most emerging markets. In Serbia, where almost half the population lives in rural areas, revitalizing agribusiness is essential for creating jobs and reducing an unemployment rate that has crossed 20 percent.

Strong global demand for food is creating new markets for Serbian agribusiness companies. From 2005, Serbia's agricultural exports are constantly increasing. Now exporters need investment to continue expanding, yet capital has been scarce in the national budget.

Most of Serbia's agribusiness supply chain can present a great potential for job growth. New investments can improve companies operations and environmental and social standards while supporting a sizable network of local suppliers. Aside from agro business Serbia seeks potential in increase in other industries like IT, automotive and related businesses.

More specific, there are several key sectors like:

• Infrastructure and Construction, related to transport corridors and similar.

• Agri-Business – Serbia's agricultural sector accounted for 9 percent of GDP in 2016, compared to an EU 27-average of two percent. Agriculture is the engine for development of rural areas as it employs 21 percent of the country's labor force. The main agriculture and food import commodities in 2016 were coffee, cigarettes, soybeans, bananas, vegetables, and fish. Challenges for U.S. exporters include high import tariffs for products from non-EU countries, low incomes, standards which sometimes diverge from international norms, infrastructure issues, and the presence of monopolies in production and retail chains.

• Medical devices - Modernization of the healthcare sector, driven mostly by the private sector, is stimulating demand for advanced medical devices and equipment. As Serbians increasingly demand modern medical services, the demand for medical devices and pharmaceuticals will increase in the coming years.

• Telecommunications – The telecom sector accounts for 6 percent of Serbia's GDP. Serbia has created the conditions to render all segments of the telecom sector competitive and to bring in a greater number of operators who can offer better quality services.

• Energy generation and transmission equipment – Significant investments in the electricity generation, transmission, and distribution by both the private and public sector represent opportunities in exports of services, equipment, and materials necessary for the development and modernization of the sector.

Market Challenges

Every sector in Serbia is open to foreign investors and there are no legal barriers to market entry. Trade is liberalized and there are no barriers to exporting to Serbia. The government has made significant reforms to make trade easier and foreign investment more attractive. Ongoing improvements in administrative procedures, such as customs procedures, business registration, licensing, and, e-procurement are some examples. Access to adequate financial resources for Serbian consumers and importers remains a problem. Non-performing loans (NPLs) account for 20 percent of all loans in Serbia.

The agriculture of the future will be marked by the implementation of a large number of technological solutions such as automated machines – robots, sensors and wireless systems, satellites and drones, and also systems controlled by AI (artificial intelligence) which will seek out and help in finding new or more optimized solutions in agriculture. This will present a great opportunity but at the same time the challenge to secure the sufficient number of skilled people to use this technology. The primary target should be the young population and farmers, which are the future of agriculture. Moreover, it is essential to pay more attention to young people, the country's future young farmers and their agricultural education in middle and high schools. Providing a proper agricultural education, teaching new technologies and modern ways of farming is crucial for the future of farmers and their staff, who will be creating Serbia's agrarian future.

Consequently, the whole agriculture industry is developed mainly due to the fact that agriculture still provides some source of income to more than half of the population in Serbia. Main sectors are:

- Fruit production with introduction of new plant varieties and increasing of yields and establishing of new and modern orchards and vineyards.
- Beverages production, where craft beer industry is growing fast.
- Confectionary industry
- Meat and milk processing was very well developed in former times and although most of them collapsed during the sanctions, part of old still works and there are also new smaller ones trying to get with their products on international markets.

- Crop production, especially in northen part still brings the high income from export but also provide sufficient space for local production and development of new modern and innovative products.
- Water production is important since Serbia has a lot of facilities for production of water.

Albania

The **fruit and vegetable** processing industry consists of 28 formal enterprises and some semi-industrial informal garages that offer a wide range of processed fruit and vegetables. This sector is characterized by suitable climatic conditions that enable the early production of certain types of fruit and vegetables, which also constitute an important potential in terms of export opportunities; this is today a tangible reality proven by growing exports of fruits and vegetables.

However, fruit and vegetable production still faces various challenges, including the informality of the seeding material sector, high costs of purchased inputs and fuels (especially heating greenhouses), low productivity and major post-harvest losses, especially in the case of fruit. Fruit and vegetable food safety standards are also a challenge to address exports to the markets of member states and those expected to become EU members.

The development of the fruit and vegetable processing industry is also hampered by the difficulties to secure the raw material for the processing industry in sufficient quantities and the required quality.

The **olive oil** sector is also characterized by several potentialities. There has been a significant increase in production due to support schemes for olive / olive plantations - this trend is expected to continue to grow. Intensely planted cultivated crops are expected to reach higher yields. The existing processor capacity of modern olive oil plants can hold a much larger output without the need for additional investment. Some small olive oil manufactures have achieved high quality standards, winning national and international awards. The improvement is also evident in the knowledge base in processing and in some technical services.

However, the sector of Olive faces some challenges. One of them is the fragmentation of soil planted with olives. Farms are too small to be efficient, have high costs, and yields are low, which makes the olives to be sold by farmers at high prices. Production is low mainly due to shortcomings in agronomic practices, especially in pruning. The quality of the olives is not what is required due to shortcomings in agronomic, harvesting and post-harvest practices. Knowledge and awareness of producers on market quality criteria are insufficient (compared to traditional quality criteria). High quality olive oil represents a very small percentage of demand and supply.

Moreover, the sector of **vineyards and wine** is characterized by several potentials. Albania has favorable climate conditions, which enable an early production, which opens a window of options for exporting table grapes. Production and quality are growing both for table grapes and grapes for processing. There is an increase in investments in quality wine wineries and focus on utilizing potentials in local grape varieties such as Kallmet and Black Square (Red Wine) and White Square (white wine).

There is also potential for diversifying the production of **bread, pasta and confectionery**. This sector has some challenges. Grain production faces high production costs, especially the costs of mechanical tools. Grain production in Albania remains insufficient compared to the demand from the processing industry, increasing the fragility of the industry (especially for small and medium-sized operators) from the price fluctuations in the regional market. At the processing level, flour production industry is stable and has the right technology for flour processing. There are many opportunities for product diversification in the production of bread and pasta, as well as in the production of confectionery.

Another very strong sub-sector in Albania is the **livestock breeding**, but he faces the following problems:

- The larger specialized farms, many more on milk than on meat, have better premises, but the majority use old existing buildings, which are slightly adapted.
- Cattle and small ruminant farms use outdated technologies and equipment. Animals are kept in primitive tied-stall barns, often without windows. All work is done by hand, including the removal of manure.

Regarding Aquaculture, Albania occupies an important place in the region for the production and marketing of fish, seafood and fishery products. Albania is rich in waters, including coastal and land waters, which are suitable for fishing and aquaculture. There are rich fish stocks - especially under 100 meters - which serve as a basis for the modernization of the fishing fleet. The coastal structure is suitable for aquaculture, especially in the Ionian Sea.

The lagoons, though improving integrated management, are needed, provide increased ecological and economic value. On the other hand, natural and artificial lakes, irrigation reservoirs, and river waters represent a potential for groundwater aquaculture.

Aquaculture (fresh and salt water) is a promising sector, but he requires the creation of new or extension of the production of existing aquaculture farms, including the equipment.

Summarizing, the three (3) main challenges faced by agriculture in Albania are:

- the existence of an agricultural farm with minimal size (1.4 ha), fragmented, closed in itself and oriented towards the fulfillment of the family needs.
- the existence of a considerably large family which needs to operate in the micro farm.
- the lack of irrigation system.

Region of Basilicata

Region of Basilicata faces the following main development challenges and opportunities:

- Increasing the quality and entrepreneurial capacity thanks to investments in new practices such as qualitative improvement, energy and water savings, which can induce the entrepreneur to produce better and at lower costs and thanks to the improvement of product certificate protection consortia.
- Innovation and knowledge transfer that represent the joker for sustainable development: realization of cooperation projects also with operational groups and in collective mode, to improve the economic and environmental performance of the provincial agricultural enterprises.
- Process and product innovation, quality growth and strengthening of environmental sustainability, also with new sources of income.
- Overcoming the digital divide, increase access to information and communication services.
- Tourism, rural life and enhancement of cultural, historical and artistic heritage will give life to extra-agricultural activities

For the 2014-2020 programming period, the European Commission considers the adoption of a research and innovation strategy of "intelligent specialisation" as a necessary condition for the access of ERDF funds.

The regional specializations regarding innovation are: Aerospace, Automotive, Bio Economy, Energy, Cultural and Creative Industry.

If the provisions of the smart specialization strategy did not achieve the expected results, the agro-food system would be particularly lagging behind the level of competition required from the European/global agro-food market.

Finally, the most strong existing and emerged sectors in the Region of Basilicata are:

- cereal growing continues to represent a strategic sector for the primary sector that succeeds in penetrating the markets both with high quality raw materials (valuable varieties of wheat such as Carosella, Saragolla and Senatore Cappelli) and with processed products (baked goods and bread of Matera IGP).
- olive sector is one of the most productive sectors and the sector as a whole has grown in recent years in terms of quality and entrepreneurial capacity.
- Increasing interest is also shown in the organic and/or integrated production of high quality products such as cherry trees and other fruit crops (apricots, strawberries, clementines).
- A growing market is that of wine produced in Basilicata, which boasts different prestigious productions including the DOC wines of Matera, the Aglianico del Vulture (DOCG) and the Grottino di Roccanova (DOC). Although production is limited to areas that are not very large, the product lends itself to satisfy niche markets that require high attention in the production cycle and distinguishable organoleptic characteristics.

Region of Puglia

The main challenges for Apulian agro-food companies are addressed to implement strategies based on differentiation of high quality products, to improve integration along the chain and to help producers to increase their incomes. The value of high quality, tradition and sustainability could represent a great opportunity for Apulian companies especially at international level.

Finally, agro-food products easy-to-eat, ready-to eat, active packed, energy from agro-food waste, are the most strong existing and emerged sectors in the Region of Puglia.

3.2. Economic & productive Structure

Region of Crete

Region of Crete grew rapidly and stabilized its position in the Greek economy in the period 2005-2010. It is at an intermediate level of development in the EU and is characterized as a transition region. Per capita income in 2011 accounted for 87% of the average in the country and about 69% of the average of the 28 EU countries. Economic activity and employment peaked in 2008. Tourism, trade, construction and manufacturing had been enhanced. Entrepreneurship in Crete has a strong stratification, as strong and dynamic businesses coexist with small or loss-making businesses.

The most dynamic segment is made up of 19 enterprises with the highest growth rates ranging from 33% to 1.308% during the crisis period (2008-12). A second group is made up of the 30 largest businesses based on sales that are objectively able to allocate significant resources for the development and introduction of innovations. A third group consists of 841 companies with sales that account for 28% of regional GDP. The data are from the GLOBAL TRUST (2013) Financial Study of AE based in Crete, October 2013. The sectoral composition of dynamic businesses is balanced as tourism is represented by 54%, manufacturing by 23% and trade services by 12%.

Business activity is not limited to existing units. If the business environment is healthy, conditions will be created for the creation of innovative start-ups but also the attraction of businesses that will seek their cooperation with the research institutes of Crete. Initial entrepreneurship in Crete is about half of the country average 66,67%. In Graph 7 is presented the Initial Entrepreneurship by region.

The low level of new entrepreneurship reflects the competitive conditions in the regional economy, the capital requirements for starting up economic activity in the dominant sectors, the resilience of existing established firms and many other factors.

Consequently, the main advantages of Crete Region are:

• The morphology of the territories, the microclimate and the age-old tradition, led to the production of products with special characteristics.

• The most important agro-food product of Crete is olive oil. Numerous investigations have shown that olive oil is associated with a reduced risk of many diseases and its nutritional value is now indisputable

• Existence of many PDO / PGI products.

• A dynamic fishery with export activity.

• Local gastronomy with strong elements of uniqueness and peculiarity.

• Well-developed research facilities

• The existence of important academic infrastructures

• Very rich environmental and cultural heritage.

• Existence of historical monuments, archaeological sites, museums, religious monuments

• There are several attempts at regional level to link the agro-food sector and the culinary heritage with tourism sector

• The main road network is directly linked to the main entry-exit gates airports and ports.

• Strategic geographical location between East Europe, Mediterranean and Asia

On the other hand, the main disadvantages of the intervention area are:

• Restricted industry standardization / processing.

• Reduction of investment in the primary sector.

• A large number of agro food companies, with a very small size, so that these companies do not have the opportunity to negotiate and penetrate in to international markets.

• Increase of cost of producing agricultural and fishery products.

• Lack of transport and communications infrastructure.

• Over-concentration of tourist activity, infrastructure and population in the northern coastal area.

• The desertification of the hinterland of Crete and existence of isolated areas in the hinterland,

• Significant trends in rising unemployment and high long term unemployment rate

• Low level of entrepreneurship

• Weak technology transfer activities and limited cooperation of science & technology parks, incubators and clusters

• High level of early school leavers.

• Companies do not require from their employees a high level of specialization.

Slovenia

In 2016 the Slovenian economy continued to grow. Gross domestic product (GDP) has increased for the third consecutive year, by 2.5% (in 2015, +2.3%). A key factor economic growth remains exports (in real terms by 5.9%), strengthened by foreign demand and improving the competitive position, as well as increased domestic consumption (+2.4%). Greater domestic consumption is the consequence of the strengthening of private consumption (+2.8%) due to further improving labor market conditions, as well as strengthening government spending (+2.6%). Versus with the previous year, public investment in gross fixed capital formation declined sharply in 2016 (gross investments in fixed assets: -3.1%; in 2015 1.0%), mainly due to the modest absorption of European of funds at the transition to a new financial perspective.

With the recovery of economic activity, the situation on the labor market also improved in the year 2016. According to national accounts data, employment has been increasing for the third consecutive year, it increased by 2.0%. At the same time, the registered unemployment rate fell by an average of a year 1.1 percentage points (to 11.2%), and the level of survey unemployment decreased, by 1 percentage point (to 8.0%). The increase in the average gross wage per employee was in in 2016 the highest in the last few years; compared to the previous year, it nominally increased by 1.8% and in real terms by 1.9%. Growth in gross wages in the public sector, which was also in 2016 higher (2.3% in nominal terms, 2.4% in real terms) than in the private sector (nominally 1.7%, 1.8% in real terms) is mainly the result of promotions, as well as raising the wage scale.

In 2016, inflation at the annual level was 0.5%, while the average of the year was the second year to deflation, namely the minimum (-0.1%). To the higher annual inflation contributed the most higher food and services prices, as well as the slowdown in the decline in energy prices. In 2016 it was recorded the largest surplus in the current account of the balance of payments so far, reaching 6.8% of GDP. The increase was mainly due to improved export competitiveness of the exchange sector, private sector paying off debts and a low level of domestic consumption.

