



REGIONE PUGLIA



**CIHEAM
BARI**

The cover of the report is divided into two main sections. The left section is white and contains the following text and graphics: 'Interreg - IPA CBC' in blue, 'Italy - Albania - Montenegro' in black, the European Union flag logo, and 'FOOD4HEALTH' in white on a blue brushstroke background. Below this is a map of the Balkan region with yellow and light green shaded areas representing cooperation zones, and several blue circles highlighting specific locations. The right section is a dark grey rectangle containing the title 'FOOD 4 HEALTH' in large white and blue letters, and the subtitle 'SUSTAINABLE AND INNOVATIVE AGRI-FOOD AND FISHERIES VALUE CHAIN FOR SME'S CROSS-BORDER MARKET' in white italicized text.

REPORT ON BEST PRACTICES

ON QUALITY SCHEMES AND CONSUMER HEALTH

in Apulia Region

Contents

1. INTRODUCTION	3
2. AGRICULTURE IN APULIA.....	3
2.1 The main agri-food supply chains in Apulia	4
2.1.1 Wine production supply chain.....	4
2.1.2 Olive and oil supply chain	4
2.1.3 The fruit and vegetables supply chain.....	5
2.1.4 Durum wheat supply chain.....	5
2.1.5 The fisheries chain	6
3. QUALITY SCHEMES IN APULIA	6
3.1 Organic agriculture.....	7
3.2 Agri-food products, PDO and PGI wines	8
3.3 Regional Quality Scheme (RQS) “ <i>Prodotti di Qualità</i> ”	10
3.4 “ <i>Prodotti di Qualità Puglia</i> ” trademark	12
3.5 <i>Traditional Agri-Food Products</i>	13
3.6 Sustainable fish products	13
4. REGIONAL POLICIES ON QUALITY AND ON CONSUMER HEALTH.....	14
4.1 Regional Programme “ <i>Agricoltura&Qualità</i> ”	14
4.2 The Apulian Lifestyle™ for a long and happy life and new actions.....	17

1. INTRODUCTION

The Apulian agri-food sector offers a variety of quality products that represent the link with the territory, the producers' skills and local traditions.

In a globalized world, the Apulia Region focuses on the strengths of its products namely typicality and territoriality. The globalization of markets implies new market opportunities for "local" quality products (as opposed to undifferentiated "global" products).

The increasing attention to food quality is a major economic opportunity for the Apulia Region for the following reasons:

- the availability of a rich and varied range of quality agricultural products, together with high-standard food and wine;
- the strong expansion of tourism which has become a driving industry of the Apulian economy;
- food and wine which is, together with the territory and the environment, one of the main tourist's travel motivations;
- the proliferation of biodiversity and production practices are values much appreciated by the consumer;
- Apulian agriculture, with its specificity and potential, best interprets the multifunctional model of agriculture, production quality, environmental sustainability, food security, rural and compatible tourism.

Therefore, with a sustainable development perspective of the territory, the Apulia Region encourages the spread of quality agriculture, in order to strengthen both the position of farmers on the markets, by protecting the names of typical and traditional products against imitations and misuses, and the expectations of consumers, increasingly attentive to product quality and food safety.

Regional quality policies for agri-food products pursue the following objectives:

- stimulate the development of quality production, and encourage the qualitative characterization of regional agri-food products;
- protect the healthiness of food and the consumer's health;
- encourage the growth of the agri-food system through a better positioning of products on local and international markets;
- enhance and protect Apulia's typical and traditional agri-food products.

2. AGRICULTURE IN APULIA

Apulia stretches over 1,954,090 hectares, with a predominantly flat territory, low hills and limited mountainous reliefs. The UAA is equal to about 1,285,290 ha; almost 51% of this surface is arable land, 8% permanent meadows and pastures and 41% woody crops. Although the highest % of agricultural area is arable land, **olive trees and vineyards are the most economically important crops.**

Apulian agriculture features a strong **biodiversity** and a high number of types of products. The average farm size is 4.7 ha. The majority of Apulian farms are directly managed by the farmer.

Herbaceous (about 38%) and tree crops (about 36%) prevail in the regional agriculture, with a minor share of the total Gross Saleable Production (GSP) being left to animal farms. Viticulture (12%) and olive growing (18%) are the most important ones.

Apulian agriculture plays an **important role in the national context** with a Gross Saleable Production (GSP) equal to 7.3% of the Italian GSP, for a value of € 3,567 million. Agricultural Added Value is equal to 2,288

million euro (3.6% of the total Added Value). Agriculture contributes 5% to the generation of wealth (value higher than that of the South of Italy and of the national context).

2.1 The main agri-food supply chains in Apulia

2.1.1 Wine production supply chain

In Apulia there are about 50,000 vine-growing farms (both **table and wine**), equal to 12.7% of the total number of Italian wineries. Apulia holds more than 16% of the total national area for wine grapes and is the second largest region in Italy in terms of vine-growing area.

By the end of 2018, Apulia ranked second in Italy (second only to Veneto) for wine production, with about 9.5 million hectolitres, i.e. 19% of national production; in line with the increasing demand for organic wines, organic vine cultivation is continuing to grow in Apulia. In the Region, the surface area of organic vineyards has exceeded 16,300 hectares, and Apulia ranks second in Italy with a 2% growth between 2016 and 2017 and with 19% of the surface area cultivated with organic vines.

As regards quality, the wines of Puglia are booming: in 2018, 25% of regional production (1 bottle out of 4) was made up of PDO or PGI wines, for a total of over 2,400 thousand hectolitres of product; there are 38 wines of which 4 *DOCG* wines, 28 *DOC* wines and 6 *IGT* wines.

The production of wines and musts in Puglia is carried out by medium size producers specialized mainly in the production of bulk wine and musts and by small producers with significant market success. Cooperatives play a very important role.

In the province of Lecce, in 2019, 9,900 hectares were grown with wine grapes (643,500 quintals) and 85 hectares with table grapes (19,550 quintals).

2.1.2 Olive and oil supply chain

Olive growing is one of the most important sectors of the Apulian agricultural system (GSP of 411 million EUR, 13% of the regional GSP, 26% of the Italian olive GSP). The average UAA of regional farms was 1.6 ha/farm in 2010.

