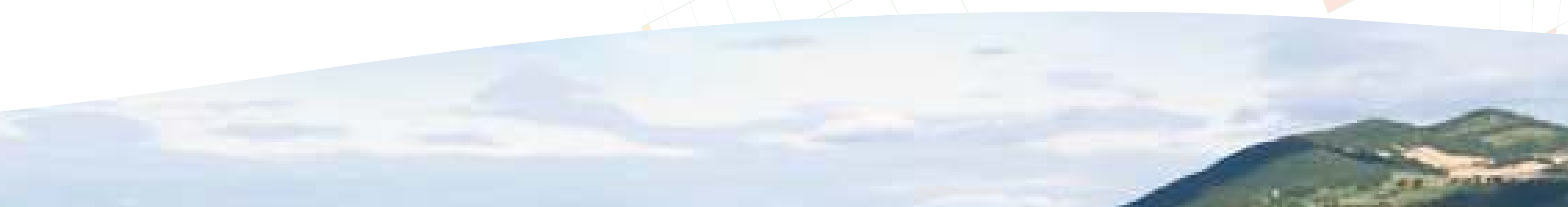
PACMAn

Promoting attractiveness, competitiveness and internationalisation
of Agro-food Clusters of the Med Area

PACMAn Project - e-Guide for Operators and Stakeholders Networking

This e-Guide aims at supporting networking activities within the Mediterranean agro-food system and contains guidelines to promote collaboration and exchange of information on the operators activities in the areas participating in PACMAn project



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L'Europe en Méditerranée
Europe in the Mediterranean

Projet cofinancé par le Fonds Européen de Développement Régional (FEDER)

Project cofinanced by the European Regional Development Fund (ERDF)

PACMAn: "Promoting Attractiveness, Competitiveness and Internationalisation of Agro-food Clusters of the Med Area"

This book is co-financed by the European Commission (PACMAn project). The authors are the solely responsible for the content of the present document.

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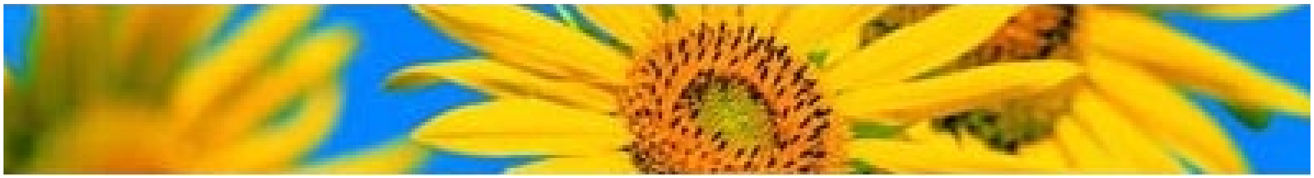

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Chapter 01

The PACMAn Project

PACMAn

Promoting attractiveness, competitiveness and internationalisation of Agro-food Clusters of the Med Area

1.- The PACMAn Project

1.1 Introduction

PACMAn aims to stimulate the innovative and dynamic capacities of the agrofood sector in Mediterranean regions so to make them able to promote their attractiveness and competitiveness at transnational level. This is achieved by:

Developing innovation in skills and abilities of the main stakeholders involved in agrofood sector to enhance their growth potentials through networking activities;

Contributing to making agrofood clusters more attractive and competitive on international markets by stimulating their innovation, modernisation, diversification and adaptation to new issues and market trends;