According to national accounts data, agriculture together with hunting, forestry and fisheries in 2016, has contributed to the total added value 2.3% (in 2015, 2.4%) to the total of employment is 7.8% (in 2015 8.0%). In recent years, the share of employment in agriculture has fluctuating slightly more than the share of agriculture in the total added value.

In 2016, there were 196.072 enterprises operating in Slovenia. They employed 858.203 persons and generated EUR 98.574 million of revenue. The values of all these data were higher than in the previous year, i.e. in 2015: the number of enterprises was higher by 2.2%, the number of persons employed by 2.5% and the generated income by 3.4%. The number of enterprises increased most significantly in the real estate business (by 9.8%), the number of persons employed and the turnover increased most significantly in other diversified business activities (by 7.0% and 21.1% respectively).

Among the size groups of enterprises (in terms of the number of persons employed), the most powerful in Slovenia in 2016 were micro-enterprises (95.1% of them); these are companies that employ fewer than 10 people. Nevertheless, the bulk of revenue was generated by fewer medium-sized and large enterprises, i.e. companies employing at least 50 people.

Medium-sized enterprises accounted for 25.4% of turnover and 33.0% of turnover; they employed more than half (53.6%) of all persons who worked in companies. The number of sole proprietors was the highest in 2016, and the number of these increased the most in comparison with the previous year (by 2.8%). In 2016, companies employed the largest number of persons working and generated the bulk of their turnover (revenue was 3.7% higher and they employed 2.8% more persons working than in the previous year).

Serbia

In six years, Serbia has transformed from an economy characterized by stagnant growth, high unemployment rate and twin deficits - to a low inflation and stable growing economy, with erased fiscal deficit, declining public debt, significantly reduced external imbalances and labour market recovery.

GDP growth significantly surpassed expectations for the first half of the year, growing 4.9% y/y on the back of robust investment activity, supported by consumption and exports (despite headwinds from the Eurozone).

Inflation recovered from the April trough of 1.1%, reaching 2.6% in August, and is expected at a similar level in the short-term, gradually approaching target by 2020. Inflation expectations are anchored around central target point (3%).

Government budget turned into a surplus in 2017 (1.2% of GDP), and this trend continued in H1 2018 (1.5% of GDP). After sharp fall in public debt in 2017 of more than 10% of GDP, public debt has remained on a downward path and since the beginning of 2018 it is moving below 60% of GDP.

These results were acknowledged by improved credit ratings (S&P, Fitch and Moody's) during 2017, by successful completion of a precautionary SBA with the IMF and a sharp decline in the country risk premium (historic low in January). In 2018 a 30-month Policy Coordination Instrument with the IMF has been approved.

Macroeconomic stabilization and improvements to the business environment contributed to further FDI growth, focused on the manufacturing sector.

Manufacturing exports retained a strong growth momentum in Jan-Jul (11.2% y/y) with all 23 branches posting growth. Services expansion continues, with their net exports growing at 22.3% y/y, driven by ICT services.

After strengthening of the Dinar against the euro in 2017 by 4.2%, appreciation pressures continued during the most part of 2018.

The policy rate was cut in March and April to its current level of 3.0%. Lending activity increased by 6.4% y/y in July 2018 (13.8% excluding the effects of NPLs write-offs and sales since 2016) led by demand and supply factors.

Banking sector stability has been preserved and further reinforced. Encouraged by the NBS measures, the share of NPLs in total loans plummeted to 6.7% at end-July 2018 which is the lowest level since 2008 when this indicator of portfolio quality was introduced. Capital adequacy indicators are even stronger after the application of Basel III standards in Serbia

- The unemployment rate, according to the Labour Force Survey for Q2 2018, was 11.9% (decrease of 2.9 pp. compared to Q1). In the same period, the employment rate was higher by 3.5 p.p. and amounted to 48.6%.
- Favourable trends in the labour market confirms the growth of the participation rate which was in Q2 at the level of 68.5%.

• Favourable trends in the formal labour market segment come from the private sector where employment increased by 14.4% (July 2018 / July 2014). This growth mainly comes from manufacturing, private sector services, and more recently from construction.

• In the first half of 2018, productivity increased by 1.6% as a result of faster GDP growth (4.9% y-o-y) than employment growth.

• In the last three years, the highest growth in productivity has been recorded in manufacturing branches with the largest FDI inflows - steel, chemical and pharmaceutical industries, as well as in rubber and plastics industry.

Finally, productivity growth in the same period is also noticeable in production of machinery and equipment, as well as in production of beverages.

Albania

In 2016, the Albanian economy recorded an increase in real terms (in volume) of 3.35% compared to 2015, following an increase of 2.22% in 2015 compared to 2014. Based on data on an annual basis, GDP at current prices in 2016 was estimated at 1.475.251 million ALL (10.7 billion euros) and 1.434.307 million ALL (10.3 billion euros) for 2015. GDP per capita in 2016 amounted to 513 thousand ALL (or € 3,734), from 498,000 ALL (or 3,563 €) in 2015. According to GDP by the method of production, the main contribution to this growth has been given to the branches of the economy as "Business, Transport, Accommodation and Food Service "With 0.32 percentage points," Agriculture, forestry and fishing "with 0.33 percentage points," Art, entertainment and recreation, other service activities "with 0 , 29 percentage points, "Building" with 0.28 points for percent, and "Public Administration, Education and Health" by 0.26 percentage points. Net taxes on products contribute by 0.52 percentage points respectively.

With regard to the structure of GDP according to economic activities, the largest share in the economy for 2016 continues to occupy Total Services, by 46.7%, recording an increase in real terms by 4.43%. Industry and Construction represent 21.1% of GDP, which increased in real terms respectively: Industry with 1.34% and Construction by 3.1%. Agriculture, hunting, forestry and fishing account for 19.9% of GDP and increased by 1.67% in real terms.

The deflator of GDP for 2016 was -0.5%. According to GDP by the spending method, final consumption represents the major share of expenditure in the economy, at 92.54%. This component grew by 3.68% in nominal terms and 2.94% in real terms. The Final Consumption structure is the final consumption of the population, which accounts for the highest share by 80.45%, followed by the consumption of public administration by 11.25% and the consumption of non-for-profit institutions serving households (FIFG) with 0.85%.

In 2016, gross fixed capital formation, which represents 24.54% of GDP, increased by 3.38% in nominal terms and 3.34% in real terms, compared to 2015.

Goods and services exports increased by 9.10% in nominal terms and by 11.34% in real terms, while imports of goods and services increased by 5.65%, in nominal terms and by 6.95% real terms, compared to 2015.

GDP growth for 2018 is projected at 4%, supported by energy production and a strong tourism season. Rising employment and wages continue to drive private consumption. Although private investment is losing pace, government infrastructure spending is stepping in to support investment growth. A strong labor market continues to support falling unemployment.

Albania's fiscal deficit is forecast to remain at 2% of GDP in 2018. Revenues are expected to increase by 0.3% of GDP in 2018 because of higher social security contributions. In compliance with the fiscal rule, public debt is expected to decline from 71.6% of GDP in 2017 to 69.5% in 2018.

With inflation expected to average 2.1% in 2018 (below the inflation target of 3%), the Central Bank further lowered the policy rate by 0.25 percentage points to contain the impact of the appreciation on domestic prices. This monetary easing is expected to further stimulate credit growth.

The current account deficit is expected to reach 6.8% of GDP in 2018, as exports in both goods and services expand and outgrow imports. A stronger economic performance in the EU is sustaining remittances. The current account deficit is fully covered by foreign direct investment (FDI).

Region of Basilicata

Our elaborations on ISTAT data highlight that gross domestic product in Basilicata increased overall from 2012 to 2016, although it was at a low level in 2014. The rate of growth of companies remained constant in the period 2011-2015 and then saw a growth that exceeded the national value that that referred to the South of Italy. The number of active companies fell from 2001 to 2015 and then grew slightly in the last two years.

Moreover, one of the sectors that has not suffered any setback is tourism (our elaboration based on ISTAT data), which in the last fifteen years has recorded an increase in attendance and arrivals, which has been accompanied by an expansion in the number of accommodation activities.

The Basilicata has a position that can be read in two ways. On the one hand, it is very peripheral to the rest of Europe. The poorly central position compared to the rest of Europe and the low level of infrastructure of the territory constitutes the greatest limit to the economic and entrepreneurial development of Basilicata. From the other point of view, it is a candidate as a natural platform for exchange between the countries of the Mediterranean basin.

The depopulation of the inland areas and the increase in the average age of the resident population are additional factors of burden for an economy that is struggling to distinguish itself for innovation.

Consequently, the advantages of a green economy are at least in part constituted by the fact that in the collective scenario at national level Basilicata is associated with a great naturalness, a consolidated authenticity and the presence of villages and small centers characterized by a strong identity component.

Region of Puglia

Southern Italy suffers from unfavourable national and supranational macroeconomic conditions to which it adds its own endogenous structural difficulties: a condition of "structural disadvantage" that cannot be compensated only with more virtuous cohesion policies.

Some positive confirmation in relation to spending capacity is evident in the case of Puglia, and some new interesting signs of trend reversal, compared to the implementation delays experienced in the past. It may seem obvious that the economic recovery in the South is inextricably linked to the consolidation of its industrial and manufacturing fabric in particular. If we also look at the data of the crisis it clearly emerges how the recovery of the industry, which in 2015-2016 had already characterized the restart of the South, represents an important positive element of the favourable southern economic situation of 2017.

More specific, according to SVIMEZ forecasts, GDP growth rate in 2018 was 1.3% in the Center-North and 0.8% in the South. In August, instead, a growth gap between the two macro-areas was assumed, again in favor of the Center-North, more limited: equal to just one tenth of a percentage point.

The reopening of the differential between the two macro-areas is due to the combined effect of two phenomena. On the one hand, there is a deceleration in the rate of increase in total consumption, especially in the component relating to household spending, influenced by the decreasing profile of general economic activity, which has a more significant impact in the South.

On the other hand, however, investment spending remains on a dynamic that is still strongly increasing in both areas of the country, still feeling the positive impulse offered by the "Industry 4.0 Plan" to the accumulation process. Although this concerns both areas, but in a more marked manner the central-northern regions (+ 3.8% in the South and + 6.2% in the Centre-North), it is recalled that the production of these goods is essentially limited only to the most developed regions (and / or abroad), and it is in this area therefore that the added value activated by the demand for new capital goods is concentrated, contributing to explaining a large part of the differential found in the growth rate of the aggregate product. Finally, the capital expenditure of the Public Administration is expected to stagnate substantially in 2018. Our assessments, in fact, discount the known difficulties that the Administrations, especially the local ones, encounter in translating the higher allocations provided for in the latest Budget Laws into actual expenditure.

3.3. Physiognomy & Development Characteristics

Region of Crete

In the regional and national level, the economic crisis, the downturn, the increase in the density of social risks (over-indebtedness, unemployment, undeclared employment, extreme poverty) and the reduction of the "social budget", leaded to increase of poverty and social exclusion.

The main factors influencing poverty are long-term unemployment and the marginalization of groups of the population. Long-term unemployment has raised on 2011 and reach at 13,8% on 2013 but remains below the country average. The vulnerable population groups are limited numerically and spatially concentrated on the outskirts of urban centers. As far as poverty is concerned, Crete performs better than the average country.

The economic crisis and fiscal adjustment policies have highlighted the structural weaknesses of the regional economy since 2009, and have caused differentiated spatial and sectoral impacts in terms of economic activity, income composition and employment2. The recession in some European economies has negatively affected the demand for tourism services, while spending per visit has been reduced. Budget adjustment reduces disposable income through increased taxation resulting in an important reduction in consumption. Limited liquidity reduces the ability to finance businesses by adversely affecting their operations and their investment plans.

This deterioration leads to capital flight, postponement of investments and migration of skilled persons. The combination of these influences, combined with the existing structural weaknesses of the regional economy, create crisis conditions, which are manifested by a fall in economic activity and the unemployment which for the first time shows convergence with the national average (24.4% compared to 27.3% of the country's average for 2013), with higher unemployment among women (23.9% vs. 20.7% of men).

Further evidence of declining economic activity is also the continuing decline in agricultural incomes recorded at national level due to the decrease in direct payments and the increase in production costs. Indeed, the agricultural sector has decreased competitiveness, low income sustainability and structural problems that have intensified due to the economic crisis (the massive import of food and agricultural products, low productivity, high production costs). Agricultural income, including subsidies, showed a pronounced downward trend (-10%, ELSTAT Agriculture Economic Accounts 2010-2013), due to the increase in taxation and bank interest. In addition, fixed assets and, in particular, equipment are often disproportionate to the installed capacity (doubling the consumption of fixed capital, ELSTAT 2000-2011 Financial Accounts for Agriculture), creating problems of over-leverage and liquidity, which have been aggravated by the crisis. However, the most important element is that the agricultural production value is low (only 10% from agricultural trade and processing) because producers do not have access to and / or market orientation.

The main public services, infrastructures, and facilities to agrofood sector are in Crete are:

• The main road of the region is the North Road Axis which is already developed but needs improvement in access and in safety conditions. On the contrary, there is reduced accessibility from the southern part of the island to the north coastline. In the hinterland and in the south the spatial dispersion of residential settlements, point-based tourist developments and production areas of the primary sector creates increased demands for improvement of the provincial and inter-municipal road network.

• The island has three airports:

- Nikos Kazantzakis airport in Heraklion. It is about 5 kilometers from Heraklion. It is the second airport in Greece as far as passenger and freight traffic. During 2016 the total number of passengers raised about at 6.700.000. This airport has cargo terminal infrastructure and it is served for commercial purposes.

- Vitsentsos Kornaros Airport in Sitia and Daskalogiannis Airport in Chania doesn’t serves freight traffic.

• Crete has ports with significant position in the eastern Mediterranean because of its the location, it lies on the "passage" of the ships from the Suez Canal to the Western Mediterranean and the Atlantic. There are 3 important ports:

- Port of Heraklion. The port of Heraklion is the largest of Crete. Due to its geographical location it is the main port of communication with Piraeus. The Heraklion Passenger Port is considered the third in Greece as far as passenger and freight traffic.

- Port of Souda. Except the passenger traffic, it also serves commercial purposes as an important volume agricultural production is traded (olive oil, vegetables and fruits).

- Port of Rethymno. Also, the port of Rethymno has passenger and freight traffic. The agricultural production that is traded is usually olive oil, carob.

• Regarding the Public Administration, the recent implementation of the Kallikratis Program resulted in the establishment of the administrative structure of the Region Authority of Crete. A significant change was the decrease in the number of municipalities. This reduction is positive as far as the first-level governance and development planning, but it influenced negatively on the ability of new municipalities to design, mature and implement projects.

• The island of Crete continues to have a high dependence on oil (86% against the national average of 58%). The interventions to date have resulted in the development of several alternative forms of power generation (24 wind farms, 4 under construction, 2 biogas cogeneration plants 50 photovoltaic systems, 400.000 solar water heaters / central solar systems and large pilot solar centrals for hotels, 8 geothermal installations, 2 small hydropower, 10 permits for pumping and 5 permits for solar thermal power generation).