The quantities of olive oil (1.1 million tons) are stable with a record of production in Italy. **Quality products** are of utmost importance. Apulia has 5 PDOs and 1 PGI. The PDO Terra di Bari is the second most important brand in Italy in terms of production, turnover and value of exports, with an incidence of 23.5% on the total Italian production of PDO / PGI olive oil.

The PDO oil supply chain includes 1,632 olive farms for a UAA of 16,824 ha which accounts for 17% of the total PDO/PGI olive oil surface area in Italy. There are 125 mills and 141 bottlers, (12% and 9% out of Italy).

The **cooperative system** is important (76-million-euro turnover, 61,400 farms) but its economic dimension is reduced; furthermore, use efficiency of facilities and financial capacity are poor and this limits its competitiveness.

Sales of Apulian oil on international markets are shrinking due to competition from Spain and other Mediterranean countries, where production costs are lower. In the last ten years, olive oil imports have grown faster than exports. Data analysis has highlighted the importance of the size of the Apulian olive oil supply chain, especially when compared to the national average. There are also significant criticalities: first of all, Apulian olive growing is characterized by a considerable number of farms small in size (both economic and financial) with a high fragmentation of the production structure and prevalence of traditional, poorly efficient and not very innovative production systems.

To this we shall add the high management costs of olive groves and the low level of remuneration for producers. Another weak link in the supply chain concerns the distribution and marketing stages, characterised by a low level of vertical coordination and poor efficiency and effectiveness of the distribution network.

Over the last decade, olive groves in Apulia have been infected by the **quarantine pathogen *Xylella fastidiosa*** which also attacks other cultivated, ornamental and wild species. The spread of the pathogen has reached such a magnitude that the state of natural disaster has been declared. The epidemic is likely to completely destroy the most economically important and job-creating sector of Apulia's agriculture if strict and effective prevention and eradication actions are not seriously undertaken.

The province of Lecce has witnessed a dramatic reduction in olive-growing involving all the actors in the chain due to the spread of the bacterium *Xylella fastidiosa*; in 2019 the olive-growing surface area equalled 96,500 ha, from which 1,530,000 quintals of oil olives and 17,600 quintals of table olives were produced.

2.1.3 The fruit and vegetables supply chain

The fruit and vegetables sector is one of the key sectors of Apulian agriculture (44% of GSP) with 9 PDO/PGI products.

Although they are still a minority, **PDO and PGI certified agricultural producers** have a much larger average farm size than non-certified operators.

The role of **cooperation and associations**, with 83 cooperative enterprises associated with national organisations, is important.

Apulia is one of the leading regions in the national fruit and vegetables scenario, due to its climate, the appreciation of its cultivated varieties and species by the markets, and the good level of production specialization throughout the region.

On the **processing and marketing** side, facilities are specialized and widespread; furthermore, medium-sized companies have good levels of organization and technology, and the territorial proximity to the places of production allows to preserve the characteristics of products.

There are some weaknesses i.e. lots of small farms, without effective production planning and organization, with limited financial capacity, without irrigation systems suitable for crops, with low aggregate supply and low propensity towards partnership.

Often farms are not able to meet the needs of the large-scale retail trade, which requires large volumes, long-term qualitative and quantitative production planning, financial capacity, standardization, lengthening the shelf-life of the product, specific delivery times and quality and continuity of services required.

In the Province of Lecce, in 2019, about 370 hectares were grown with legumes, about 1,500 hectares with roots and bulbs of which 2/3 with early potatoes, about 3,900 hectares with outdoor vegetable crops including tomatoes, watermelons, melons, chicory, peppers, zucchini, aubergines, 180 hectares with greenhouse vegetable crops in particular tomatoes, 560 hectares with citrus fruits especially oranges and clementines, 620 hectares with fruit crops including peach, apricot, fig, pomegranate, almonds and pears.

Generally **small producers** are not able to process their own products in order to gain their own added value, as they do not have facilities and machinery suitable for processing, packaging and sales; therefore they sell their products for fresh consumption and/or to traders often at unprofitable prices.

2.1.4 Durum wheat supply chain

The total number of enterprises operating along the durum wheat chain is about 67,000, of which 62,885 in the agricultural phase, 3,306 in the industrial phase and about 2,367 in the tertiary phase. The durum wheat-growing area in Apulia (284,870 ha) was, in 2010, 22.1% of the total national area, while the production (7,227,080 quintals) represented, again in 2010, 17.7% of national production. In the Province of Lecce, the area cultivated in 2019 with durum wheat was equal to 20,500 ha, barley 3,000 ha and oats 2,800 ha.

In 2009, the production potential of the **10 plants** producing dry pasta in Apulia (14,326 quintals in 24 hours) was equal to slightly less than 10% of the national production potential. The Apulian cereal sector, focused on durum wheat, is most concentrated in the provinces of Foggia and Bari along the Bradanica-Capitanata belt.

2.1.5 The fisheries chain

The fisheries sector (which includes aquaculture, fishing and product processing) has an important economic significance for the region of Apulia. The **fishing fleet** is the second largest in Italy and Apulia's aquaculture has its ancient roots in shellfish farming and, more recently, in marine fish farming. Over 56% of the Apulian fleet falls into the category of Small-Scale Fisheries.

In Apulia, there are 1,511 fishing vessels (Fleet Register, 2019), 64 aquaculture plants and 3,300 employees in the sector (ISTAT, 2016). The total economic value of fisheries and aquaculture production is 291.5 M€ (ISTAT, 2017).

Apulia, with its approximately 800 kilometres of coastline, plays an important role in the Italian mariculture, which has experienced, in recent years, a consolidation of the Apulian production fishbase, with **15 fish farms**, 5 of which are in the province of Foggia, 5 in the province of Taranto, 2 in the province of Bari, 2 in the province of Lecce and 1 in the province of Brindisi. There are also 3 hatcheries specialised in the reproduction of sea bass and sea bream. The species reared are mainly sea bass (*Dicentrarchus labrax*) and sea bream (*Sparus aurata*), but there are also productions of eel (*Anguilla anguilla*), mullet (*Mugilidi* spp.), sharpnose seabream (*Diplodus puntazzo*), white seabream (*Diplodus sargus*), meagre (*Argyrosomus regius*). Most of the plants breed two or more species and only in a few cases the production is monospecific. More than 50% of the plants are located in the sea, a significant percentage compared to a recent past when land-based fish farming was the most widespread.