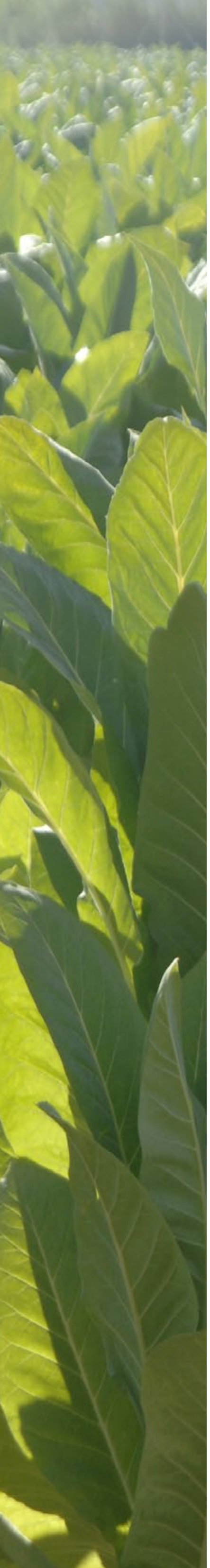
Increasing of market-oriented production and commercial trade in order to enhance the export performances;

Encouraging the strategic cooperation between economic development actors, science/ research poles and public authorities for new integrated approaches, tools, strategies and plans/policies generating the sustainable development of agrofood sector;

Fostering framework agreements among different stakeholders and public authorities;

Implementing innovative joint actions strengthening the international dimension of Mediterranean agrofood clusters;

Ensuring the maximum information and dissemination on project activities to grant future outcomes, new initiatives, wide interest on innovation potentials.



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The PACMAn project is a three-year initiative partly financed by the European Union in the framework of the MED Programme. The project started in October 2010 and ends in September 2013. It involves 10 public and private bodies belonging to 6 MED countries: Italy, France, Greece, Spain, Portugal, Cyprus. All the partners are key actors in the agrofood sector with different expertise and experiences, being RDAs, local authorities, universities and research bodies, Chambers of Commerce.

1.2 Location of activities

In the first instance the main working and implementation orientated activities will be located within the participating regions itself: Murcia Region / Spain Crete / Greece Emilia-Romagna / Italy Valencian Community/ Spain Alentejo Region / Portugal Provence-Alpes-Côte d'Azur / France Cyprus Central Macedonia/ Greece.

1.3 The PACMAn partners

The project coordinator is:

ERVET - Emilia-Romagna Regional Development Agency Via Morgagni 6, 40100, Bologna – Italy Tel: : +39 051 6450411; Fax: +39 051 6450310 Project Manager – Paola Maccani pacman@ervet.it - http://www.ervet.it ERVET is the “in house” company of Emilia- Romagna Region. It commits itself to the cooperation among regions, provinces and municipalities, and, in consultation with economic and social forces, to the realisation of coordinated actions to promote sustainable development and environmental qualification of the region. It deals with integrated territorial policies and it operates as a policy advisor. The Company has to ensure technical and operational support in the framework of regional development policies, fostering cooperation and partnership in a European dimension. It provides assistance on territorial development, international policies, sustainable development, knowledge society, labour and welfare, competitiveness of the economic systems.

The PACMAn partners are:

Provincia di Parma P.le della Pace, 1, Parma - Italy Tel: +39 0521 931111; Fax: - europa@provincia.parma.it - www.provincia.parma.it Provincia di Parma Province of Parma is a local government dealing with a broad range of public activities in many areas including environment and agriculture. Promoting an integrated system of safeguard of quality products and the rural environment, Province of Parma supports an agriculture-related development of its territory and abides to European regulations and decisions.

ADRAL - **Agência de Desenvolvimento Regional do Alentejo** Rua Intermédia do PITE Lt 4 e 6, 7000-171, Évora - Portugal Tel: +351266769150; Fax: +351266769156 geral@adral.pt - http://www.adral.pt/ ADRAL is a regional structure with 68 partners/shareholders, both public and private, with relevant experience in all sectors of economic, social research and development activities, geographically spread and deeply acquainted of local and regional reality. ADRAL mission is to contribute to the promotion, divulgation and development of

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Alentejo region.