• The Region of Crete has particularly important research infrastructures, some of which are internationally recognised, such as:

-the Foundation for Research & Technology – Hellas based in Heraklion which comprises the following 8 Research Institutes:

• Institute of Electronic Structure and Laser (IESL)

• Institute of Molecular Biology and Biotechnology (IMBB) Biomedical Research Division in

• Institute of Computer Science (ICS)

• Institute of Applied and Computational Mathematics (IACM)

• Institute of Astrophysics (established in 2018)

• Institute for Mediterranean Studies (IMS)

• Institute of Petroleum Research (established in 2019)

• Institute of Chemical Engineering Sciences (ICE-HT)

This Institute has also founded the following Units:

• The Crete University Press (CUP)

• The PRAXI Network, a technology transfer Unit

• The Science and Technology Park of Crete (STEP-C) ,

- The Mediterranean Agronomic Institute of Chania which is the 4th constituent institute of the International Center for Advanced Mediterranean Agronomic Studies (CIHEAM) since 1986. The three main complementary missions of this Institute is:

1. post-graduate specialised education
2. networked research
3. facilitation of regional debate

with focus in the fields of Business Economics and Management, Geoinformation in Environmental Management, Horticultural Genetics and Biotechnology, Food Quality and Chemistry of Natural Products, Sustainable Agriculture.

-The Institute of olive tree subtropical plants and viticulture which belongs to the Hellenic Agricultural Organisation "DIMITRA", located also in Chania. The main role of this Institute is the design and execution of research, pilot programmes and demonstration projects on the problems and modernisation of the cultivation of olive and citrus tree, and subtropical plants. A secondary role is the development of activities related to the management of soil and water resources, and problems of crops and issues of local interest like vineyards, greenhouse vegetable crops, aromatic plants, animal production etc.

Consequently, the role of the research institutions of Crete is key, within the framework of the country's new research infrastructure map completed in 2014 by the General Secretariat for Research and Technology. The Roadmap is ex-ante conditionality for the funding of Research Infrastructures by GRNET National Research and Technology Network.

Slovenia

Slovenia is gradually progressing in the field of quality of life and economic development, and environmental pressures are also being reduced. Nevertheless, in many areas of economic, social and environmental development, it is much lagging behind the most developed countries. Further development potential is thus constrained by low productivity, maladaptation to demographic change, further excessive environmental pollution and low state efficiency in promoting development. Slovenia's involvement in the international business and socio-political environment is of utmost importance for the exploitation of development potentials.

In the last decade, Slovenia experienced high economic growth until the outbreak of the crisis, with a number of structural weaknesses already before the crisis indicating the unsustainability of the then development model. During the crisis, a sharp drop in GDP was followed, which greatly weakened economic stability and negatively affected the well-being of the population.

The level of education of the population has improved considerably, but there are some disparities between supply and demand for skills in the labor market (deficient professions are: stonecutter, mechatronic operator, manufacturer / manufacturer of metal structures, installer / installer of machine installations, metal designer toolmaker / toolmaker, electrician, car-fixer, baker, confectioner, butcher, wallpaper, carpenter, bricklayer, plumber-roof / plumber-cap, contractor of dry construction works, painter, laying of ceramic linings, forestry, chimney sweep, glass).

In the context of demographic change, which will require, inter alia, the increase in older people's work activity, as well as from the point of view of society's response to global trends, learning for and through life should be strengthened. The inadequate educational structure of employees, coupled with modest cooperation between enterprises and the research sector, has an adverse effect on the innovation activity of companies.

Slovenia is lagging behind in the development of the digital society as a result of low investments in the development of digital skills and technologies and the uncoordinated development of the entire area, despite the relatively steady distribution of the fast broadband network. An important factor in economic development is creativity, which, among other things, comes from culture and creative industries, which in Slovenia is under-recognized and represents a significant untapped potential.

The economic situation has also improved the material position of the population since 2014. The actual individual per capita consumption, which is the indicator of living standards, is still lagging behind the EU average. In 2015, the levels of risk of social exclusion and poverty, which are higher than at the onset of the crisis, have also been reduced, but lower than the EU average. In this context, the risk of poverty among older people, in particular women, is particularly challenging.

Positive shifts have been made in recent years in terms of reducing environmental pressures that are still overburdened by the population and the people of Slovenia with the current lifestyle and production processes. Greenhouse gas emissions, causing one of the biggest environmental problems - climate change - have declined in the context of lower economic activity in the crisis, but per unit of GDP remain higher than the EU average. The environmental problem is primarily the increase of road transport in transit and general unsustainable mobility. Due to lower consumption in households and in industry, the total energy consumption decreases, but it remains relatively high due to a large share of energy-intensive industries per unit of GDP.

Finally, the main Public infrastructures to agrofood sector in Slovenia are:

- Agricultural Advisory Service
- Public service in the hops
- Public advisory service in beekeeping
- Public service of professional tasks in livestock farming
- Plant Health Service
- Public service of the genetic bank in livestock production of professional tasks in the production of agricultural plants

• Public Service for Conservation and Sustainable Use of Plant Genetic Resources for Food and Agriculture

• Research institutes (organized within Universities)

Serbia

Rural areas were more responsive to the economic crisis and were strongly affected by it, the overall increase in poverty in the Republic of Serbia was generated as a result of increased poverty in rural areas. Compared to 2008, the percentage of poor people in rural areas (measured by the absolute poverty line) in 2010 increased by 6 percentage points, while the percentage of the urban poor people increased by less than one percentage point. The widening gap between poverty of urban and rural areas during the crisis was passed on from year to year, so in 2010 it reached a record rate of 2.4.

While the growth of poverty in the countryside in 2009 could be explained with the sudden drop in food prices (after the record yields in 2008), the rapid impoverishment of the rural population in 2010 certainly had roots in the economic crisis and its impact on the rural labor market. Since the economic crisis has been strongly reflected in employment in the informal sector, which is very frequent in the rural economy, it is likely that the trend of increasing poverty in the country will continue.

Large regional differences in poverty are in line with the existing differences in the economic development of the regions. Regional differences in the prevalence of rural poverty are significant and follow the relationship that exists between the regions in terms of overall poverty: the most unfavorable situation is in the Southern and Eastern Serbia, while it is more favorable in Vojvodina.

Serbian rural areas are characterized by biodiversity, rich cultural heritage and natural resources. On the other hand, they suffer the consequences of the demographic drainage. It is the reason for their lagging behind in development, for all types of deprivation and increasing poverty. Their economy boils down to exploitation and further degradation of the natural resources, based on agriculture and accompanying activities, with poor offer of quality jobs and with modest possibility for generating external income.

The increased attraction of the rural areas to the young families as their potential place for living is closely connected with improved infrastructure, improved accessibility of social services, improved social structure and improved entrepreneurial support. The serious threat for further growing of the development gap between rural and urban areas comes from the lack of recognition of the specific needs of villages and their population and the lack of systemic and coordinated activities of various actors.

Accessibility of the IPARD funds, strengthening of the social capital and market connections would lead to strengthening of the rural areas and contribute to their sustainable development in the future. The significant development opportunities for agriculture and rural areas lie in establishing the efficient knowledge, technology and information transfer system as well as in the innovative ways of using the potentials of cultural heritage and biodiversity.

Finally, Public infrastructure in Serbia is sufficiently developed for development of agro food sector.

- There are road, railway and river corridors, and air transport. Main high way is crossing the country and is further spreading in order to link east and west of Serbia.
- Agricultural Advisory Service consists of 35 Extension Services with less than 300 advisors. The work and financing of advisors is conducted by the State through tendering for realization of Annual extension program defined by the Ministry of Agriculture. All except 4 private ones, are owned by the government. Highly skillful and educated advisors are licensed for their work and have to attend regular trainings organized by the Ministry, in order to keep the licenses.
- There are also advisors working in Public advisory service in forestry
- Veterinary Service which is privatized
- National referent laboratory which recently started with strengthening of capacity and additional staffing is expected in coming period.
- National Gene bank in plant production is established in the National Referent Laboratory
- Private consultants and consulting agencies.

Albania

The main characteristics of area are:

1. A natural environment suitable for agritourism and farm diversification,
2. Favorable climate conditions for the production of fruit and medicinal plants,
3. Natural environment suitable for livestock breeding;

4. Able and free labor force etc.

According to the OECD definition at NUTS3 level, there are five predominantly rural regions, five intermediate and two predominantly urban regions. In 2013 the predominantly rural regions (Diber, Gjirokastra, Korca, Kukes and Lezha) and the intermediate regions (Berat, Elbasan, Fier, Shkodra, Vlora) accounted for 91.6% of the territory and 63% of the population of Albania, which is close to the EU average (90.9% and 59% respectively). The predominantly urban regions - Tirana and Durres, - accounted for 8.4% of the territory and 37% of the population. The population density in the predominantly rural regions is about half of the country's average (56 inhabitants per sq. km) and in the intermediate regions is slightly lower than the national average (85 inhabitants per sq. km).

Albania is predominately mountain country with nearly two-thirds of its territory located in mountainous areas. Eight NUTS3 regions with total population of about 1 million people are located entirely or predominantly in the mountain areas.

During the intercensal period 2001-2011, the Albanian population declined by 269,000 people, or 8.8%. The main factors contributing to the decline of population were significant reduction of birth rate and out migration. The country had positive, but decreasing natural population growth (5 per 1000 inhabitants in 2012). It is estimated that about 500,000 Albanians emigrated during the period 2001-2011, mainly driven by economic factors and lately by family reunification. In recent years, there is an increasing flow of returning migrants, mainly from Greece and Italy. The census data showed that in the period 2009-2011, 73,000 people returned to Albania, of which about 70% resided in rural areas.

The Albanian population is among the youngest in Europe with median age of 33 years old, however the population is ageing fast. In the intercensal period 2001-2011, the number and share of population bellow 15 years old declined significantly from 29.3% in 2001 to 20.7% in 2011 and the share of population aged 65 and above increased from 7.5% to 11.3%.

In 2012, the population in the age group from 20 to 64 years old was 1,615,600, which was 9.7% less than 2007. The share of population in this age group with upper secondary education was

Region of Basilicata

In recent years, the Basilicata region has experienced a high rate of depopulation and an equally negative natural balance.

Our elaboration on ISTAT data show that although per capita gross domestic product grew from 2014 to 2016 and was always higher than in Southern Italy, the average is significantly lower than in Italy.

In recent years, the labour market has also shown a positive trend, with the unemployment rate decreasing and the employment rate rising until 2016, but then slightly declining.

Despite this and according to ISTAT data, the percentage of families living below the poverty line still remains at about 22%, showing even a small increase in the last two years. The number of people at risk of poverty or social exclusion, on the other hand, has remained almost constant since 2014.

Region of Puglia

The Territorial Pacts represented the main programming tool negotiated in Italy. In Puglia, starting from 1996, twenty-eight Territorial Pacts were activated, of which ten concerned agriculture only. A Territorial Pact is an agreement between representatives of local administrations, entrepreneurs and workers' unions that aims at the realization of entrepreneurial projects and public interventions. Municipalities, characterized by geographical proximity, belonging to the areas defined as under-utilized by the community legislation, can adhere to a Territorial Pact.

The main objectives of the territorial pact are:

• promote cooperation between public and private entities in a territory so that they plan and implement projects to improve the local context;

• promote, through these projects and through territorial and thematic concentration, the aggregation of a volume of private investments capable of producing advantages for all local economic subjects.

Finally, the main Public infrastructures in Apulia for agro-food are:

Istituto Zoo Profilattico di Puglia e Basilicata http://www.izsfg.it

- CREA- CI http://sito.entecra.it
- Istituto Agronomico Mediterraneo di Bari http://www.iamb.it/
- UNIFG, UNIBA, UNISALENTO Dip. Agraria
- BIOAGROMED
- Banca del Germoplasma di Bari http://ibbr.cnr.it/ibbr/info/ibbr-divisions/ibbr-headquarter-bari

3.4. Demographic and social characteristics of the population

Region of Crete

According the census 2011 the population in Crete is 623.065 persons, showing an upward trend in relation the census of 2001 that it was 594.368 persons. This increase of population is in opposite with the census of total of Greece.

The concentration of researchers in Crete is significant, with 1.05% of the total number of people employed (1st region in Greece in 2011) and the employment in high-tech sectors is at the same level as the other regions of the country.

However, as regards the employees with tertiary education as a percentage of the total number of employees, Crete falls short of the others regions occupying the 7th place (2013). The reason for this lag is the composition of economic activity that absorbs workers with a low educational level without special requirements of specialization.

The population trends are not very encouraging. Thus, while the total population represented a positive population change in the period of 2001-2011, the population growth was observed in favorably-characterized areas. These areas are located in the northern part of the intervention area and show positive results in all fields and especially in the demographic. In the demographic field, therefore, there is a clear disparity between the northern part on the one hand and the hinterland and the southern part of it. This confirms the phenomenon of "rural exit". Thus, it is understood that the region follows the tendency of the Greek population to concentrate in the urban centers and the tourist zones by abandoning the mountainous and disadvantaged areas.

This social transformation is directly linked to the economic one, which is characterized by the tertiarisation of the local economy. It is characteristic of a significant drop in employment in the primary sector and a significant increase in tertiary. These trends indicate the abandonment of rural activities and the corresponding increase in the services and tourism sectors.

Slovenia

Slovenia, like most developed countries, faces changes in the age structure of the population. They are defined in particular by the reduction of the working age and the increase in the number of elderly people. According to the EUROPOP2013 demographic projections, the aging population that we are facing in Slovenia will be more intense than in other EU countries. Projections are related to the risks of realizing their key assumptions (trends in births, deaths and net migrations), but the demographic scenarios show the inevitability of aging populations in Slovenia. The consequences of such movements will be mainly visible on: i) the labor market, ii) education, iii) public expenditure, and iv) housing, spatial and regional fields.

In the labor market, a reduction in the number of working age workers will become a limiting factor for economic growth over the next ten years. While maintaining modest migrations, the increased working activity of young people and the elderly will not be enough to cover the needs for greater employment due to the strengthening of economic activity. The age-modified structure of reduced labor supply could slow down productivity growth and affect the structure of consumption. Demographic change is changing the needs for training capacities in the direction of strengthening lifelong learning and providing skills for life and work.

Demographic trends will affect the reduction of funding sources and the growth of social protection expenditure. While maintaining current social protection systems, a smaller number of working-age population will limit the sources of social protection systems funding, while increasing the proportion of the elderly will increase pressure on general government expenditure related to the aging of the population. This will be reflected in the sharp increase in expenditure on pensions already partly financed by budgetary funds, as well as expenditure on health services and long-term care services.