The **shellfish farms** in Apulia are located only in the provinces of Taranto and Foggia, which account for about 94% and 6% of the 92 plants surveyed respectively.

In 2016, production, mainly mussels, was about 10,192 tons (MIPAAF-Unimar data). In 2010, a renewed interest in oyster farming began to be recorded.

3. QUALITY SCHEMES IN APULIA

Quality schemes for agri-food products offer consumers **guarantees regarding the quality and characteristics of the product or production process**; quality schemes are divided into those recognised by Member States or regions and those established by the European Union under the following regulations:

- Council Regulation (EC) No 834/2007 on organic production.
- Regulation (EU) No 1151/2012 of the European Parliament and of the Council on quality schemes for agricultural products and foodstuffs - PDO, PGI and TSG.
- Council Regulation (EU) No 1308/2013 Part II, Title II, Chapter I, Section 2, as regards the wine sector.

- Regulation (EU) No 1305/2013 of the European Parliament and of the Council, Article 16(1)(b) on support for rural development by the European Agricultural Fund for Rural Development (EAFRD).

3.1 Organic agriculture

In 2019, in Apulia the hectares under organic farming are about 235,000 with almost 9,400 organic operators, showing a growing trend. Apulian organic agriculture has an important share in Italy, so much so as to rank Apulia second in the ranking of the most 'organic' regions of Italy in terms of surface area and third in terms of number of farms.

An **upswing sector**, also characterized by the increasing trend of consumption, is that of processing companies and services connected to the organic farming chain such as agritourism, organic canteens, restaurants and certified operators.

The distribution of organic land in 2019 shows a prevalence of arable land (47%), olive groves (32%), vines (6%), fruit (2%).

Exclusive organic producers predominate (77%), while there are still few producers-processors (18%) representing the short supply chain and even fewer exclusive processors (9%).

Organic products are sold in Apulia through various channels; the most common one is direct sales, followed by agritourism farms. The presence of restaurants is marginal, with an increase in retail sales in specialized stores of retail companies, as well as in large retailers where there are areas dedicated in particular to fresh food.

The Apulia Region has created and finances the **Regional Observatory on Organic Agriculture** which carries out the following actions for the development of the sector and for the management of the **BiobankOpenProject integrated system**:

- Monitoring of the organic sector;
- Improve the data and statistics management system to facilitate sector studies and regional capacity building;
- Promote the competitiveness of SMEs involved in the organic sector through information on price trends by linking to the main commodity exchanges, specialist trade fairs, ongoing financing and calls for tenders, and commercial channels, etc.;
- Promote the efficiency and governance of agri-food supply chains;
- Contribute to the growth of associations among biological operators;
- Promote research and innovation;
- Promote the transfer of knowledge and innovations in the productive world;
- Improve transparency, traceability along the supply chain for a more responsible consumption;
- Encourage the diffusion of organic food in public canteens through a greater awareness of students in schools and universities, and patients in hospitals about the environmental, social, health and nutritional benefits of organic production;
- Develop harmoniously the "organic culture" across the regional territory which is not only the producer of raw materials but also the recipient of the overall benefits deriving from the development of the sector;
- Provide technical-scientific support to regional decision making and programming (RDPs, ROPs, etc.), as well as to the transfer of regional regulations to operators in the regional organic chain;
- Facilitate the analysis of regional, national, European and international policies with a focus on the Mediterranean area.



3.2 Agri-food products, PDO and PGI wines

Apulia is one of the Italian regions with the highest number of food products and wines with a **designation of origin and geographical indication recognized by the European Union**. A testimony to the great quality and attention paid to our products, but above all to the strong tie that links Apulia's agri-food excellences to its territory of origin.

The **EU's Geographical Indication system**, in fact, favours the productive system and the economy of the territory; it protects the environment, because the inextricable link with the territory of origin requires the protection of ecosystems and biodiversity; it supports the social cohesion of the entire community.

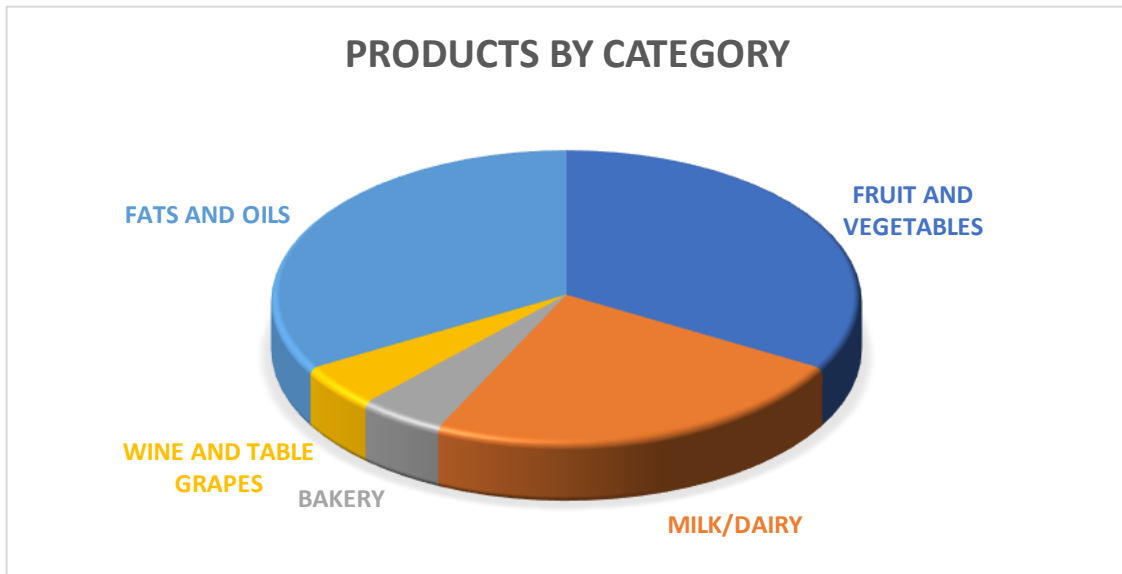
At the same time, European Union certification gives consumers greater guarantees with a higher level of traceability and food safety than other products.