IVACE – **Valencian Institute of Business Competitiveness** Pl. del Ayuntamiento, 6, 46002, Valencia – Spain Tel: +34 963 986 200; Fax: +34 963 986 201 info@impiva.gva.es - www.impiva.es. IVACE is a public entity of the Valencian government attached to the Regional Department of Economy, Industry, Tourism and Employment. Its first objective is to promote and foster business competitiveness, sustainable development and adaptation of Valencian companies to market requirements.

MURCIA REGION DEVELOPMENT AGENCY Avda. De la Fama, 3, 30003 Murcia – Spain Tel: +34 968 366 843; Fax: +34 968 368 441 info@investinmurcia.com - http://www.investinmurcia.com - www.institutofomentomurcia.es The Murcia Regional Development Agency is organically attached to the Regional Ministry of Universities, Business and Research. Its main objective is to boost the development of SMEs in Murcia Region by means of economic promotion, investment raising, elimination of obstacles and the establishment of an environment favouring competitiveness. One of the main objectives of the development agency is to ensure the upgrading and economic growth of regional SMEs, including those operating in the agrofood field.

HELP-FORWARD/FORTH (Foundation for Research and Technology - Hellas) 4 Zalokosta st., 106 71 Athens – Greece Tel: +30 210 3607690 - fax: +30 210 3636109 rosa@help-forward.gr - http://www.helpforward. gr/ Science and Technology Park of Crete, Basilka Bouton, Heraklion, 71110 Crete - Greece Tel: +30 2810 391954 - fax: +30 2810 391906 ignatiadis@stepc.gr http://www.help-forward.gr/ PRAXI (HELP-FORWARD) network is a nonprofit private organisation, administered by FORTH, aiming at providing a bridge between Research and Industry in Greece. It is a member of the Innovation Relay Centres Network in Europe, offering Technology Transfer brokerage services to Greek companies and RTD Institutions and it has thus established close links with many regional actors in various technological fields. It will deal with mapping and analysing each country's agrofood economic sectors and segments, providing regional information on socioeconomic issues and policies.

CRITT Agroalimentaire PACA Cité de l'alimentation, Rue Pierre Bayle - BP 11 548, 84916 AVIGNON Cedex 9 - France Tel: +33.4.90.31.55.08; Fax: +33.4.90.31.55.10 Critt@critt-iaa-paca.com - www.critt-iaapaca. com CRITT is a French Innovation and technology Transfer Center dedicated to food processing industry. The CRITT Agroalimentaire Provence Alpes Côte d'Azur is the dedicated tool for innovation and technology transfer on food industry in south west of France. It has 20 years experience in agrofood networks at national and regional level as well as a 10-years-experience in agrofood networks at EU level. Having a good knowledge of needs and functioning of firms involved in the agrofood clusters, it will be responsible for benchmarking in practices and improvement of the support to the agrofood sector, also enhancing networking tools and processes.

Province of Modena AREA ECONOMIA, Strada Scaglia Est 15. 41125 Modena - Italy Tel: +39 059 200 710; Fax: +39 059 209 770 siragusa.p@provincia.modena.it – www.provincia.modena.it Province of Modena coordinates the municipalities for economic, territorial and regional environmental planning and adopts its own longterm strategies. It is responsible for direct management of services that concern the vast provincial area in competent matters and for programmed intervention, carried out in close relation with the Regional authority. It participates in the determination of regional development planning. The Province of Modena, Lead partner of the TECH.FOOD project is building a R&D node and innovation scheme for the agro-food local system.

CUT – Cyprus University of Technology Limassol Savings Co-operative Bank Building, 4th Floor, Office 33, 31 Archbishop Kyprianos Str., 3036, Lemesos - Cyprus Tel: +357 25 00 2500; Fax:+357 25 00 2750 cut.cyprus@gmail.com - http://www.cut.ac.cy CUT aspires to develop itself into a modern, pioneering University able to offer education and high level research in leading branches of science and technology which have high impact on the economic, technical, and scientific sectors. It plays a role in support of the state and society in their efforts to confront problems, which cover all areas of science and technology. CUT puts special emphasis in applied research and has a strong experience of project management. It participated as a partner in many EU and Med 6 6 programs (including in 3 Med project

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awarded in 2010 on innovation, csr and agrofood).