The aging of the population also changes the needs of housing, spatial and regional policies. Among the elderly, there is already an above-average high share of socially excluded, and with the increase in their number, the problem could become even more pronounced. The older population is also characterized by a high proportion of owner-occupied dwellings, and at the same time an above-average high proportion of older people living on farms or in detached houses. In doing so, their housing deprivation is high, and some long-term care services are difficult to perform. Demographic change increases the need for older adapted spatial planning, building construction and transport policy. Regional population projections indicate an increase in the uneven aging of the population by region.

Socio-economic indicators. Labor productivity, measured by Total Working Capacity (TWC) / 100 ha of the UAA increased in the period 2000-2016 quarter. The age structure of masters remains unfavorable, since the average age of masters is 57 years. It is also worrisome that among those working on farms is decreasing the proportion of people under the age of 25 and increasing the proportion of those older than 65 years. During this period it has improved educational structure of masters. In 2016, half of masters had one completed of the level of agricultural education, and in 2000 only 16% of them had.

Serbia

Population Census results from 2011 show that the demographic trends in Serbia, especially in its rural areas, are increasingly unfavorable. In the period of 2002-2011 there was a decline in the total population of 4.15%, which was primarily a result of negative population growth and due to migration abroad. The rural population in this period was reduced for 311.139 people (10.9%), and fell below 3 million, and now is 40.6% of the total population of Serbia. The following information explains the negative demographic trends in rural areas:

In about 1000 village's population is less than 100 inhabitants, which basically shows that every fifth villages on the verge of disappearing, the biggest concentration of such settlements are on the south and on the east of the country, where every third village has fewer than 100 residents.

In rural areas of Southern and Eastern Serbia population was reduced by 19% during the period of nine years. The average population density in a square kilometer in Crna Trava was boiled down to just five people, and the average age of its residents is ten years above the national average.

Region Šumadija and Western Serbia is the only one where more people live in rural than in urban areas (52.6%).

The age structure of the rural population

One of the key characteristics of demographic development in Serbia is an increasingly unfavorable age structure. Changes in the age structure in the period of 2002-2011, indicate a continuation of the process of declining of share of young people, with simultaneous increase in share of the elderly people. The parameters of the age structure of the rural population are even worse. Every fifth resident of village in Serbia is older than 65 years of age, while in the Southern and Eastern Serbia it is every fourth one. The coefficients of age dependency in rural areas, with the exception of the region of Vojvodina, indicate that per each person older than 65 years, there are three (in some areas even less) in the age group of 15-65 years. On the other hand, the relationship between the young and old populations shows that per every 100 people older than 65 years, there are only 69 of those under the age of 15 years (in the Southern and Eastern Serbia, only 52).

The educational structure of the population

In the educational structure of persons older than 15 years of age in the Republic of Serbia, the most common are those with a high school education (47%), whose share has increased since the previous Census by 5 percentage points. The same trend is also present in rural areas, where people with a high school education make up 37% of the population over 15 years of age, and for the first time there are more people in this category than in the category of the illiterate or people without primary education (which made 15% according to the last Census). Growth in the share of people with secondary education took place at the expense of reducing the share of persons with lower education. However, noticeable is the reduction in the share of highly educated rural population, in all regions. Favorable educational and age structure of the population have villages in Vojvodina.

Modest knowledge and lack of additional skills of the rural population are confirmed by the data according to which 97% of the rural population has not attended additional training programs, and 54% does not have special knowledge and skills. These results adversely affect the overall capacity and competitiveness of the labor force in rural areas. The low quality of the labor force can be considered as one of the factors that hold back economic development in rural areas, since it is the reason of low entrepreneurial potential of the people in rural areas, just as it causes low economic interest of foreign investors. Such an environment encourages the migration of highly educated population, because it is difficult for an educated workforce to remain in areas without enough attractive jobs that match their education and ambition.

Albania

In 2019, Albania has an estimated population of 2.94 million, and it is the 137nd most populous country in the world. Albania is fairly densely populated for a small country of 28,748 square kilometers, with 102 people per square kilometer, or 39 people per square mile. This brings Albania to 144th in ranking for area and 105th in ranking for population density. Albania's capital, Tirana, has a population of 421,000, with a greater metropolitan population of 764,000. Other major cities include Durres (113,000), Korce (51,000), Elbasan

(78,000) and Shkoder (95,000). Almost 58% of Albanian's are Muslim, with a Christian population of 17%. About 25% of the population belongs to another religion or has no religion. While Albania was the only European country whose Jewish population grew during the Holocaust, the mass emigration to Israel has left just 200 Albanian Jews in the country. Albania is currently growing very slowly, with a growth rate of just 0.34% and in 2018 with a growth rate by 0.14%. Albania has a relatively young population, but the trends of recent years are showing that Albania will soon be aging, and this is the ultimate consumer for businesses operating in Agro Food.

The sex ratio is 102.1 men for every 100 women. However, the sex ratio at birth is different: there are 109 male neonates for every 100 female neonates.The abortion rate in the country is 186 abortions per 1 000 pregnancies, 32.8 percent of which are planned abortions. Based on this evidence, the United Nations Population Fund (UNFPA) and the Council of Europe have pointed out that sex-selective abortion may be widespread, despite being outlawed under the 2000 'Law on Reproductive Health.' Although further research is needed, it has been suggested that Albanian families have less interest in investing in girls because their status and potential economic returns are perceived to be significantly lower than those of boys. This is especially the case in rural areas where patrilocal marriages – those in which brides move from the house of their parents to their husband's family – are widely practiced.

However, infant mortality rates are higher among male children and there is a greater prevalence of underweight male infants between 0-4 years of age. The male life expectancy rate at birth is also lower when compared with the female rate (76.4 percent and 80.3 percent respectively), partly due to infant mortality rates and partly due to gendered habits that negatively impact on men, including a higher prevalence of smoking and drinking practices among males.

In 2014, the mean age of marriage was 24 years for women and 29.5 years for men. While 12 percent of women over 20 years of age are widowed, only three percent of men over 25 years of age are widowed.

While general mortality patterns are similar to those observed in developed European countries, morbidity patterns are similar to those found in developing countries. Self-perception of health status is better among men than women, especially within the poorer quintile and the quintile with lower education levels. Women also experience more chronic illness than men.

Adult literacy rates are close to 100 percent for both women and men, and there is no discernible difference in the primary education completion rates of girls and boys in either urban or rural areas. The primary school attendance rate is lower in rural areas (51 percent) than in urban areas (69 percent); and the educational completion rate in rural areas is only 8.6 years, despite the fact that school attendance is mandatory for 9 years.

Girls and boys from rural areas also have lower enrollment rates in secondary and vocational schools. Vocational schools and adult training centers are mainly located in central Albania, while they are almost absent in rural parts of the country. Schooling rates are equivalent for girls and boys and access to tertiary education is directly linked to the economic status of the family: 28 percent of women and 31 percent of men from the highest wealth quintile have some university education, while only one percent of both sexes from the lowest quintile have access to tertiary education.

Region of Basilicata

Basilicata is a sparsely populated region, with a total population of 567118 inhabitants (as of 1 January 2018) and a constant negative trend of the population.

The disparities in the levels of development of the territory are historically accompanied by rates of depopulation, with different trends within the region. The less central areas of the region (Matera, Metapontum, Northern Vulture and Marmo Melandro) as well as the areas gravitating around the two capitals (i.e. the only two urban areas of the region) have lost much less population, or even increased it.

If we break down the demographic phenomenon into its two macro-components (migratory and natural balance), and with reference to the migratory phenomenon, we notice how it has been more intense in Val d'Agri, in Pollino, in the area of Matera hills and in the Bradanica area.

Internal migrations to the region have been attracted by the urban poles of Matera, Potenza (and its hinterland municipalities, such as Tito, Pignola, Picerno) and in some municipalities of Vulture (namely Melfi, Rionero in Vulture, Lavello) and metapontino (Scanzano Ionico, Bernalda, Pisticci) which have thus been able to increase or stabilize its population "at the expense" of the more internal and smaller municipalities.

The progressive decrease of the resident population, in particular in the mountain areas of the region, has negative repercussions both on the economic and social activities and on the overall control of the territory. The productive fabric, in fact, characterized by companies oriented towards the domestic market, is finding it increasingly difficult to achieve an income, generating phenomena of socio-economic marginality.

For areas such as Metapontino and Vulture, rural development policies could translate into incentives for the enhancement of endogenous resources: agriculture, first of all, and, in an integrated perspective, tourism, with the consequent maintenance of basic conditions for the population and for the protection of the territory.

Finally, according to our elaboration on ISTAT data, depopulation of the Region has a negative impact on demography, recording an index of old age in growing and higher than both the national value and that of Southern Italy. More specific, more than 44% of the regional population is over 50 years of age.

Region of Puglia

The North and the South of the country are hit by a profound demographic revolution that, in addition to the overall decline, is reshaping the population structure, with a clear loss of weight and role of the South and of the young generations. Italy, all of them, finds itself poor with young people and, also as a result of an imbalance in the social policies adopted so far, large cohorts of poor young people. Among the European countries with the widest demographic base, Italy is the one that has suffered the most intense fluctuations in the number of births: from the million and 61 units of 1964 to the present 458 thousand. The most significant population losses are recorded precisely in the southern regions: -145 thousand inhabitants only in the two-year period 2016-2017 in the South. It is as if a medium-sized southern city had disappeared from one year to another.

ISTAT forecasts outline a path of strong population reduction over the next fifty years, with a more intense fall in the South (-5 million) than in the rest of the country (-1.5 million). In the South, the sources of power for population growth are weaker: fewer and fewer immigrants are born. All this will make the South the oldest area in Italy and among the oldest in Europe: this inevitably reduces the working-age population, compromising the growth potential of the economic system.

In territorial dynamics, a role of absolute importance is played by internal migrations and those from abroad, which will contribute to redesigning the spatial distribution of the population to the advantage of the Center-North. The South will lose a substantial part of its youngest component due to a progressive decline in births and a continuous migration loss.

The outflow of human capital from the south to the north and abroad has caused a serious depletion of the demographic structure and the social fabric. In the last 16 years, 183 million residents have left the South: half of them between the ages of 15 and 34, almost a fifth graduated; about 16% have moved abroad. Almost 800,000 of them never returned to the South.

The population residing in Puglia as of 1 January 2012 is 4,050,072 people, with a slight prevalence of women. The province of Bari is the most populous and represents about 31% of the population residing in Puglia, precedence from that of Lecce (19.8%), Foggia (15.4%), Taranto (14.4%) and, more distanced, from Brindisi (9.9%) and Barletta-Andria-Trani (9.7%). 32.9% of the Apulian municipalities have a population not exceeding 5 thousand inhabitants. More in detail, the analysis of the population structure by age group highlights how 66% of the Apulians are between the ages of 15 and 64 (higher than the national figure), about 15% fall into the class 0-14 years (slightly higher than the national figure) and 19% have more than 65 years of age (a value decidedly lower than the national figure). The average age in Puglia is 41.5 years. Puglia is young: the average age of the population is among the lowest in Italy.

3.5. Impact of recent development interventions

Region of Crete

The recent development interventions to the agro food sector in the Region of Creteare:

Operational Program CRETE 2014-2020

The Operational programme Crete is co-funded by both the European Regional Development Fund (ERDF) and the European Social Fund (ESF), at 80%. The interventions co-financed refer to 7 Priority Axes.

• PRIORITY AXIS 1 (ERDF): Enhancing competitiveness, innovation and entrepreneurship in Crete.

• PRIORITY AXIS 2 (ERDF): Sustainable Development with environmental upgrading and addressing the impact of climate change on Crete.

• PRIORITY AXIS 3 (ERDF): Strengthening education and social cohesion in Crete

• PRIORITY AXIS 4 (ECB): Promoting employment and adapting workers to change.

• PRIORITY AXIS 5 (ESF): Promoting Social Inclusion and Combating Poverty in Crete

• PRIORITY AXIS 6: ERDF Technical Assistance

• PRIORITY AXIS 7: ESF Technical Assistance.

Programme Rural Development 2014-2020

The vision of the programme is "Integrated Development and Sustainable Rural Competitiveness". Its design is aimed at enhancing the competitiveness of the agri-food sector, highlighting the multifunctional nature of rural areas and protecting the environment.

The programme has 5 key operational priorities:

• Enhance the competitiveness and productivity of the primary sector

• Strengthening the value of the chain of domestic agricultural products

• Upgrading human resources and enhancing entrepreneurship

• Protecting the environment and natural resources and adapting to climate change

• Strengthening the social fabric in rural areas.

Finally, the current public structural interventions have not yet been completed. Consequently the impact is not clear

Slovenia

In the 2014-2020 period, 14 measures will be implemented under the Rural Development Program:

• Measure M1 - Transfer of knowledge and information activities (EUR 12.500.000)

• Measure M2 - Advisory services, farm management assistance and farm replacement services (EUR 10.768.000)

• Measure M3 - Quality schemes for agricultural products and foodstuffs (EUR 3.400.000)

• Measure M4 - Investments in fixed assets (EUR 206.465.816)

• Measure M6: Farm and corporate development (EUR 123.013.333)

• Measure M7 - Basic services and village renewal in rural areas (EUR 10.000.000)

• Measure M8 - Investments in the development of forest areas and improvement of the viability of forests for livelihoods (EUR 59.481.066)

• Measure M9 - Establishment of groups and producer organizations (EUR 2.227.950)

• Measure M10 - Agri-environment-climate payments (EUR 203.287.386)

• Measure M11 - Organic farming (EUR 65.300.000)

• Measure M13 - Payments to areas with natural or other specific restrictions (EUR 265.933.333)

• Measure M14 - Animal welfare (EUR 32.533.333)

• Measure M16 - Cooperation (EUR 20.062.500)

• Measure M19 - Support for local development under the LEADER initiative (local community-led development) (EUR 53,365,614)

Since the mid-1990s, permanent structural changes have been taking place in Slovenian agriculture, which is mainly reflected in the increased concentration and specialization of agricultural holdings. The number of agricultural holdings decreases, while their average size is increasing in parallel.

Improving the size structure is the result of a reduction in the number of holdings in the smallest size classes. In recent years, the threshold above which the absolute and relative number of agricultural holdings is still increasing has moved to 20 hectares of utilized agricultural land or 20 livestock units.

The level of specialization is also increasing. Almost 60% of agricultural holdings are targeted in a certain type of plant or livestock production (2007), with the dominant focus on grazing livestock (42%), while other major holdings are focused on growing permanent crops (around 10%) and agriculture (about 6%). Parallel to the restructuring process of agriculture, labor consumption is reduced and the educational structure of farm owners is improving.

Finally, projects, actions and support of the Ministry of agriculture are:

The project “Our super food” is dedicated to the promotion of locally grown and processed foods. "Our super food" is a joint project of the state and sectors that have entered the promotion. In order for the consumer to recognize Slovenian quality food better, a new national quality scheme "selected quality" was established, in which each of the eight sectors of food production and processing can enter. Until now, the milk and beef and poultry meat sector has entered it.