Apulia includes 12 PDO, 9 PGI and 2 STG products, 32 PDO wines (DOCG and DOC) and 6 PGI wines (IGT):

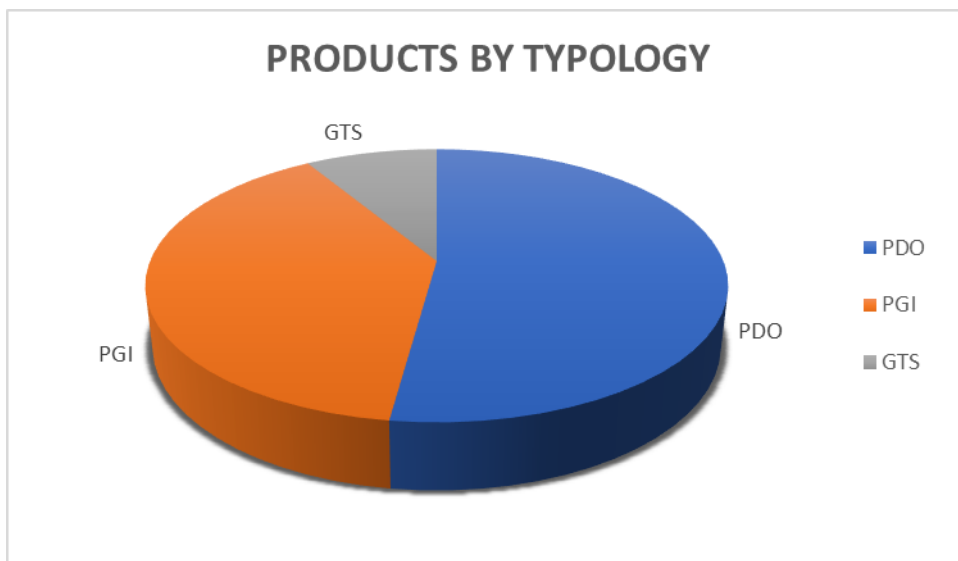
PDO AND PGI PRODUCTS IN PUGLIA (excluding wines)

Olivo Terra di Bari DOP	Clementine del Golfo di Taranto IGP
Olivo Collina di Brindisi DOP	Patata Novella di Galatina IGP
Olivo Terra d'Otranto DOP	Arancia del Gargano IGP
Olivo Dauno DOP	Carciofo Brindisino IGP;
Olivo Terre Tarantine DOP;	Uva di Puglia IGP;
Oliva la Bella della Daunia DOP;	Lenticchia di Altamura IGP;
Formaggio Caciocavallo Silano DOP;	Burrata di Andria IGP;
Formaggio Canestrato Pugliese DOP;	Cipolla Bianca di Margherita IGP;
Pane di Altamura DOP;	Limone Feminello del Gargano IGP;
Mozzarella di Bufala Campana IGP;	Olivo di Puglia IGP.
Ricotta di Bufala Campana IGP;	

PDO AND PGI PRODUCTS BY PRODUCTION CATEGORY



DOP AND IGP PRODUCTS BY TYPE



PDO AND PGI WINES IN APULIA

DOP (DOCG)

DOCG Castel del Monte Nero di Troia Riserva	DOC Moscato di Trani
DOCG Castel del Monte Rosso Riserva	DOC Nardò
DOCG Castel del Monte Bombino Nero	DOC Negroamaro di Terra d'Otranto
DOCG Dolce Naturale di Manduria	DOC Orta Nova
	DOC Ostuni

DOP (DOC)

	DOC Primitivo di Manduria
DOC Aleatico di Puglia	DOC Rosso di Cerignola
DOC Alezio	DOC Salice Salentino
DOC Barletta	DOC San Severo
DOC Brindisi	DOC Squinzano
DOC Cacc'e mmitte di Lucera	DOC Tavoliere delle Puglie o Tavoliere
DOC Castel del Monte	DOC Terra d'Otranto
DOC Colline Joniche Tarantine	

DOC Copertino

IGP (IGT)

DOC Galatina	IGT Puglia
DOC Gioia del Colle	IGT Daunia
DOC Gravina	IGT Murgia
DOC Leverano	IGT Salento
DOC Lizzano	IGT Tarantino
DOC Locorotondo	IGT Valle d'Itria
DOC Martina o Martina Franca	
DOC Matino	

3.3 Regional Quality Scheme (RQS) “*Prodotti di Qualità*”

This is a regional quality scheme established by the Apulia Region pursuant to Article 16(1)(b) of Regulation (EU) No 1305/2013, on food products of plant and animal origin (including fish products), nursery and traditional regional quality production not recognized as PDO or PGI, with process and product specificity and having quality characteristics exceeding the current marketing standards, in terms of public health, plant and animal health, animal welfare or environmental protection or specific characteristics of production processes.

RQS is identified by the EU collective mark “*Prodotti di Qualità*” owned by Apulia Region and by the indication “Quality Guaranteed by Apulia Region”.



The compliance with RQS and the granting of use of " *Prodotti di Qualità* " trademark is subject to product certification issued by a third party.

RQS provides for mandatory requirements and optional additional requirements.

Mandatory Requirements:

- Binding Production Specifications
- Verification of conformity by Third Party Certification Bodies
- Traceability system
- Open to all producers.

The Apulia Region has approved for 183 types of products, 39 production specifications that provide for criteria and technical requirements such as to guarantee a quality of the final product significantly higher than the current commercial standards and the general ones established by European or national legislation.

Each product specification, approved by product category, lists the products to which it applies. The agri-food products for which the application for the RQR and the use of the trademark "*Prodotti di Qualità*" are requested must comply with the production specifications approved by the Apulia Region.

The adherence to the RQR and the granting of use of the "*Prodotti di Qualità*" trademark is subject to obtaining product certification issued by a third party. The certification is carried out by Certification Bodies registered in the regional list of authorized bodies.

CBs operate according to the control plans approved by the Region of Apulia, which describe all the systematic controls to which the product must be submitted in order to be identified with the Trademark.

Optional additional requirements

- Indication of the traditional designation
- Sustainability
- Ethicality

RQS can also be joined for the additional requirement of traditional agri-food products (*PAT*) in addition to the requirements defined by the Reference Production Specifications approved by the Apulia Region.