Kilkis Chamber of Commerce and Industry Stenimachou 2, 61100, Kilkis – Greece Tel: (Maria Kalogeridou) +30 23410 26724, Fax: +30 23410 20924 mkalogeridou@ccikilkis.gr, info@ccikilkis.gr – www.ccikilkis.gr. The Chamber of Kilkis is a consultative advisory body of the State and Business Members. It aims to represent, monitor and promote of industry, small sized industry, trade and services, in line with the development of the economy. The Chamber, in order to meet the institutional and developmental role, operates on a business plan, through which it reorganized its services and built its organization chart.

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Chapter 02

Networking Opportunities with the Agro-Food Systems from the Emilia-Romagna Region

2.1 Introduction to the agro-food system in the Emilia Romagna region

The agro-food in Emilia-Romagna is known on an international level not only for combining tradition and innovation but also for achieving high standards of food quality and safety.

The regional cluster is made up of about 28.000 local units and 180.000 employees (Istat - Asia, 2008).

The regional agro-food industry is characterized by the development of integrated supply chains spread all over the territory. A great contribution to the regional agro-food figures is given by the cooperative companies and other forms of associations, that are still dominant in many activities of processing and sales of agricultural products. They are responsible for more than a third of the national turnover of the sector.

Emilia-Romagna is specialised in local products of high quality process produced according to traditional methods and with advanced food processing machinery. Among the production of vegetables the highest figures are registered by cereals, potatoes and vegetables (tomatoes in particular), pears, nectarines and wine. In the regional territory there are more than 4,500 producers of organic products (2008). In Emilia-Romagna there are 33 PDO (Protected Designation of Origin) and PGI (Protected Geographical Indication) certified products, of which the most well known names internationally are Parmigiano Reggiano – Parmesan cheese, Prosciutto di Parma – Parma ham and Aceto balsamico di Modena – Balsamic vinegar from Modena.

The food industry is specialized in the processing stage but the cluster also involves other important sectors such as agricultural machinery, one of the region's best performing industries as well as food packaging. The chilled food chain is also very efficient and well established in the region.

2.2 Agro-food packaging in Emilia Romagna

The packaging division is an important production specialization in the regional mechanical cluster and numbers 597 local businesses with a total of 14,394 people employed (Asia, 2008).

This cross-cutting sector is composed of design, manufacturing and trade of machinery, plants, apparatus and equipment in general for packing, packaging and refilling, in addition to design services, labelling, distribution and sales.

The highest concentration of people employed in packaging is in the province of Bologna, followed by Parma and Modena. Other districts in the sector are also in Reggio Emilia and Rimini.

Mechanical cluster – Number Employed in the “Production of automatic machinery for packaging” sector (Asia 2007)

Sales turnover of this division (source: Aida – Bureau Van Dijk)

There are 150 companies with an annual turnover above 900,000 Euros. The total turnover of these companies is Euros 3,480 million (2010 data). The sales turnover performance during the period analysed shows evident growth in the period 2006-08, followed by a duly expected downturn in the subsequent two-year period, 2008-2010, as a consequence of the widespread explosion of the global economic crisis. The data shows a notably stable situation in terms of revenue, demonstrating the resilience of the sector to the difficulties that affected the global markets.