The promotional campaign "Our super food" is a 3-year campaign co-financed by the state and the sectors (milk sector and beef and poultry meat sector). Milk and meat products are also already certified to a large extent and marked with the trademark "selected quality Slovenia".

The Ministry of Agriculture organizes the "Traditional Slovenian Breakfast" campaign – where they inform children, youth and general public about the importance of breakfast, the meaning and advantages of locally produced foods or food products produced or processed in Slovenia, the importance of agriculture and beekeeping and their impact on the environment and proper waste management. It is also important to raise awareness of the importance of a healthy lifestyle, including movement and sports activities.

"School Fruit and Vegetable Scheme" - the purpose of the project is to increase the low consumption of fruits and vegetables by children, reduce the number of children with overweight and obesity, reduce the risk of developing modern-day illness (diabetes, cardiovascular disease, cancer ...), to improve nutritional habits of children, connect children with agriculture. It is carried out in elementary schools by providing free fruit and vegetables to children; local fruits and vegetables are promoted, seasonally, of higher quality.

Serbia

During the last decade, agricultural policy in Serbia has been marked by frequent changes in policy frameworks, implementation mechanisms and budgetary transfers to agriculture. Despite unstable and often inconsistent policy measures and unpredictable shifts in implementation mechanisms, progress has been achieved in recent years in setting up institutional structures and adjusting the agricultural policy concept to align it with the CAP.

Recently adopted National Programme for Agriculture and the National Programme for Rural Development, define mid-term policy objectives and their implementation. The stable and constant growth of budgetary support for agriculture, which started in 2009 are extended in 2018 with accreditation of IPARD Program and measures.

In the absence of mid-term programming, agricultural policy is implemented by applying the Law on Incentives for Agriculture and Rural Development and the Law on Budget, on the basis of annual regulations and rulebooks. In addition, the policymaking process lacks the use of a standardized monitoring and evaluation system to assess the implementation and impacts of policy measures and to evaluate the degree of coherence between the policy objectives and their effects. These limitations of the current Serbian system of policy coordination, design and implementation mean that the rational allocation and the effectiveness of budgetary support for agriculture cannot be guaranteed. In an effort to overcome these limitations different legal solutions and instruments that are outside the scope of agricultural policy have been used in recent years.

Rural development and general services support is rather underrepresented in the current implementation of agricultural policy. A particularly low level of support has been allocated to the environment and the development of rural infrastructure.

The current system for the design and implementation of direct payments does not rely on objective and valid baseline indicators or on evidence-based impact assessments of applied measures. Therefore, the objectives of certain measures, types of incentive and eligible criteria are poorly defined, with the result that a large part of the budget is spent in a way that does not guarantee the achievement of the overall policy objectives outlined in the strategy.

Direct producer support schemes only partially comply with the CAP requirements. Most of the direct payment measures are implemented with low maximum eligibility thresholds and make very little contribution to the growth of competitiveness and the acceleration of structural change in agriculture, which is contrary to the overall policy objectives defined in the strategy. Furthermore, most direct producer support is coupled to production (input use, output level, cultivated area for specific crops or livestock numbers); this is in contradiction to the CAP, which relies mainly on decoupled payments.

The lump sum payment method, in which payment is fixed at an equal amount for all farmers participating in the scheme (irrespective of farm size and specialization), does not make any real contribution to the broader sector goals (e.g. structural changes, higher competitiveness, public goods, etc.). With limited budgetary funds for agriculture, this system contributes to the equity objectives, rather than to farm growth or the competitiveness of the sector.

Support measures that are tailored to small farms to address their specific needs are not considered in Serbian agricultural policy. Some attempts have been made to address the specific needs of small farms located in ANC (e.g. relatively low minimum eligibility threshold applied for milk premium, higher subsidies for on-farm investments), but the question remains whether or not these measures are sufficient to address the structural development needs of these small farms.

Albania

Info from the expert interview: Impact may be positive or negative, e.g. through Grants, could be intervene or not with financial support to productive farms, or ups and downs of fuel prices, VAT rates for inputs, seedlings price, pesticides, manufacturing machinery, packaging etc. If the intervention could consist with more financial support for new and high technology of equipment and machinery for production lines, the processed products will automatically added to the demand for more product from the area, - meaning more income for the producers, which influence on increased efficiency from the machine reflected on the reduced costs of the enterprise.

Region of Basilicata

The latest calls published by the Region have mainly concerned the financing of new agricultural enterprises. Compared to the previous programming cycle, the criteria for the allocation of scores have changed. In the last competition, the young age of the proposer, but also and above all his level of training specific to the planned productions, were rewarding.

The presence of crops capable of bringing nutrients to the soil and the inclusion of morphologically disadvantaged areas within the perimeter of the farm, was further material for good evaluation.

Since the size of the agricultural area was also the subject of evaluation, the Basilicata region has sought to promote the establishment of new agricultural businesses such as to encourage generational change, specialization and reduce excessive pulverization of family-owned businesses.

Region of Puglia

The main intervention in Apulian Region for supporting best practices and integration along the chain of agro-food sector is for sure the regional application of the European Programme for Rural Development. Futhermore the Common Agricultural Policy plays an important role in addressing farmer's choices towards the adoption of specific best practices such as sustainable soil management, rotation, greening etc.

Regional funding for specific interventions in agro-food sector also entail positive implications along the overall chain. The label “Made in Puglia” represents an example of strategy of differentiation according to specific features of Apulian agro-food produce.

3.6. Development prospects over a 10-year horizon.

Region of Crete

The development opportunities over a 10-year horizon are the followings:

- The Designed European and National strategies to promote innovation
- The funding opportunities from Greece and the EU
- The existence of strong research institutes in the area
- The making use of new technologies and innovations for the benefit of productivity and consumer needs
- The products of the agro food sector that contribute to the Cretan diet model and in extending to the Mediterranean diet.
- The capabilities of ICTS technologies
- The trends of the market for organic products, stricter environmental regulations and enhancing environmental awareness
- Positive trends in the development of tourist flows towards Crete

The interconnection of agro food and tourism, which can have a remarkable positive effect on direct sales in the short term, and on long-term exports

Slovenia

Development opportunities in the agro-food area:

- management of the agro-food system and value chains for ensuring sustainable production and processing of food of superior quality and recognized traceability
- the development of new marketing models for the purpose of improving the position on the domestic market and the penetration of new products into foreign markets
- development of personnel and competences for the purpose of improving the transfer of knowledge and technologies and entrepreneurial activity and, consequently, the competitiveness of the agro-food system.
- development of new integrated consumer products with greater functionality, including for catering and tourism, with emphasis on short supply chains, such as the cattle farming.

Consequently, agriculture needs to be restructured. Restructuring in the sense that small farms are given the opportunity to diversify into, say, vegetable farming, herbalism or similar niche activities, where they can produce decent income with a relatively small amount of land said Mr. Peter Polanič, director of Panvita.

Serbia

Agriculture is the engine for development of rural areas as it employs 21 percent of the country's labor force. In recent year foreign trade has become increasingly important from political, economic and cultural point of view.

The strategic development document of Serbia defines agriculture and food industry as a sector with the expressed comparative advantages and the sector which has the development as one of the priorities in the future.

Some sectors of food industry are more competitive than others. Serbia could improve the level of international competitiveness of agro food sector by technological and organizational modernization, like mobilization of resources to overcome the uneven level of development to strengthen the economy, conservation and environmental protection, the development of the transportation and education.

Agricultural products are significant for the total export, but also the structural changes are necessary for qualitative and quantitative increase of foreign trade exchange.

Thanks to the achieved level of fruit production here was achieved a top quality of frozen fruits, as the backbone of export, and especially frozen raspberry. Good quality of raw materials is important for top quality of fruit export, as well as selection and making new varieties, modernization of processing capacities, increase of the level of utilized equipment and finalization of products.

Vegetable production and processing also show potential for further promotion due to the favorable conditions and existing markets.

Livestock products are in deficit, but have the great potential to grow considering the needs of domestic market and export possibilities. The focus should be on increase of productivity, quality, the production volume and structure, the development of high quality final products, change of export structure in accordance with demand and increase of export competitiveness by the rational use of comparative advantages in export.

Albania

The EU has provided substantial support to Albania in the areas of democracy and governance, rule of law and fundamental rights, environment, competitiveness, nearly half of the national IPA II envelope has been allocated to support these sectors in line with the principles of IPA II focusing on fundamentals first. As stated in the Indicative Strategy Paper for Albania 2014-2020,9 the important lessons learned from IPA I (2007- 2013) are: (a) capacity building and investments require a minimum level of human resources in terms of both skill and number; (b) the ownership for EU funded investments is jeopardised if they are not linked to the sector strategies and budgets of the relevant Ministries as well as the need for a careful assessment of the institutional due diligence.

Another indicative strategy paper priority is enhancing the competitiveness of Albania's economy. To this end, the 2018 Annual Action Programme will support local economic development. The action EU for Economic Development - Tourism-led local economic development with focus on cultural heritage aims at increasing the contribution of sustainable and responsible tourism to Albania’s economic growth, thus regenerating local economic fabric and urban environment. The action will implement a tourism-led local economic development model focused on a cultural and /or on a natural heritage site.

Region of Basilicata

According to what emerges from the Regional Strategy for Innovation and Intelligent Specialization 2014-2020, the Basilicata Region has good indicators of development in the field of electricity from renewable sources and in the ability to export products with high productivity. Food industry contributes about 12% to the regional GDP and is a candidate for development opportunities linked to the growing needs of European markets that are articulated in high standards of:

- product quality and safety
- environmental sustainability and animal welfare.

Over a ten-year period, development opportunities are identified on the implementation of good practices that improve the sustainability of the production cycle and point to innovation.

Region of Puglia

Development opportunities in the agro-food area:

- Management of the agro-food system and value chains for ensuring sustainable production and processing of food with high quality and recognized traceability;
- the development of new marketing models for the purpose of improving the position on the domestic market and the penetration of new products into foreign markets;

- development of labourers and competences for the purpose of improving the transfer of knowledge and technologies and entrepreneurial activity and, consequently, the competitiveness of the agro-food system;
- development of new integrated consumer products with greater functionality and services (e.g. ready-to-use, easy-to-eat), including for catering and tourism, by promoting local produce with emphasis on short supply chains.

Primary sector (agriculture) needs to be supported in terms of warranty of minimum prices by avoiding speculation and protection. Small farms should be helped to diversify their production and integrate them into the overall chain, in order to guarantee income and preserve competition at local and international level.

4. PROSPECTS & TRENDS OF THE AGRO-FOOD SECTOR

4.1. Technological and organizational changes

Region of Crete

As far as the primary sector, there is a peculiarity in relation to the secondary one, the industrial production. The reason is that in the primary sector the production process is largely dependent on unpredictable factors such as insect pests, diseases etc. as well as weather conditions. Even in this unpredictable production environment, it is important to keep spending low and reduce the unpredictable situations.

With the help of technology the cultivators are modernized and, through the laptop, the tablet, the smartphone are monitoring their cultivation on a 24-hour basis. They have the information at all times about how to deal with the pests and diseases of the plants, when and how much it needs to water, when and how much fertilizer will be used on the field. Consequently, making use of modern technology, such as telemetric stations, is a tool for providing precision services for better risk management on the farm.

As far as the secondary sector, new technologies, innovation activity, research and development products play a decisive role in the development of all stages of production and distribution in the food sector, and their rapid change necessitates rapid adaptation, vigilance and flexibility of human resources in order to be capable of responding promptly and effectively to these changes and new requirements in the context of international competition.

The Food Industry and the relevant research area have developed good cooperation and communication relationships, especially after the creation of the Greek Food Technology Platform, “Food for Life” which ensures communication and collaboration in a joint Food Industry Forum, the research community and all of stakeholders in the Food Industry to define research priorities and develop a National Strategy for Research and Technological Development.

The Greek Technology Platform was set up in May 2009 on the initiative of Hellenic Federation of Food Associations and brings together the main "food business partners" such as large and small-sized enterprises, primary production enterprises, research centers and universities, control bodies, political designers, associations’ consumers etc.39

Slovenia

In Slovenia it will be necessary to amend the legislation in such a way as to protect, in particular, the indivisibility of agricultural land complexes in the processing and encouraging their rounding.

The Slovenian food processing industry has to connect, as it will be stronger in concluding contracts with traders, and above all, without that it will not succeed in foreign markets.

Moreover, there are a lot of opportunities is in Slovenia for new “spin off” high-technology companies (also incubators at the Universities) to be established.

Finally, Ministry for agriculture will in 2018 financially support investments in following technological changes: sprinkle system for orchard, insecticide protection networks, greenhouses for growing vegetables that are grown in the soil (10 mio EUR) etc

Serbia

Agro-industrial sector plays an important role in the economy of Serbia. According to the Strategy of Agriculture and Rural Development of Serbia for the period 2014-2024 (2014) in 2024, agriculture should be the sector whose development is based on knowledge, modern technologies and standards, domestic and demanding foreign markets offering innovative products and manufacturers provide a viable and stable income.

Similarly, strategy and policy development of the industry in the Republic of Serbia 2011-2020 (2011) predicts the growth of industrial production, investment, innovation and exports, as well as speeding up the reform process. If we take into account environmental factors that have a strong influence on agriculture and food industry of Serbia, such as globalization, the rise of competition, the process of Serbia's European integration, technological changes, changes in the needs and preferences of customers, etc., as well as the projections of strategic documents, innovation is one of the keys of profitability and competitive advantage in the agro-industrial sector in Serbia.

Innovations are the most important drivers in contemporary economies and much of the efforts policy makers and many other stakeholders aim to support innovation. Although, today in Serbia, the importance of innovation is understood as one of the main levers of success in enterprises of agro-industrial sector in Serbia, innovation processes in small and medium-sized enterprises are still ineffective and unsystematic.

Seen by elements from both major dimensions of access to open innovation, technology exploitation and exploration technology, the food sector has an advantage in terms of venturing, employee involvement, outsourcing R&D & external networking, customer involvement and external participation. However, in terms of willingness to sell intellectual property to other organizations the agricultural sector shows a lot higher score. In accordance with this result, companies in the food industry are still averse to sell the intellectual property rights that present one source of their competitive advantage to other organizations.

A greater preference for open innovation in the researched sample was shown by companies in the food sector compared to companies in agriculture. We believe that the problem here is less in connection with the general food industry being more prone to innovation than agriculture.

Summarizing, food industry in Serbia on the researched sample of enterprises has an advantage in five elements of the proclivity for open innovation in comparison with agriculture

Region of Basilicata

Since the production system is highly fragmented, an opportunity to make it more competitive lies in the composition of consortia and chains well organized and decisively oriented to the market.

A change that over the last decade has proved profitable and cost-effective and whose good experience could be replicated in relation to other products was the introduction of the deep-freezing plant in the Metapontum area.

Region of Puglia

The main technological and organizational changes should face the standard of:

- Agriculture 4.0;
- Digital Agriculture with the help of ICT;
- Sustainable Agriculture;
- Social Agriculture;
- Differentiation of agro food production with functional, nutraceutical and healthy characteristics.