The specific requirements of traditional products (more restrictive than those defined by the reference PSs) are defined in the Technical Data Sheets of traditional products that the Region of Apulia approves and publishes in the list of traditional regional products pertaining to each specific production specification of RQS.

Companies that adhere to the RQS for the additional requirement of "Product included in the National List of Traditional Products" of the Ministry of Agriculture, Food, Forestry and Tourism, guarantee in this case a product controlled and certified by a third party.

Besides the qualification of the production process with the definition of production specifications, in addition to quality issues, the Apulia Region also wanted to ensure the sustainability of Apulian products already complying with the Quality Scheme.

The companies complying with RQS may voluntarily implement the optional requirement "Sustainability", understood as the ability to combine tradition and innovation ensuring not only quality production, but also its sustainability from the point of view of the 4 pillars: economic, environmental, social and nutritional/health.

The 4th Pillar outlines the health criteria to be met which include, among others:

- the quality of raw materials in relation to the use of local varieties and breeds,
- the transparency of the information on the label regarding nutritional quality,
- nutritional advice to consumers.

In order to use the 'additional sustainability label', the agri-food company agrees to submit to the additional control system. The inspections are carried out according to criteria and procedures defined in the control plans.



The additional requirement "Ethicality" guarantees the respect of the fundamental rights of workers within the farms, producers' organizations and agri-food processing companies adhering to the Regional Quality Scheme.

3.4 "Prodotti di Qualità Puglia" trademark

For agricultural and food products regulated by **quality systems already recognized by the European Union** (PDO, PGI, DOCG, DOC, IGT) one can apply for the use of the collective mark with indication of origin "*Prodotti di Qualità Puglia*", as governed by the regulations for the use of the mark, approved by Resolution of the Apulia Region n. 1100 of 05/06/2012.

Accordingly, the control is carried out in accordance with the approved control plan and by the **control body** designated by the Ministry of Agricultural, Food and Forestry Policies.

The mark "*Prodotti di Qualità Puglia*" groups together and identifies all the quality schemes recognized by the European Union and the member state that refer to the indication of origin "Puglia".

The brand "*Prodotti di Qualità Puglia*" is a trademark owned by the Apulia Region whose competences are exercised by the Rural Development Policies Area.

It is a EU collective quality mark with an indication of origin which guarantees both the quality and the origin of the product. With this mark the Apulia Region aims both to enhance the value of agri-food products with a **high standard of quality control**, and to inform consumers, through publicity, information and advertising actions, of the quality characteristics of the products and services bearing the mark that participate in the food quality system recognized by the Apulia Region.

The main message conveyed by the mark indicates the quality of the product and the secondary message its origin, thus ensuring full traceability of the products.

3.5 Traditional Agri-Food Products

Traditional agri-food products, to be included in the **regional and national list**, pursuant to Article 3 of Ministerial Decree No 350 of 8 September 1999, are those whose processing, preservation and maturing methods are practised in the territory in a homogeneous manner and in accordance with traditional rules, for a period of not less than twenty-five years.

The **reference to territorial origin** makes it possible to link the product to:

- the territory, which is important for agricultural and agri-food production in view of the influence that the soil and climate factors of the places of production have on the characteristics of products;
- processing, of a specific and traditional character ('done as we used to');
- special production traditions.

Thanks to these characteristics, traditional products survive over time; their link with the places of production determines their qualification and differentiation. This explains their gastronomic and cultural value. The national list contains 285 traditional Apulian products.

3.6 Sustainable fish products

The international economic scenario and the increasingly fierce competition from other producing countries such as Greece or Turkey have greatly reduced the margins of profit of Apulian companies, which, however, have tried to react in terms of quality. Some farms have adopted **voluntary certification protocols**, such as ISO 9000. More recently, some farms have chosen to produce organically, obtaining certification in accordance with Regulation (EC) 710/2009.

In the extreme edge of the coast to the south-east of the Salento peninsula, characterized by irregular cliffs overhanging the sea, small fishing communities have been rooted for centuries dedicated exclusively to small-scale fishing and fishing with small boats. These fishing communities that traditionally respect the natural limits of the sea, following criteria of sustainable management, imposed by their customs, have created the collective brand PESCOPEANSANDO.



The brand aims to identify, promote and qualify sustainable small-scale fishing products coming from the reference area. In line with the values expressed in the **Charter of Principles** of the **Port Museum of Tricase**, the intention is to promote and grant the brand to all the actors in the small-scale fishing chain that base their activities on the respect of the rules contained in the **code of ethics**.

Compliance with the Code aims to qualify small-scale fisheries products on the basis of the OPERATIONAL PROGRAMME EMFF 2014-2020 (European Maritime and Fisheries Fund); it is aimed at all small-scale fishermen and all economic and social operators in the small-scale fisheries sector, in the area between Otranto and Leuca, who choose to comply with it.

The Apulia Region with the Regional Law n. 43/2017 supports actions of innovation and environmental, economic and social development in the fields of fishing and aquaculture. To this end, it promotes and encourages the preservation, rational use and biological rebalancing of aquatic ecosystems, fish fauna and flora, the enhancement, quality and food safety of fish products and their supply chain.

On the basis of specific studies, the regional law has also identified the areas of production and/or management planning interest, proposing regulatory actions to the competent administrations:

- a. biological rest areas: areas within which it is appropriate to suspend professional and/or sport and recreational fishing activities for a certain period of time in order to promote stock recovery or growth of aquatic organisms;
- b. nursery or restocking areas: marine, lake or coastal areas within which it is appropriate to reduce human pressure (also through the installation of fixed or mobile elements that can act as fish aggregating devices) to encourage the reproduction of species of importance for the fish economy and the preservation of biodiversity;
- c. fishing effort planning areas: areas within which it is appropriate to regulate fishing activities (in time or space terms) in order to benefit from aquatic resources in a sustainable way;
- d. blue oasis: management tool consisting in the temporary acquisition by a local authority of a Site of Community Interest (SCI) out at sea and/or of any area adjacent to it, within which the zoning and regulation of activities (professional, sports and recreational) is carried out;
- e. allocated zones for aquaculture (AZA): i.e. sea or lake or coastal areas (sea and land) to be used for aquaculture purposes, as well as the service areas necessary to carry out this activity.