Mechanical Cluster - Packaging Division Panel of 135 companies with a sales turnover > 900,000 Euros **Variations in % of turnover**	
2006-2008	**+ 19.9%**
2008-2010	**+ 0.4%**
2006-2010	**+ 20.4%**

International events

CIBUS **CIBUS - CIBUS TEC** www.cibus.it	**Cibus – International Food Fair** held at the Parma Trade Fair site. The fair also includes Dolce Italia, the exhibition for the confectionery industry. The 2012 edition hosted 2,300 exhibitors, 63,000 visitors, 12,000 buyers and foreign operators in the sector. **Cibus Tec – Trade fair of Technologies & Solutions for the Food Industry** held at the Parma trade fair site. The 2011 edition hosted 775 exhibitors and received more than 26,000 visitors.
Packology www.packologyexpo.com	**Exhibition of Technology for Packaging and Processing**, held at the Rimini Trade Fair site. It also includes technology for the Food and Beverage sector. It received over 100 top buyers and put together 700 business meetings in 2010.
R2B - Research To Business www.rtob.it	Participants include companies and research bodies, some of which are part of the agro-food cluster, in particular in the sectors that represent the development of new products and processes, the characterization and selection of raw materials, design and validation of machinery and equipment, food production and packaging, biotechnology, etc.

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2.3.- Matrix of thematic sections and opportunities in relation with the key organizations belonging to the agrofood system

Matrix of Opportunities in Relation with the Operators of the Area	
01	The organization has the capacity to make technology transfer and provide innovation solutions
02	The organization has the capacity to export
03	The organization has the capacity to provide education and training
04	The organization has the capacity of attending to International fairs
05	The organization has the capacity of organizing local events at regional or local level

Agro-food Operator Identification	01	02	03	04	05
Association Representative *UCIMA* *UNACOMA* *U.NI.MA.* *ENAMA* *UNACMA*				●	●
Regional Development Agency *ERVET*			●	●	●
Research Laboratories *ASTER – High Technology Network- Agro-food platform (CIRI AGROALIMENTARE; C.I.M; CIPACK; CRPA LAB; SITEIA.PARMA; BIOGEST.SITEIA)*	●		●	●	●
Training bodies *SSICA; IFOA; DINAMICA; IRECOOP; CESCOT; FORMA FUTURO; IAL*			●		
Universities *University of Bologna* *University of Ferrara* *University of Modena and Reggio Emilia* *University of Parma* *Cattolica University in Piacenza*			●		

2.4.- Contact points

	Agro-food	Website
Associations	UNACOMA - National Union of Agricultural Machinery	www.unacoma.it
	U.NI.MA. National Union of Agricultural Mechanisation Companies	www.unima.it
	ENAMA National Institute for Agricultural Mechanisation	www.enama.it
	UNACMA National Union of Distributors of Agricultural Machinery	www.unacma.it
Agencies	EFSA – European Food Safety Authority (in Parma)	www.efsa.europa.eu
Laboratories	ASTER – High technology Network – Agro-food platform	www.aster.it http://www.aster.it/tiki-index.php?page=Catalogo_ALI_en

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	Agro-food	Website
Universities	UNIVERSITY OF BOLOGNA (Department of Agricultural Sciences)	www.agrariaveterinaria.unibo.it
Universities	UNIVERSITY OF FERRARA (Agro-food technologies and industrial biotransformations)	www.unife.it
Universities	UNIVERSITY OF MODENA AND REGGIO EMILIA (Agro-food science and technology)	www.unimore.it
Universities	UNIVERSITY OF PARMA (Food science and technology; Gastronomy Studies; Mechanical engineering for the food industry)	www.unipr.it
Universities	CATTOLICA UNIVERSITY IN PIACENZA (Agricultural science and technology; Food science and technology)	www.unicatt.it
Training bodies	SSICA (Experimental Station for Canned Food Industry)	www.ssica.it
Training bodies	IFOA (Vocational Training and Educational Institute for Companies in the field)	www.ifoa.it
Training bodies	DINAMICA	www.csa.it
Training bodies	IRECOOP (Regional Cooperative Training Institute for Emilia - Romagna, based in Bologna)	www.irecoop.it
Training bodies	CESCOT (Trade Centre, Tourism and Services, Cesena Fc)	www.cescot-cesena.com
Training bodies	FORMA FUTURO (Parma)	www.formafuturo.it
Training bodies	IAL (Innovation-Learning-Work)	www.ialemiliaromagna.it