4.2. Innovation capability and opportunities of agro-food enterprises

Region of Crete

As far as the primary sector, there is a peculiarity in relation to the secondary one, the industrial production. The reason is that in the primary sector the production process is largely dependent on unpredictable factors such as insect pests, diseases etc. as well as weather conditions. Even in this unpredictable production environment, it is important to keep spending low and reduce the unpredictable situations.

With the help of technology the cultivators are modernized and, through the laptop, the tablet, the smartphone are monitoring their cultivation on a 24-hour basis. They have the information at all times about how to deal with the pests and diseases of the plants, when and how much it needs to water, when and how much fertilizer will be used on the field. Consequently, making use of modern technology, such as telemetric stations, is a tool for providing precision services for better risk management on the farm.

As far as the secondary sector, new technologies, innovation activity, research and development products play a decisive role in the development of all stages of production and distribution in the food sector, and their rapid change necessitates rapid adaptation, vigilance and flexibility of human resources in order to be capable of responding promptly and effectively to these changes and new requirements in the context of international competition.

The Food Industry and the relevant research area have developed good cooperation and communication relationships, especially after the creation of the Greek Food Technology Platform, “Food for Life” which ensures communication and collaboration in a joint Food Industry Forum, the research community and all of stakeholders in the Food Industry to define research priorities and develop a National Strategy for Research and Technological Development.

The Greek Technology Platform was set up in May 2009 on the initiative of Hellenic Federation of Food Associations and brings together the main "food business partners" such as large and small-sized enterprises, primary production enterprises, research centers and universities, control bodies, political designers, associations’ consumers etc.

A strong tendency of recent years is the modification of products to address issues that such as reducing artificial additives, salt levels, supplemental sugar levels, saturated fat, fat and trans fat levels, and developing products with micro-components that have a positive health effect.

Moreover the exploitation of biotechnology and genomics gives new prospects for the development of targeted nutrition and food production for specialized nutritional needs (elderly people, people with intolerances, pregnant women, athletes, children, etc.). The adoption of innovative products and processes by industry sector is largely determined by the general development of the related technology sectors (IT and communications, biotechnology, nanotechnology), the evolution of consumer demand and the regulatory framework adopted.

Slovenia

1. Investing in short supply chain.

2. Smart agro-food - which offer also small producers to be competitive while at the same time it makes it possible to achieve sustainable effects, that is, more environmentally friendly management. The use of robotics and sensors makes it possible for smaller producers to be more competitive. Examples: greenhouse engineers are exploring automation as a way to reduce costs and increase quality (e.g., identifying the "Ripe for the picking" point of technological maturity; animal life supporters help maintain the health and well-being of animals (Animal trackers); work is also under way to monitor and maintain soil quality (Silicon soil saviors) or, for example, for the elimination of pests and diseases without

the use of agrochemicals (elimination of pests and diseases "Eliminating enemies"). In the field of processing, the situation is somewhat different. Most food processing plants today use "fixed" automation technologies (carrying out one function for the purpose of economies of scale), unable to respond to product variability or to perform multi-layered or complex manufacturing operations.

Market pressures on delivering value-added products, higher labor availability and workers and product safety are compelling many food-processing companies to "intelligent" automation technologies. These technologies use the growing power and affordability of computer platforms and the development and distribution of electronic sensors and product manipulators (robots for sowing, watering, harvesting and for the processing of agricultural and food products in cutting, processing and packaging processes). Using and sensors in the agro-food sector professionally deals with Dr. Aleksandra Lobnik, who presented the possibility of application of sensors in packaging, which guarantee the safety and quality of products (project with the company Perutnina Ptuj - poultry) or even in refrigerators for households. So the technologies are achievable, the weakness is that they are too slowly used in everyday use, therefore Dr. Lobnik praised the new efforts of the relevant ministries that devote certain resources (new ones) to the transfer of knowledge into marketing. Robots also have great potential for transforming processes in handling and processing of foods, palletisation, packing and food storage.

In Slovenia, there are several R & D teams and companies in the field of smart technologies. Best practice example is programme e-Vineyard, a vineyard management assistance program. Perhaps the flourishing of this kind of industry in Slovenia also suggests a farm management, precise and smart agriculture project. We are again faced with the problem of lack of utilization and also of possible accessibility to these skills, but with little systematic approach and support of relevant stakeholders, Slovenia can be recognized as recognizable and niche products globally competitive.

3. Public procurement - Chamber of Agricultural and Food Companies is going to set up a platform for support of suppliers and public organizations (schools, kindergarten, hospitals etc.) and offer them a place to meet. A suggestion from the public organizations is that the budget for the supply should increase for 30% in order to soften the criteria to take into account the seasonality of supply and slightly higher local production costs, as the latter are

in a much worse position compared to wholesalers. Of the latter, however, it is not possible to expect such high local multiplier effects as can be from local producers.

4. Interdisciplinary knowledge brings even faster development

Serbia

Based on the systematized responses received during interviews conducted, the identification (sub) areas, key players, their characteristics and preferences related to the future process of entrepreneurial disclosure were performed.

1. Current and potential (sub) areas

The interviews pointed out the high potential and numerous innovative trends in the field of food and beverage production through which the existing natural resources that Serbia has for agricultural production are used in an optimized way, through which the centuries-old tradition of Serbia as an agricultural country translates into a modern development resource.

According to these observations, the field of food production should be mandated to be one of the strategic directions of Serbia which could be named a- FOOD FOR FUTURE

Within this strategic direction, three key sub-elements could be further developed:

- High tech agriculture
- Valued added food products
- Sustainable agrifood production

A special potential that should not be neglected is the production of traditional products dominated mainly by small entities such as small farms and craft shops. This area has a large but economically disadvantaged potential. Traditional products are especially valuable when they are offered as part of a tourist offer, through rural as well as other forms of tourism. Bearing in mind the insufficiently visible sector of receptive tourism developed in Serbia in various forms like: (medical tourism (dentistry, aesthetic surgery), organization of events with high visibility (Exit, Guča), spa tourism, visits for the purpose of performing certain activities (filming of films) etc.), may need to be considered that the area of HOSPITALITY is identified as one of the vertical strategic priorities.

Region of Basilicata

One of the possibilities for innovation is the integration of the agro-food sector with that of green chemistry. The Bio-Economy area combines the development trajectory most directly related to agro-industrial aspects, with its complete exploitation, and exploitation of biomass, by-products and waste originating from agricultural production and the food industry, enhancing the multiple and versatile use of these towards Green Chemistry

A very important perspective is the development of a chain related to agro-energy. Agro-energy is the energy derived from agricultural activities, through their production of biomass by means of energy crops, by-products and agricultural waste. Within the agricultural sector of Basilicata, this sector could develop mainly in:

- solid fuels;
- liquid fuels (biodiesel);
- gaseous fuels (biogas from methanisation).

Agro-energy, produced with sustainable agricultural methods, is a renewable and carbon neutral resource that can be an added value for companies that decide to invest in sustainability and recognition of high environmental performance.

Region of Puglia

The main opportunities for moderinizing the agro-food companies are:

- Digitalization;
- Web Marketing application;
- Integration along the overall chain;
- Applying the principles of circular economy (by valorising the by-products);
- Enhancing the brand identity of trade mark “Made in Puglia”.

4.3. Sustainable development (environment) challenges and trends

Region of Crete

Developing the market for organic products, the raising consumer awareness of food quality and safety, the strict environmental regulations and the enhancement of environmental awareness are factors that can be an opportunity to develop agricultural businesses in this direction. In addition, the CAP separates subsidies to farmers from the level of production and instead links them to keeping farms in good agricultural and environmental condition.

Specifically:

1. One of the major modern trends in consumer preferences for agro food products is the certified, high-quality products. This presents a particularly timely opportunity for the

intervention area to highlight and exploit the significant production of certified and quality products it markets and to incorporate new practices to promote them.1

2. Maintaining biodiversity and natural resources lay the foundations for the development of rural activity combined with the protection of the environment and the ability to produce high quality products (organic farming and livestock farming) which can enhance the competitiveness of the economy.1

One of the major disadvantages in managing agricultural production remains the overconsumption of water resources for irrigation. Old irrigation systems, the type of crops selected in some cases and pricing policy that does not provide incentives for saving irrigation water contribute to its waste. The rate of soil erosion also threatens the agricultural sector. Key factors of deterioration are climate change, land-use change as well as agricultural practices and forest fires.

The promotion of new technologies and know-how alongside the improvement of the level of training of those involved in agriculture will contribute to the rational management of natural resources and thus to the protection of the environment.

However, it should be noted that high biodiversity is usually linked to low agricultural yields and increased costs for producers, and therefore appropriate measures (agri-environmental measures) are in place to support farmers and protect ecosystems.

Slovenia

Slovenia supports organic farming and thus supports sustainable agricultural production. Slovenia also supports organic farming by supporting farmers who decide for organic farming (agro-environmental payments). The importance of organic farming for Slovenia is emphasized by the Action Plan for the Development of Organic Agriculture in Slovenia. Organic farming has an important place in the emerging strategy of Slovenian agriculture. At the same time, the state promotes marketing of organic products in public institutions and emphasizes a better and more efficient way of connecting and marketing.

Annual growth in the number of agricultural holdings with the status of "ecological" fluctuates: in 2014, the number of such holdings increased by 14% compared to the previous year; in 2015 the increase was less pronounced (6%); in 2016 it was again more pronounced (9%). Thus, in 2016, the number of agricultural holdings with the status "ecological" was

2933, which is 4.2% of all agricultural holdings in Slovenia. Together with farms in conversion, this was 5% of all agricultural holdings in Slovenia.

Moreover, in 2016, the organic utilized agricultural area increased by 3864 hectares in relation to 2015. Of this, the area of organic permanent meadows and pastures increased by 3101 hectares, the area of fields and gardens for 481 hectares (5 hectares from this new ecological area was intended for the production of vegetables), orchards for 177 hectares, vineyards for 70 hectares and olive trees for 35 hectares.

Furthermore, In 2016, the weight of organically-bred aquatic organisms increased by 104% in relation to 2015; it was 65 tons. Carp weight increased by 307% and weight of mussels by 100%. The total weight of meat from organic farming was 113% higher in 2016 than in 2015.

The number of growers is also increasing every year. In 1999, 41 growers applied for organic farming under the Rural Development Program, and in 2016 over 3.000. There is still an urgent need for large quantities of crops and an organized appearance on the market by raising awareness among consumers and also producers. The production is dominated by livestock production, although consumer demand is the highest in fresh vegetables, fruits and non-processed food products (milled and dairy products).

Finally, waste management in agriculture includes: 1. Waste packaging, 2. Hazardous waste from agriculture and 3.Agricultural waste. The opportunity here is to reduce the packaging waste, to recycle it. The most important renewable energy source in the country is wood biomass, followed by hydropower, and in recent years development has been the most dynamic in the exploitation of solar energy and biogas.

Remote heating systems on wood biomass bring a number of synergic effects both from the point of view of using available energy, reducing emissions of dust particles and building a wood processing chain, and thus creating new jobs (almost 2/3 of Slovenian land is covered with forests, which represent great potential in wood biomass). The potential is also in ensuring biofuels of second and third generation (not from crops but from wood residues in the processing of forest biomass, waste or straw).

Serbia

Globally, organic production has been developing for many years. In 2009, 35 million ha of cultivable land were organically certied, and continued to rise to 43,7 million which is signicant growth compared to 29 million ha in 2005. In the EU, farm land under organic cultivation increased in the same period from 6 million ha to 11,6 million ha, equivalent to a growth of 8-10% annually. Such expanding acreage is a response to the growing demand for organically produced food products. Of the total Serbian export of organic products prevails export to the EU countries (Germany, the Netherlands, Belgium, Austria and Poland), with overall export in 2015 of 13.787.417 million EUR, what makes 70% of the total value.

After spending many years in the green ecological niche, organic food and beverages entered mainstream markets and became part of the global megatrend in lifestyle, health, and sustainability.

While the trend to organic food is strong, the level of its market penetration in all European countries is still relatively low. It grew in the past not only as a factor of increasing demand, but also of its availability. Market penetration for eggs, baby foods, potatoes, fresh milk and cereals is high not only because of exceptional demand, but also because the industry was able to provide adequate organic supplies at tolerable prices.

Considering the expectations of consumers of organic food and current market penetration, it is evident that major supply gaps exist. These refer to organic meat, organic sh, fruits, to some extent to vegetables as well, and even to milk and cereals.

Generally, direct import of meat to the EU is difficult since the market is strictly regulated, and even under the relaxed trade regimes foreseen by the SAA, meat will not be freed from import restrictions. Producing organic meat and dairy products usually involves the issue of organic feed, which depends on organically produced fodder cereals and oilseeds.

Within the vegetable sector, supply of organic carrots and zucchini has already reached a penetration rate exceeding 20%, but that of onions and peppers is still below 10%. In the fruits sector, organic table grapes already occupy substantially more than 10% of the market, while apples and berries have yet to reach 5%.

The waste management system in Serbia is based on waste collecting, transporting and landfilling. In this regard, Serbia is no different than other countries in Southeast Europe, where landfilling is still the predominant method. Serbia’s waste management is inadequate, particularly in rural areas. Collection is poorly organized; landfill is not subject to controls. By EU comparison, organic waste as a proportion of total residual waste is high and the recycling rate is very low. As yet, the population shows little awareness of environmental issues.

According to ASWA (Association of Serbian Waste Utility Companies) Serbia is currently recycling between 5 and 8% of municipal solid waste. The cities most active in recycling are Novi Sad and Čačak (around 10%), but the biggest problem is that numerous towns and municipalities which do not recycle waste at all. Serbia is seeking EU membership and is currently working to align its legislation with that of the EU. Modernization of waste management by joining the transition towards a circular economy is a declared political objective. By 2030 Serbia plans to achieve the recycling target of 50%of total municipal solid waste.

In the National Strategy of Sustainable Use of Natural Resources and Goods, the principle on the efficient use of natural resources requires maximum efficiency in the use of resources and a decrease in losses at all phases of the resource life cycle. This strategy focuses on energy efficiency and water efficiency, and waste management with emphasis on increased recycling.

Resource efficiency and waste policies are linked in the draft Waste Management Strategy 2015– 2030 as well as the draft strategic document on the green economy, which focuses more on waste prevention, recycling and reuse, and energy use from waste. These drafts include specific targets for recycling and reuse.

Albania

Although small country, Albania is quite unique for its diverse natural features and complex climate, geology and relief, either in its coastal, or hilly and mountainous zones. Nearly 3⁄4 of territory is stretched between 200 and 2000 m above sea level, with average altitude of 708 m, double the European one. The landscape is quite fragmented, horizontally and vertically, with steep slopes and with variegates and intertwined landscape, sheltering rich flora and fauna.