4. REGIONAL POLICIES ON QUALITY AND ON CONSUMER HEALTH

4.1 Regional Programme "Agricoltura&Qualità"

The programme "Agriculture & Quality - Qualification and enhancement of Typical Quality Products of Apulia" has been developed by the Apulia Region with the technical-scientific collaboration of CIHEAM Bari.

Through this program Apulia has undertaken for several years now an important path of enhancement and qualification of agri-food products, first with the registration and implementation of the EU collective trademark "*Prodotti di Qualità Puglia*" and then with the definition and recognition of the Regional Quality Scheme "*Prodotti di Qualità guaranteed by the Apulia region*", already described in paragraph 3.3.

The recognition of the Regional Quality Scheme can be compared to the recognition of a single PDO at regional level which includes all the traditional regional quality products that are not among those already recognized at European level as PDO and PGI.

The list includes **183 quality products belonging to the 9 agri-food chains** (cereal/bakery products, dairy, meat products, fresh fruit and vegetables, processed fruit and vegetables, meat products, flower farming,

fish, oil). Farmers' participation in the scheme helps to qualify quality production, widen its market outlets and make it compatible with the aid provided for in the new RDP.

As part of the "Agriculture & Quality" Programme, the guidelines and procedure for the awarding of the "**Prodotti di Qualità Puglia**" label in the catering sector have been defined, including the verification of minimum requirements for the preparation of typical traditional Apulian dishes in the third party control system.

Moreover, in the framework of the "Agriculture & Quality" Programme, following a preliminary study, in order to verify the compatibility of typical Apulian products with the Mediterranean diet, the **pyramid of the Mediterranean diet of typical quality products** of Apulia was defined.



I PRODOTTI PUGLIESI DI QUALITÀ NELLA DIETA MEDITERRANEA

DOLCI - Africani, Biscotto di Ceglie Messapica, Bocca di Dama, Calzoncelli, Caramelle di Limone e Arancia, Cartellate, Cotognata, Cotto di Fico, Cuddhura, Cupeta, Dita di Apostoli, Dolcetto della Sposa, Dolci di pasta di Mandorla, Fico secco mandorlato di San Michele Salentino, Fruttone, Grano dei morti, Intorchiate, Mafalda, Mandorla riccia di Francavilla Fontana, Mandorlaccio, Mandorle atterrate, Marmellata di arancia e limone, Marmellata di fichi, Marzapane, Mostaccioli, Mustazzueli, Mostarda, Mostarda di uva e mele cotogne, Ostie ripiene, Pasticciotto e Buccinottu gallipolino, Pesce e Agnello di pasta di mandorle, Pistofratu, Pitteddhre, Pizza sette sfoglie di Cerignola, Purceddhruzzi, Scarcelle, Spumone salentinu, Susumelli, Taralli neri con vincotto, Tenerelli, Vincotto, Zèppula salentina.

PESCE, CROSTACEI E MOLLUSCHI - Alici marinate, Cozze piccine allu riènu, Cozza tarantina, Monacelle, Polpo alla Pignatta, Quatàra di Porto Cesareo, Scapecce Gallipolina, Scapecce di Lesina, Zuppa di pesce alla gallipolitana. **POLLAME** - Galletto di Sant'Oronzo. **CARNI** - Agnello al forno alla Leccese, Carne al fornello di Locorotondo, Carne arrosto di Laterza, Carne di Capra, Carne Podolica, Cervellata, Involtino bianco di trippa di Locorotondo, Fegatini di Laterza, Lardo di Faeto, Matriata, Muschiska, Salsiccia alla Salentina, Salsicciotti di Laterza, Spezzatu, Tocchetto, Turcinelli, Zampina. **SALUMI** - Capocollo di Martina Franca, Pancetta di Martina Franca, Prosciutto di Faeto, Pzzntel, Salsiccia a punta di coltello dell'Alta Murgia, Salsiccia dell' Appennino Dauno, Soppresata dell' Appennino Dauno, Soppresata di Martina Franca. **PATATE** - Patata dell'Argo Leccese, Patata di Zapponeta, Patata novella sieglinde di Galatina.

OLIO D'OLIVA - Olio extravergine d'oliva Dauno DOP, Olio extravergine d'oliva aromatizzato, Olio extravergine d'oliva Terra di Bari DOP, Olio extravergine d'oliva Collina di Brindisi DOP, Olio extravergine d'oliva Terra d' Otranto DOP, Olio extravergine d'oliva Terre Tarantine DOP. **LATTE E DERIVATI** - Burrata, Cacio, Caciocavallo, Caciocavallo Podolico Dauno, Caciocotta, Caciocotta Caprino Orsarese, Caprino, Giuncata, Manteca, Mozzarella o Fior di Latte, Pallone di Gravina, Pecorino, Pecorino di Maglie, Pecorino foggiano, Scamorza, Scamorza di pecora, Vaccino, Ricotta, Ricotta forte, Ricotta Marzotica leccese, Ricotta salata o marzotica, Canestrato Pugliese DOP, Caciocavallo Silano DOP, Mozzarella STG, Ravioli con ricotta*. **FRUTTA A GUSCIO, SEMI E OLIVE** - Oliva da mensa, Olive cazzate o schiacciate, Olive Celline di Nardò in concia tradizionale, Olive in salamoia, Olive verdi, Paparine 'nfucate*, Peranzana da mensa di Torremaggiore, Oliva Bella della Daunia DOP, Mandorla di Tortito. **ERBE, SPEZIE, AGLIO E CIPOLLE** - Cipolla Bianca di Margherita, Cipolla di Acquaviva delle Fonti, Cipolla di Zapponeta.