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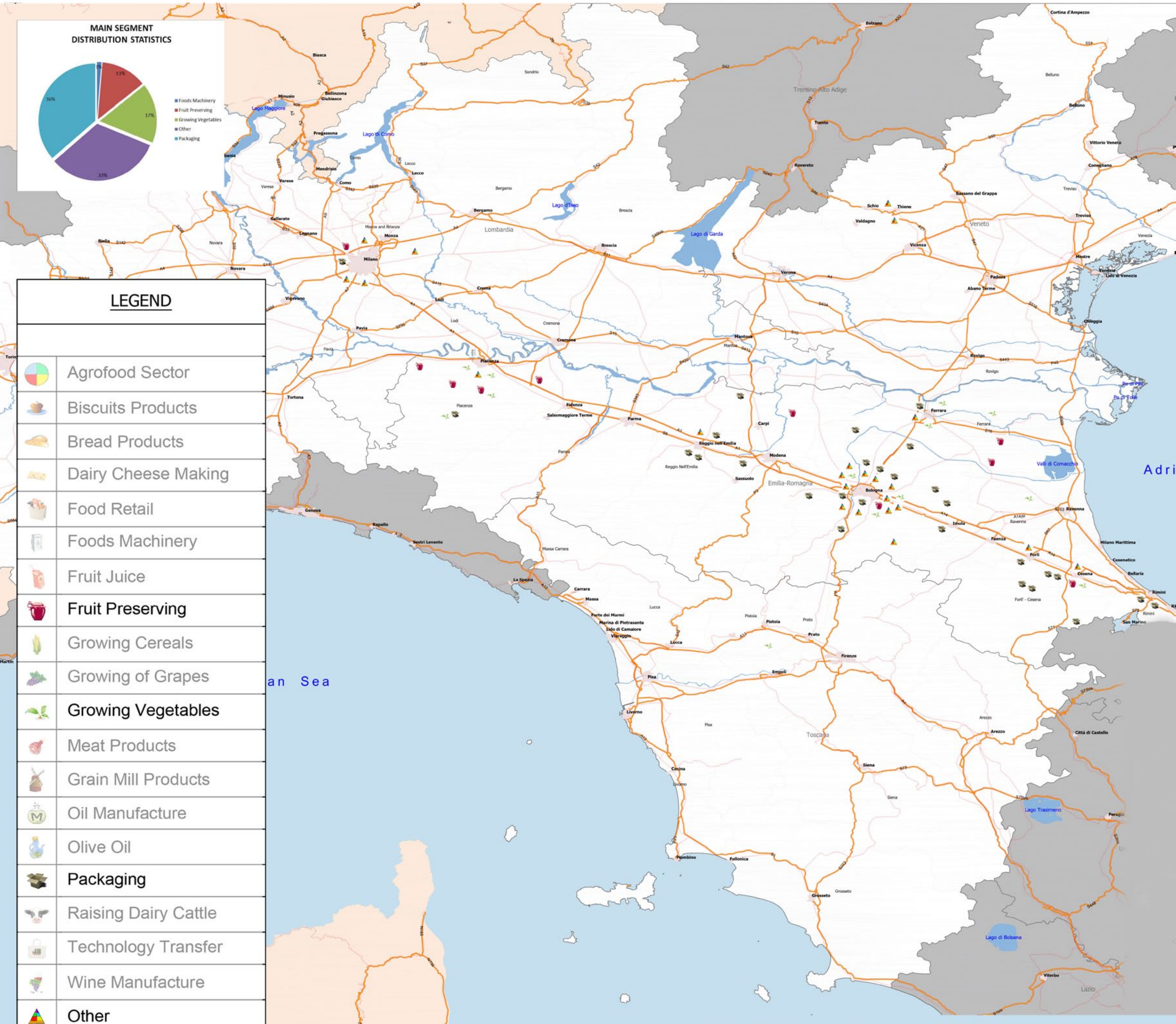
	Packaging	Website
National associations and Organizations	UCIMA	www.ucima.it/
	CONAI	www.conai.org/
	Istituto Italiano Imballaggio	www.istitutoimballaggio.it/
Laboratories	CIRI AGRI-FOOD	www.agroalimentare.unibo.it
	BIOGEST-SITEIA	www.biogest-siteia.unimore.it
	CIPACK	www.cipack.it
	SITEIA.PARMA	www.siteia-parma.it
	CIRI MAM	www.mam.unibo.it
Universities	UNIVERSITY OF PARMA - Industrial chemistry and packaging technology - Master in Packaging	www.unipr.it masterpackaging.unipr.it
	UNIVERSITY OF BOLOGNA (RIMINI) - Chemistry and technologies for the environment and materials	www.eng.unibo.it