The fact is that over 3'980 higher plant taxa (ferns, conifers and flowering plants) are known so far, approximately 30% of total number of plant species found in Europe. It is quite high if considering that Albanian territory is only 0.28% of Europe. More than 110 species per 1000 km occurs within the Albanian territory, when the respective value for the entire European continent is only 2.4. It represents a great natural and economic resource, but on the other hand, the biological components are sensitive to human activity, the cause of habitat destruction, pollution and overexploitation.

Therefore, it is needed awareness, responsibility and commitment to the biodiversity protection and nowadays even active natural restoration. The environment and its protection are considered to be fundamental goals of the state, developing programs and low.

The core requirement of environmental protection is continuous conservation of a healthy and ecologically suitable environment; Environmental protection is a permanent duty at any time and under all circumstance, and related to the life and health of the population, Sustainable development is a fundamental requirement and thus the Constitution guarantees the protection and preservation of the environment for current and future generations. The public has the right to be informed about the state of the environment and state institutions are obliged to inform the public concerning the environment and measures taken for its protection.

Region of Basilicata

According to the Smart Specialization Strategy of the Basilicata region, the development of the agro-food sector should take place from the perspective of the Bio-Economy.

Having at its disposal important realities active in the chemical sector and a relevant and well positioned nucleus of research centers linked to the agro-industrial chain, the Basilicata region intends to pursue the development model of the so-called Green Economy, according to a declination that enhances the multiple and versatile use of biomass, specialized crops and by-products and waste of the agro-alimentary chain.

Region of Puglia

Apulia supports organic farming and sustainable agro-food production according with the principles of Common Agricultural Policy and the Rural Development Programme.

Apulian Region created an observatory for organic farming in order to improve knowledge of operators and consumers. (https://agri.iamb.it/agri16/)

Furthermore, a regional Association belonging to the National Association of Organic Farming operates in supporting and promoting organic practices in the Region (https://www.aiabpuglia.org/)

According to data of SINAB 2017, Apulian organic crops increased of 50% respect to the previous year. With 255.853 hectare cultivated by 10.029 organic farmers, the Apulia is one of the main three Italian regions in which the organic farming is carried out. The Apulian

organic crops are olives (32%), cereals (22%), grape wine (6%), fruits (2%). It is worth noting that there are also 3 organic aquaculture systems.
“Farming Markets” play a very important role in allowing consumers to buy organic produce directly from farmers. In a farm house for tourists of Villa Castelli (Brindisi) there is the only organic swimming pool of the South of Italy.
We can assert that the increasing on consumption of organic agro-food products involves farmers, manufacturing industries, farm-houses, canteens, restaurants, hotels etc with the support of Municipalities, Province and Region.
The sector of organic produce can become an instrument of valorisation of the overall territory of Apulia Region.

4.4 Prospects of the sector over a 10-year horizon

Region of Crete

In 1950, a 30-year study showed that Cretans had the lowest mortality rate from cardiovascular disease and cancer, and the highest average life expectancy. Since then many scientific studies have shown that this result had its roots in the traditional Mediterranean diet of the Cretans at that time. The "secret" of the longevity of the Mediterranean peoples, especially the Cretans, was a simple diet, which was based on vegetables, unprocessed cereals, olive oil. A further factor contributing significantly to the well-being of these populations was their natural way of life.
In modern Greece, measures have been taken in the field of promoting healthy dietary standards, which mainly concern children's health education and school measures. Dietary education in schools is promoted through the actions of the Ministry of National Education and Religious Affairs. The Ministry, in cooperation with other organizations, organizes information and experiential education programs on the traditional Greek diet, healthy diet, obesity and physical activity in primary and secondary schools. At the same time, measures to prohibit the sale of high fat, sugar and salt formulations in school canteens have been promoted and initiatives have been put in place to promote healthy food.
However, the impact of the economic crisis is reflected in the latest study by the Institute for Consumer Products Retail Studies, as the consumer is trying to make a healthier diet, but on

the other hand he is trying to balance his choices with the disposable income. This change has taken place over the last eight years.

Typical changes are recorded in related food groups. In particular, cheaper choices for protein, such as legumes and poultry, are increasing, while more expensive choices are reduced.

A corresponding increase in carbohydrate (pasta and rice) was recorded. On the other hand there is a positive direction towards healthier dietary choices with the reduction in sugar by 44% and soft drinks by 43%.

Also there is a trend of removal from Mediterranean diet that is more pronounced at younger ages. The percentage of consumers choosing Mediterranean cuisine is decreasing more and more as age is decreasing and especially at ages under 35. Usually young people choose a variety of different cuisines. This is a global trend, which also relates to the development of the Internet and social networks, tools that facilitate the diffusion of information from different parts of the world. In contrast older ages in a percentage of 56% choose foods with beneficial properties for health.33

Moreover for the next years is foreseen a future demand for specialized products 34: organic and vegetarian food and products for specialized nutritional needs (eg people with intolerances, pregnant women, athletes, children, etc.).

Finally an important trend is the expansion of private label products 34, where branded products compete on the shelf with other (usually cheaper) products under the retailer's brand. The result of this trend is to strengthen the influence of food retailers on producers.

Slovenia

Slovenian agro-food industry (chain of food production from agricultural production, agricultural production, sales of agricultural raw materials and food processing industry) is between stagnation and some positive economic trends (increased exports, added value), but it is still lagging behind in key economic aggregates for the chains of a more developed part of the European Union. Further development and delivery jobs will only be possible with an appropriate innovation policy and more effective integrating novelties into existing and upgraded production systems.

In the past years, quite a few food business companies have been sold in Slovenia (Breweries Laško and Union, Radenska, Fructal, Droga Kolinska, Mercator, Perutnina Ptuj, Žito, Ljubljanske mlekarne), but many of them are still owned by domestic owners. Most of the companies sold, despite foreign ownership, work well and develop brands.

Trends:

• When it comes to foodstuffs, Slovenia does not show comparative advantages at the aggregate level; therefore, certain segments show positive trends, which also show potential in this area. Milk processing (C10.5), for example, already shows the disclosed comparative advantages, while the sections "Manufacture of other food products" (C10.8) and Production of feedingstuffs (C10.9) show positive growth of value added per employee and exports in the period 2008-2012. A positive trend from the viewpoint of the revealed comparative advantages is also detected in the field of livestock production (Burger, Kotnik, 2014: 13). In this area, it is also worth mentioning the "Production of agricultural and forestry machinery" (C28.3), where Slovenian companies also do not show the disclosed comparative advantages, but this sector, therefore, showed a real growth in value added per employee in the period 2008-2012 and more than 9% of exports growth, indicating the region's dynamism and unexploited potential.

• self-supply rate is increasing in last years (it's between 70 – 75% - but it differs substantially from individual agricultural activities. We have the highest level of self-supply, for example, in the production of raw milk, where we have continued growth in 2017, which is understandable, since we have in Slovenia, despite all the two thirds of the grassland, which is ideal for animal breeding such as cattle or sheep. We already have a 130% self-supply here. We also have a very high level of self-supply in beef, in chicken eggs, in small ruminants. In the green part of the chain, which is bound to the fields that are so lacking to us, we have a lower self-supply rate. In the case of cereals, it ranges between 55% and 70%, depending largely on the actual harvest - if weather conditions are favorable, we also have 75% or more self-supply. The level of self-supply in vegetables has already exceeded 40% and is slowly increasing, while it is interesting that consumption is growing at the same time, so we have a double growth - at the level of consumption, and slightly faster on the level of self-supply. The fruit is again completely dependent on the harvest: when it is good, we are an important apple producer, which can also be exported at the good harvest. (In 2017 due to the frost we had only 20% - 3500 tons - of the usual annual yield). The self-sufficiency rate is therefore higher than 50%, but the part of it that is dependent on climate conditions is fluctuating.

• Complementary tourist activity on the farms is also a market niche that is perceived by Slovenian farms, because in this year the growth of supplementary activities on farms is increasing, more than 10%.

• Digitalization of agriculture and agrofood. Expamples of best practice: Lotrič Metrology company developled ICT system EXACTUM, a smart system for automated monitoring and regulation of environmental parameters in the food industry. Inadequate parameters can pose a risk in the distribution chain, so they need to be regularly monitored, thus reducing their impact on the safety and quality of foods.

Company Efos has developed innovative automated Trapview system, which controls all types of insects using artificial intelligence, reduces the number of field visits and self-purification mechanisms, capturing basic weather data).

• Sealing of the best flatland agricultural land.

With the increasing demand of consumers in organic products and foodstuffs and the increasing volume of trade in these foods, not only in Slovenia, but throughout Europe and the rest of the world, organic farming, or organic producers and processors, have a relatively safe future; but above all a great opportunity for higher revenues and higher added value on their farms. There are also many unused opportunities in the so-called eco-tourism, tourism on organic farms, which can be a good alternative to or supplementing traditional rural tourism.

Serbia

Main trends in agro food sector could be seen as follows:

• The share of agriculture in GDP has been reduced, which is a classical development trend, but the agricultural production has been increasingly growing over the past years. The largest indices are registered in plant production, with the largest growth in fruit growing and arable farming, while livestock breeding is generally characterized by stagnation, which is not a good trend.

• Serbia is a net exporter of agricultural products, with the largest sufficit in trade. Opening of the market, preferential status in the EU, and the free trade agreement with Russia and the CEFTA agreement influenced such a trend positively.

• The most important exported agricultural products include sugar, raspberries, corn, tobacco, apples, wheat flour and sunflower oil.

• The instability in conducting the agricultural policy is evident from 2000 to the present day.

• Slow adaptation to standards concerning food safety additionally obstructed by the lack of laws on food safety, a series of supporting acts, and lack of efficient monitoring institutions is one of the greatest failures of the agrarian policy. This is one of the most important problems if one has in mind the future integration into the EU and STO.

• The slow development of institutions supporting agriculture in the matter of financial and scientific support. Although a number of important institutions have been formed (for example, protection of plants, water and forest), the register established as well as a number of laws adopted, the faster reform of scientific institutions to support agriculture as well as adequate and stable financing of the sector should still be worked on.

• The increased urbanization of rural areas, reduction of agricultural area at the expense of building urban and industrial units influence the increase in migration of rural population towards city zones in search of better paid and secure jobs. This issue is closely related to the fact of permanent reduction in the number of farmers, either through their transfer to other sectors or effects of increasing the number of households where the elderly live.

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Prospects could be seen in the following areas:

• increasing competitiveness of the agricultural sector, increasing the quality of agricultural products, serious work on standardization of agricultural products and revitalization of villages,

• timely preparation of agriculture for the EU accession,

• serious approach to forming and using the agricultural budget,

• protection of geographical origin of agricultural products,

• inciting the development of organic agricultural production,

• conceiving the network for supporting rural development.

Finally, the aim of increasing agricultural competitiveness is to build sustainable and efficient agricultural sector that can compete in the world market, contributing to the growth of national income

Albania

The Indicative Country Strategy Paper (CSP) 2014-2020 foresees the concentration of EU financial assistance over the next seven years on seven priority sectors: i) Democracy and governance, ii) Rule of law and fundamental rights, iii) environment, iv) transport, v) competitiveness and innovation, vi) education, employment and social policies and vii) Agriculture and rural development. The selected Union Programmes are all supporting the above mentioned priority sectors, more specifically: Erasmus +, Programme for Employment and Social Innovation, Horizon 2020, Creative Europe, Europe for Citizens support the priority sector of “Education, employment and social Policies”; the Programme COSME supports the priority sector of “Competitiveness and innovation”; while the Programmes Fiscalis 2020 and Customs 2020 are in line with the priority sector of “Democracy and governance”. The participation as an observer in the EU Fundamental Rights Agency supports the priority Sector “Rule of law and fundamental rights”.

Finally, the Country Strategy Paper confirms that IPA may continue to co-finance Albania's contribution for its participation in Union Programmes and Agencies in the context of the on-going policy dialogue under the relevant sector and accession negotiations chapters.

Region of Basilicata

The agricultural sector of Basilicata needs a profound reorganization both in terms of human resources (age and level of training of company managers) and restructuring of the production system.

The average size of companies is growing and it is hoped that this trend will continue in the coming years.

The ability to set up consortia and organizations that also allow small businesses to intercept market shares will also be fundamental.

A further perspective of development is the creation of a dense and widespread network of services in support of a naturalistic tourism focused on typical products.

Region of Puglia

It is very hard to make perspectives for the future development of Apulian agro-food market with a 10-years horizon.

It depends on many factors such as:

- the role of policies in enhancing and defending the brand identity of Apulian agro-food produces;
- the challenges that farmers should face on respect to issues concerning climate change and sustainability of agricultural practices
- the capacity of take advantages from ICT especially for export;

Now the agro-food sector plays an important role in the regional economy and if the trend will remain it could become the main driver as well as tourism. At the end, the future of Apulian agro-food is strictly linked to the capacity building of their operators and the capacity of preserving the local specification of their produces with the support of public policies.

In the last decade, the agricultural sector has been subject to structural changes in the productive systems of the farm, linked to different motivations, from adverse climatic conditions to frequent crises in the sector (inadequate market prices, high production costs, disaggregated supply). Recent calls for tenders for the establishment of new businesses have, on the one hand, favored the growth of the number of businesses managed by competent young people, but, on the other hand, favored the fragmentation of large farms into a number of businesses of a smaller size.

The growing trend of organic farming or the adoption of schemes aimed at greater sustainability of the sector, if it is to prove effective in the long term, must necessarily include training and integration within the context of specialized figures who support individual initiatives and know how to fully grasp the potential in terms of profitability and development of virtuous supply chains.

A positive trend is growing in relation to the corporatist approach that is becoming increasingly important, especially in production contexts related to the province of Matera. The establishment of Productive Organizations solves in part the problem of poor preparation of business leaders and, if well organized, contributes to the reduction of production costs and the implementation of marketing techniques that are inaccessible to individual producers and effective in penetrating some segments of the market.

4.5 Potential agro-food clusters/networks/chains

Region of Crete

According to the Smart Specialization priorities of the Region of Crete, four complexes are emerging,

1. The agro-food complex
2. The cultural and tourist complex
3. The environmental complex
4. The cluster of knowledge

The agro-food complex is composed of activities that are in the primary sector of Crete, namely: cultivation/rearing, processing/standardization and marketing/commerce of agricultural products. The agro-food complex:

1. Contributes great intensity, to the formation of the Gross Production Value of Crete.
2. Contributes to the formation of the Cretan diet.
3. Contains the emerging sectors of primary production (eg products of high nutritional value from the sea).

Given the existing business structure in the sector, the implementation of priorities requires the creation of a strong competitive cluster with an efficient administration that coordinates the provision of services, the mobilization of producers and SMEs, and encourages further networking. Existing informal clusters of businesses should form the basis of the new effort.

The main objective of the cluster is to strengthen innovation and entrepreneurship and to coordinate and dynamically develop a sector with competitive advantage internationally, by exploiting the scientific knowledge and new cutting-edge technologies available to research and educational organizations and enterprises in Crete, in order to produce new products and services of high quality and added value.