FRUTTA VERDURA - Albicocca di Galatone, Arancia del Gargano IGP, Clementina del Golfo di Taranto IGP, Limone femmineello del Gargano IGP, Uva di Puglia IGP (in protezione transitoria), Arancia dolce del Golfo di Taranto, Barattiere, Carosello di Manduria, Ciliegie di Puglia, Fichi secchi, Fiorone di Torre Canne, Mela Limoncella dei Monti Dauni Meridionali, Meloncella, Piattello, Uva baresana, Asparagi sott'olio, Capperi del Gargano, Capperi in salamoia, Capperi sott'aceto, Carciofini sott'olio, Carciofo brindisino, Carciofo di San Ferdinando in Puglia, Carota di Zapponeta, Caruselle sott'aceto, Cicoria all'acqua, Cicoria Riccia, Fave bianche e cicorie, Cima di Rapa, Conserva piccante di peperoni, Finocchio marino sott'aceto, Funghi spontanei sott'olio, Fungo cardoncello, Lampascioni sott'olio, Melanzanata di Sant'Oronzo, Melanzane secche al sole, Melanzane sott'olio, Mùgnuli, Paparine 'nfucate*, Peperoni secchi al sole, Peperoni sott'olio, Pisello nano di Zollino, Pisello secco di Vitigliano, Piselli a cecamariti, Pomodori di Morciano, Pomodori secchi al sole, Pomodori verdi e pomodori maturi secchi sott'olio, Pomodorino di Manduria, Pomodoro a serbo giallo, Salicornia sott'olio, Salsa di pomodoro, Concentrato secco di pomodoro, Vicia faba Major ecotipo "Fava di Carpino", Zucchine secche al sole, Zucchine sott'olio. **LEGUMI** - Cicerchia, Ciciri e Trya*, Fagiolo dei Monti Dauni Meridionali, Farinella*, Fava di Zollino, Fave fresche cotte in pignatta, Fave bianche e cicorie*, Lenticchia di Altamura.

PANE, PASTA, RISO, COUSCOUS ED ALTRI PRODOTTI CEREALI - Calzone di Ischitella, Cazzateddhra di Nardò, Cazzateddhra di Surbo, Cavatelli, Ciciri e Trya *, Farinella*, Farrata di Manfredonia, Focaccia a libro di Sammichele di Bari, Friselle di orzo e grano, Fusilli, Grano Stumpato, Lagane, Lasagne arrotolate, Maccaruni, Millaffanti in brodo, Mpilla, Orecchiette, Pane di Altamura DOP, Pane di Ascoli Satriano, Pane di grano duro, Pane di Laterza, Pane di Monte Sant'Angelo, Paposcia (Pizza a vamp) di Vico del Gargano, Passulate di Nardò, Pasta di Grano Bruciato, Pettole, Piscialetta, Pitilla, Pizza sfoglia e Scannatedda, Pucce – Uliate, Ravioli con ricotta*, Rustico leccese, Scaldatelli, Scèblasti, Semola battuta, Taralli

With the Agriculture & Quality Programme, the **Atlas of Typical Products of Puglia** has been realized; the work collects the list of all the typical regional products recognized by the Ministry of Agriculture, Food and Forestry and by the European Union.

The publication details more than two hundred typical products of the Apulian tradition, with the processing procedures, the area of origin, the historical background and the Nutrition facts. A useful tool to promote in detail the typical regional products.



4.2 The Apulian Lifestyle™ for a long and happy life and new actions

The Project “*The Apulian Lifestyle per una lunga Vita Felice*” (Resolution of the Regional Council N° 566/2017) was launched by the **Health Marketplace Special Unit of the Presidency of Regione Puglia** in collaboration with the Regional Strategic Agency for Health and Social Affairs (ARESS), the Regional Agency for Technology and Innovation (ARTI), the Mediterranean Agronomic Institute of Bari (CIHEAM-Bari) and the Interdisciplinary Department of Medicine of the University “Aldo Moro” of Bari. Its mission is to develop a process for the enhancement of the Apulian lifestyle, for its positive impact on health, environmental and socio-economic aspects of the regional territory. Moreover, it is aimed at activating interventions and actions across the regional territory for the enhancement of local contexts that with their human, institutional and productive resources represent the Apulian lifestyle and are able to promote a real health offer.

As substantiated by numerous scientific studies, in recent decades there has been an increase in the outbreak of non-communicable diseases. These are linked to a diet including industrial foods “polluted” by chemical compounds and heavy metals harmful to health, food imbalance resulting in overweight and obesity and all this having an important impact on natural resources and on socio-economic aspects of territories.

The mission of the project “**The Apulian Lifestyle**” is to promote the health status of Apulian citizens through a new cultural and organizational approach and, with it, the technical-scientific capacity to produce innovation. The project promotes transdisciplinary approaches, ranging from environmental, health, and economic plans to education and research policies, in order to disclose the basic biology of Apulian citizens’ health and their most common diseases, and to develop, in collaboration with the business sector, new

prevention strategies grounding them on the increased ability to identify individuals at risk on the basis of the interactions between the individual genetic pool and lifestyles.

The objective is to develop synergies and cooperative platforms for the promotion and dissemination of a lifestyle based on the sustainability of the Apulian Mediterranean Diet through participatory paths with the citizens of Apulia and their representatives, as a winning partner to ensure a good health, in line with the evidence provided by numerous national and international scientific studies. One of these paths, promoted by the Harvard School of Public Health, has translated the word "diet" into the so-called "healthy dish", a graphic concept of healthy diet represented by a circular dish divided into segments of different size depending on the type of food, replacing the traditional food pyramid.

With the regional project "The Apulian Lifestyle: for a long and happy life", the Apulia Region has embarked on a journey for the development of **Health Innovation** policies aimed at protecting, over time, the good "Health" for the benefit of the individual and in the interest of the community.

The aim is to produce, promote and protect health, through an appropriate and framed lifestyle, where nutrition with the nutraceutical characteristics of sustainable foods and physical activity are at the heart of the action. It is a best practice that certainly benefits the citizen and the community, with an extremely positive impact on sustainable development of the territory to which it belongs from the environmental, social and economic viewpoint.

Following the suggestion by the Health Marketplace Unit and the Administrative Direction of the Cabinet, the Apulia Region has established the **Health Innovation Network**, with a non-binding consultative function, representing regional, national and international public and private institutional bodies of research, innovation and entrepreneurship, operating within the policies of Production, Promotion and Protection of Health in all its forms.