At the same time, it will be targeted in the context of extroversion, the exchange of good practices and the promotion of partnerships with relevant international initiatives in areas such as innovation, clusters, innovation centers, regional development policies and smart specialization strategies, development of strong international partnerships by participating actively in selected European projects.

The Interventions for the agro-food complex will focus on key points of the value chain and will be the key elements of competitiveness. In particular, the cluster will use all the initiatives so far and will seek:

• To become the Region of Crete, the "Silicon Valley" of the Mediterranean biodiversity and the Mediterranean diet, enhancing the characteristics and the image of Cretan diet and creation of new food products by creating a strong network of research technological support utilizing mainly the capabilities of the regional R & T complex.

• To create an atlas of traditional products and recipes (quality, connection with cultural elements), which will result in the issue of a quality map of local high quality products of the region.

• To strengthen the creation of multidimensional farms with local varieties / breeds and processing based on elements of tradition and state-of-the-art scientific knowledge that will be accessible and will also include guided tours, historical retrospectives in agriculture from the Minoan area and mild entertainment for visitors.

• To support the creation of a mentor mechanism for the farmer, new trainees in land cultivation and agro food processing, working as "business angels" as "rural angels". This mechanism can be combined with an "agronet cafe" system that combines the farmer's offices with the rural portal of the Region of Crete.

• To strengthen the brand of local production and develop a credible program to promote agricultural products and services in international markets as well as strengthen links with the destination countries of local products.

• To achieve a closer connection of the agro-food complex with Tourism and the cultural values of Crete, by strengthening the Local Agreement of Cretan Diet, so that this element is reflected in the Tourist Destinations of Crete and passes to the visitors of the island. Strengthening the Cretan diet with cultural elements from Minoan Civilization, folklore elements and with the myth they contain. Adoption of the "Greek Breakfast" by the Tourist Enterprises of the Region.

In order to achieve its objectives, the cluster will encourage the creation of scientific, technological and financial support platforms and other networking tools will support supportive collective training actions and will contribute to the upgrading of the business environment in the sector.

Slovenia

Slovenians are big individuals and there is still big potential and need to connect and develop networks in many areas (dairy products, vegetables, fruit, renewable energy etc.).

SRIP Hrana (SRIP Food) is a strategic development and innovation partnership for the priority area S4 Sustainable food production. SRIP Hrana aims to become a central national hub for the purpose of connecting and cooperating with ambitious and development oriented stakeholders in the field of agriculture, food and related fields. SRIP HRANA is developing into a dynamic community of agricultural holdings, companies, associations, research and development institutions, investors and other stakeholders, whose attention will be focused on the targeted intensification of development and research activities for the needs of the industry.

There are significant possibilities of linking Slovenian vegetables producers in the economic cluster together with vegetable customers, research and development institutions and providers of the necessary repromaterial. Such a way of cooperation of producers with other players is due to the fragmentation and small size of farms (the average size of production areas for growing vegetables is only 1.57 ha per hectare farm) is indispensable in order to gain competitive advantages in the market. In a study by dr. Stane Kavčič et al. (2010) calculated that at the annual level, Slovenian food producers lose EUR 30 to 40 million due to their discordance in purchasing and selling marketing.

The participation of larger farms with smaller family farms brings benefits to both parties. Last but not least, this is demonstrated by the participation of the Panvita Group with 1,700 family farms from Pomurje. This cooperation covers everything from the production of cereals to the production of pigs and chickens.

It is proposed to establish an incubator for the Center for the Development of Agro-Food Industry.

Finally, Possible themes for clustering are listed here:

1. High productive sustainable apples production
2. High productive sustainable production of vegetables
3. Sustainable production of wine grapes and grapes for fresh use
4. Solutions for the quarantine disease of severe viroid swelling of the hops
5. Effective milk production by improving the nutrition of dairy cows

6. Introduction of genomic selection with homogenization of genomic PV
7. A new production-economic model of Slovenian pig breeding
8. Development of technologies for the production and processing of protein-rich plants
9. Breeding of cattle and sheep for meat and products of superior quality
10. Extension of food stability and freshness of products
11. Development and extension of digitalisation of a farm-holding and the organization of production
12. Models of local supply
13. Analytical systems in support of farm advising
14. Added value to wood

Serbia

Although cluster development in Serbian economy started in 2005, clusters in Serbia have not been significantly developed. Clusters in Serbia lack the lowest common denominator in terms of defining the interests around which the cluster members are gathered, and cluster capacities are not developed enough. Also there is quoite a low intensity of activities, given that companies are usually not active in cluster functioning and are rarely willing to invest their time in cluster activities. The vast majority of clusters have failed to build trust and close relationships with their members, and participation of connected institutions is mainly symbolic, with no significant results in improving the competitiveness and developing new products for cluster members.

However, Clusters are an integral part of the business environment in developed economies and show a significant contribution to the competitiveness of involved cluster members. In the field of agribusiness they are one of the methods of developing and improving the sector and producer competitiveness, too. Networking of agricultural producers, government institutions and agencies, scientific and educational institutions, as well as organization for support small and medium enterprises (abbreviation SMEs), provides preconditions for creating a sustainable competitive advantage for agricultural producers and higher export and recognition of products in international market.

Having that in mind there are several fields where agro food clusters could be organized:

- Fruit production (roseberry and apples, mainly)
- Production of wine grapes and grapes for fresh use

• Milk production and processing
• Animal breeding
• Organic production of fruit and vegetable
• Digitalization of agriculture
• Distribution of primary agriculture products
• Distribution of food (shortening the market chain)
• Analytical systems in support of farm advising
• Herbal and medicine herb collection and processing

Albania

In balkan level there is Balkan & Black Sea Cluster Network. In addition, the Albanian government has provided policy incentives and support to both SMEs and new technology-based firms for expenditures on R&D and innovation. The support includes periodic provision of funds, management training, and information services. There is still no specialized funding agency that could provide seed capital for innovation-based firms, nor is there an integrated facility that could provide non-financial support to new and small firms.

Initiatives that promote collaboration and networking among private firms include joint R&D programs and consortia (private, public-private), funding support for international co-operation (attracting research labs of foreign firms), and supporting access of domestic firms to foreign funding programs.

Region of Basilicata

The agricultural sector of Basilicata boasts products of excellence that could be further enhanced through appropriate interventions. The limited percentage of suitable agricultural area compared to a type of agriculture aimed at large distribution, does not allow the further diversification of agricultural production. The agri-food businesses have to outlets on non-EU markets.

Region of Puglia

It is not common for Apulian producers to establish clusters or to work by integrating the chain. Despite for many agro-food producers there will be important opportunities for enhancing their competitiveness, there is still a lack of collaboration among players, and often local producers go in competition among themselves.

Nevertheless, some regional attempts have been carried out in order to improve the overall sector. Apulia Regional Authority created a section for managing competitiveness in the agro food sector (DIRIGENTE SEZIONE COMPETITIVITA' DELLE FILIERE AGROALIMENTARI) with tasks of publishing decisions signed by Managing Director in the specific matter of agro-food (http://filiereagroalimentari.regione.puglia.it/).

Other important subjects are

- The Regional Agro-food District (http://www.darepuglia.it);
- The District for Quality of Agro-Food "Jonico-Salentino"
- The District for Quality of Agro-Food "Terre Federiciane"

As concerning future developments, it would be useful to value the possibility to create clusters about:

- High productive sustainable production of vegetables;
- High productive sustainable production of fruits
- High productive sustainable production of table olives & olive oil;
- High productive sustainable production of grapes & wine grapes;
- - High productive sustainable production of citrus;
- Breeding of cattle and sheep for meat, cheese and products of superior quality;
- Aquaculture;
- Sustainable forest management

5. SWOT ANALYSIS RESULTS

Strengths	Weaknesses
• Relatively well developed research establishments & facilities in some countries/regions (e.g. Slovenia, Crete, Puglia). • Some regions/countries leaders in the agrofood sector (e.g. Crete, Puglia, Serbia). • Existence of a significant number of quality agro-food products. • Existence of rich but unexploited natural resources. • Strong tradition in agriculture and agri-food sector. • The great majority of agrofood companies are small but flexible & dynamic in the whole area. • Relatively well preserved and diverse nature environment. • Strong assets of the ADRION area in the agriculture and tourism. • Appropriate climate, microclimatic and land conditions, rich and diverse biological resources, which are the basis for healthy and productive farming activities. • Old and valuable farming tradition that helps effectively in strategic development planning and promises that agriculture will be important craft in the future as well. • Relatively well educated agricultural population, which promises to be effective and productive in agriculture. • Strategic geographical position (with ports in the Adriatic and Ionian Sea) • Increased number of trademarks addressed for the export market. • A young and low-cost workforce in IPA countries • Competitive land prices in IPA countries.	• Small investments in Protected Designation of Origin (PDO), Protected Geographical Indication (PGI), Traditional Specialties Guaranteed (TSG), and Organic products in the majority of the regions/countries. • Low level of innovation and internalization spirit in agrofood SME's. • Small number of effective regional and business collaborations /networks. • Low level of providing alternative tourism's services linked with agro-food sector (e.g. Gastronomy and Wine Tourism. • Low entrepreneurial skills and low knowledge about innovation. • Low proportion of research personnel in agrofood companies. • Weak technology transfer activities between R & D Institutes & companies. • Small and fragmented farm with a high diversification of farm production. • A new generation not sufficiently passionate about agriculture. • Non-developed logistical infrastructures (transport, market, water, energy) in rural areas. • Orientation of traditional and "farm made" products mainly to domestic market.

Opportunities	Threats
• Rising investments and initiatives in R&D. • R&D specialization in agrofood & agribusiness sector. • Slight increase of technology & innovation from R&D Institutes to agrofood companies. • Slight increase of networking and clustering activities in SMEs. • Increasing skills in research through financial support and training opportunities in the field of enterprise creation, technology transfer, organizational and management innovation. • Young generation highly skilled in IT. • Increasingly rapid development of agrofood technology. • High business rate creation in some regions/countries. • Increasing commitment to sustainable development. • Synergy around the farmers and other sectors like Tourism • Awareness of farmers to be trained professionally and technically. • Loan & funding Opportunities for SMEs • Product diversification focused on actual market demand. • Improved co-operation networks in rural areas.	• Economy seriously affected by the economic and debt crisis. • Increasing competition from southern countries. • Dispersion of R&D investments and absence of priorities. • Significant inequalities between regions and territories in term of ICT use. • Significant differences among regions regarding R&D potentials. • Serious recession in the majority of regions/countries. • Difficulties of agrofood SMEs to access to finance. • Risk of increasing environmental pollution due to the increase in tourism and agriculture activities. • Increasing and cumulative pressure on bioversity. • Drain of human resources due to economic recession. • The agrarian policies of the neighboring non EU member countries are very protective for their domestic products. • Customs agreements between EU and IPA members aren't so encouranging to promote transnational commerce in the agrofood sector.

6.SUMMARY

The main aim of the deliverable T.1.1.1: "Swot Analysis", in the framework of INNOVAGRO project, is to develop updated sectoral intelligence on the most important issues concerning agrofood sector that can be addressed at interregional level, in close interaction with the specific regional & national development policies of the participating areas (Region Unit of Chania, Region of Basilicata, Region of Puglia, Albania, Serbia, and Slovenia).

To this aim, the project's partnership implemented S.W.O.T. analysis model to evaluate strengths, weaknesses, opportunities and threats within the agrofood sector, from a local/regional/national/interregional perspective.

The main findings of the above S.W.O.T. analysis in the project's implementation area are:

Strengths

- Relatively well developed research establishments & facilities in some countries/regions (e.g. Slovenia, Crete, Puglia).
- Some regions/countries leaders in the agrofood sector (e.g. Crete, Puglia, Serbia).
- Existence of a significant number of quality agro-food products.
- Existence of rich but unexploited natural resources.
- Strong tradition in agriculture and agri-food sector.
- The great majority of agrofood companies are small but flexible & dynamic in the whole area.
- Relatively well preserved and diverse nature environment.
- Strong assets of the ADRION area in the agriculture and tourism.
- Appropriate climate, microclimatic and land conditions, rich and diverse biological resources, which are the basis for healthy and productive farming activities.
- Old and valuable farming tradition that helps effectively in strategic development planning and promises that agriculture will be important craft in the future as well.
- Relatively well educated agricultural population, which promises to be effective and productive in agriculture.
- Strategic geographical position (with ports in the Adriatic and Ionian Sea)
- A young and low-cost workforce in IPA countries
- Competitive land prices in IPA countries
- Increased number of trademarks addressed for the export market.

Weaknesses

- Small investments in Protected Designation of Origin (PDO), Protected Geographical Indication (PGI), Traditional Specialties Guaranteed (TSG), and Organic products in the majority of the participating regions/countries.
- Low level of innovation and internalization spirit in agrofood SME's.
- Small number of effective regional and business collaborations /networks.
- Low level of providing alternative tourism's services linked with agro-food sector (e.g. Gastronomy and Wine Tourism.
- Low entrepreneurial skills and low knowledge about innovation.
- Low proportion of research personnel in agrofood companies.
- Weak technology transfer activities between R & D Institutes & companies.
- Small and fragmented farm with a high diversification of farm production.
- A new generation not sufficiently passionate about agriculture.
- Non-developed logistical infrastructures (transport, market, water, energy) in rural areas.
- Orientation of traditional and "farm made" product mainly to domestic market.

Opportunities

- Rising investments and initiatives in R&D.
- R&D specialization in agrofood & agribusiness sector.
- Slight increase of technology & innovation from R&D Institutes to agrofood companies.
- Slight increase of networking and clustering activities in SMEs.
- Increasing skills in research through financial support and training opportunities in the field of enterprise creation, technology transfer, organizational and management innovation.
- Young generation highly skilled in IT.
- Increasingly rapid development of agrofood technology.
- High business rate creation in some regions/countries.
- Increasing commitment to sustainable development.
- Synergy around the farmers and other sectors like Tourism
- Awareness of farmers to be trained professionally and technically.
- Loan & funding Opportunities for SMEs.
- Product diversification focused on actual market demand.
- Improved co-operation networks in rural areas.

Threats

- Economy seriously affected by the economic and debt crisis.
- Increasing competition from southern countries.
- Dispersion of R&D investments and absence of priorities.
- Significant inequalities between regions and territories in term of ICT use.

- Significant differences among regions regarding R&D potentials.
- Serious recession in the majority of regions/countries.
- Difficulties of agrofood SMEs to access to finance.
- Risk of increasing environmental pollution due to the increase in tourism and agriculture activities.
- Increasing and cumulative pressure on bioversity.
- Drain of human resources due to economic recession.
- The agrarian policies of the neighboring non EU member countries are very protective for their domestic products.
- Customs agreements between EU and IPA countries aren't so encouraging to promote transnational commerce in the agrofood sector.

7. ANNEXXES (SWOT ANALYSIS QUESTIONNAIRES)