The Health Innovation Network and the Health Marketplace are instrumental for:

- promoting healthcare models for Apulian citizens with specific health profiles related to nutrition, physical activity, education, catering and food production;
- promoting correct lifestyles, and in particular the sustainable Mediterranean diet of Apulia, with the involvement of regional productive stakeholders;
- enhancing local contexts that with their human resources, institutions and production sector represent the Apulian way of life;
- encouraging sustainable and responsible production and consumption in Apulia through a multidisciplinary approach based on environmental, social-health, health, nutritional and economic aspects;
- supporting and implementing research and experimental projects aimed at the population with certain diseases in order to assess the effectiveness of a specific diet, based on the sustainable Mediterranean diet of Apulia, with the function of supporting the related therapeutic and pharmacological treatment;
- initiating, through dedicated educational workshops and innovative coworking forms, a cultural process among the different private and public stakeholders, including citizens.

The Health Innovation Network currently consists of about 25 public and private companies and 25 municipalities in Apulia.

The 'Health Marketplace' Special Unit of the Presidency of the Apulia Region has identified 10 actions for the improvement of nutrition, health and lifestyle of the Apulian Community:

- **Action 1. Lifestyles at School:** The in-formative path aims to highlight the value of a correct lifestyle associated with the Apulian Sustainable Mediterranean Diet, to promote the regional project "The Apulian Lifestyle", the main Apulian food chains and the Atlas of typical Apulian food products. The Ci.Bu.S. Project "Good food for all: a "start", funded by the Apulia Region and managed by CIHEAM Bari, will promote Action 1, in continuity with the activities of disease prevention through proper nutrition education and lifestyle.

- **Action 2. Lifestyles in research: nutraceuticals, nutrigenomics and functional foods:** Creation of a research centre for the study of nutraceutical/functional elements and effects on the human genome in order to improve food safety, through an integrated digital platform, for the fight against malnutrition based on the principles of the Apulian Sustainable Mediterranean Diet.
- **Action 3. Technopole of Nanotechnologies and Human Pole on food, nutrition and wellbeing for the creation of Life Sciences Hub:** the Centre, based in Tricase in Salento, aims to improve the sustainability of Mediterranean food systems from an economic, environmental, social, health and nutritional point of view by encouraging sustainable and responsible consumption.

The proposal provides for research system interventions on raw materials and their impact on diets and in particular on the Mediterranean Diet, with the following objectives:

- Develop new diagnostic and therapeutic approaches based on nanotechnology for Precision Medicine applications in the fields of immuno-oncology, neurodegenerative diseases and non-communicable diseases.
 - Develop better cell and animal models of genetically modified diseases (rodents or other alternatives) for the pre-clinical evaluation of innovative therapies, including those based on nanotechnology. The development of new drugs and innovative diagnostic approaches, also based on the adoption of correct nutrition and of nutraceutical principles for the prevention and/or treatment of non-communicable, neurodegenerative and oncological pathologies is a fundamental step in pre-clinical research.
 - Encourage the incubation of start-ups, research groups and spin-offs for technological and educational development.
 - Encourage the attraction of financial and investment opportunities on a national and international scale.
 - Develop foods and functional ingredients for the preparation of personalized diets in patients with chronic inflammatory diseases (metabolic syndrome, chronic kidney disease, type II diabetes mellitus, irritable bowel syndrome) or even cancer patients.
 - Carry out studies on the composition and nutritional quality of foods and novel foods, evaluation and molecular characterization of the effects of food on human health, characterization and enhancement of typical foods of the Mediterranean diet by promoting the development of omics and food sciences through the creation of advanced bio/ sensors for food safety and human health.
 - Create synergies in the field of agriculture, food and well-being as an expression of the Human Pole Centre: Food, Nutrition and Well-being.
 - The Centre for the Sustainability of Mediterranean Food Systems represents a place of aggregation and co-working for the promotion of sustainable food systems that affect the health and lifestyles of citizens. Multidisciplinary approaches will be supported among the Apulian, Italian and international actors of agri-food and fishery policies, environmental, health, economic and education and research policies.
- **Action 4. Players of the agri-food industry:** by involving local private partners we intend to develop partnerships and synergies for the production of new products with nutraceutical characteristics tested on population samples and new production processes using innovative food traceability systems for a healthy and responsible consumption.
 - **Action 5. Startups & Temporary Coworking:** to create a professional community of "interdependent" workers through the sharing of physical spaces and work tools, the establishment of profitable professional relationships, the mutual exchange of experiences, knowledge and differentiated skills; to organize and implement training and information courses for citizens who do not use technology; to define local needs in terms of technological innovation and possible opportunities to develop new services and products.
 - **Action 6. Microbiota and Transplant:** the creation of a "Human Microbiome Biobank" represents a key tool to carry out a significant project in precision medicine approaches through the integration of data from the genetic makeup of an individual with the specific functional component of his/her microbiome, with particular reference to the intestinal and salivary one.

- **Action 7. Interreg IPA CBC Italia-Albania-Montenegro-Food4Health:** The Region is partner in the International Cooperation Project to strengthen the competitiveness of SMEs in the cross-border area through the improvement of production techniques and the transfer, sharing and adoption of European quality standards for processing and enhancement of typical and traditional products of the agri-food sector in order to facilitate access to markets.
- **Action 8. Nutraceutical & Nutrigenomics Experimentation:** Within the National Strategy of Intelligent Specialization - Thematic Area "Health, Nutrition, Quality of Life - Health Sub-programme" for an OPERATIONAL HEALTH PLAN - DEVELOPMENT AND COHESION FUND, the Apulia Region together with other Italian Regions has applied for an intervention titled "Fight against malnutrition and improvement of nutritional characteristics of food products based on the principles of the Mediterranean Diet", which is currently being approved. This proposal is an opportunity to identify new strategies to strengthen the neglected opportunities of the Mediterranean Diet, and of its nutraceutical active ingredients, through the acquisition of scientific data documenting its mechanisms of action.
- **Action 9. The Apulian Lifestyle Recipe:** the objective is to propose in Apulia THE RED RECIPE OF LIFE STYLES with the involvement of the General Practitioner and Paediatrician at the center of the project also to educate children in order to prevent chronic diseases through proper diet and physical activity.
- **Action 10. National and regional oncological network:** the Italian League for the Fight against Cancer and Apulian Lifestyle will launch training and information activities on cancer prevention and the importance of a correct lifestyle and a healthy diet in order to achieve a better quality of life and a proper attention to one's own health status.