	Packaging	Website
Training bodies	CFP Cesta	www.cfpcesta.com/
	Ecipar	www.ecipar.it/
	Formart	www.formart.it/
	Centro Servizi P.M.I.	www.cspmi.it/
	Futura	www.cfp-futura.it
	Formindustria Emilia-Romagna	www.formindustria.it/
	Cofimp, Aziende , Unindustria Bologna	www.cofimp.it
	Iscom	www.iscomer.it
	CISITA Parma	www.cisita.parma.it
	CE.SVI.P.	www.cesvip.it/
	I.F.O.A.	www.ifoa.it
	CESCOT	www.cescot.emilia-romagna.i/

PACMAN PROJECT: EMILIA-ROMAGNA PACKAGING SEGMENT COMPANIES



This map has been elaborated with the information obtained by the PACMAN project

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Chapter 03

Networking Opportunities with the Agro-food Systems from the Comunidad Valenciana Region

3.1.- Introduction to the agro-food systems in the Valencian Region

The agrofood systems and so called clusters as well in the Valencian Region aim at stimulating the innovative capacities of the agrofood sector in our Mediterranean region. The promotion of the competitiveness and the internationalisation of the agro-food clusters in our area is a key strategic pillar of the regional development. This pillar is supported by specific territorial marketing actions undertaken either by the clusters itself or by other stakeholders belonging to the Valencian Community and they already have clear links with the territory and the small and medium enterprises (SME´s). In this context, the co-creation of “added value food chains” among the relevant actors is one of the best ways to promote the internationalization of the small companies and their territories at international level either with twin business companies in other European countries or with other relevant actors from the whole food chain.

3.1.1.- Uva del Vinalopó (Grapes from Vinalopó)

The pocketed dessert grape of the Vinalopó local area is produced in the province of Alicante, it is a unique grape fruit eaten as a delicious dessert because of its flavour clearly influenced by its peculiar ripening process.

Unlike other dessert grapes varieties, the dessert grape of the Vinalopó area grows protected by a paper bag which takes care and saves every grain on the bunch besides the fact that creates a unique ripening environment inside the paper bag influencing the final texture and flavour of the grapes. This occurs until it gets to the consumer.

Thanks to this peculiar growing system, the dessert grape of the Vinalopó presents some exceptional physical and gastronomic characteristics, which led it to be the unique pocketed grape with a validated guarantee of origin and quality through a quality label.

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Source: http://uva-vinalopo.org

The paper bag protects the grape grains from the external weather severities; this is why they develop a thinner skin because they do not have to defend themselves against the rain, sun or wind influences. The same paper bag protects from the exposure to the sun, which causes a uniform colour on the grains. The Grape from the Vinalopó valley is the only grape in the Northern hemisphere that, thanks to the climate and the protective bag it is grown in, can be picked right up until January

Every year, millions of kilos leave the villages producing the pocketed dessert grape of the Vinalopó area towards the main national and international markets. From this volume, the production commercialized with a quality label has been increasing constantly, responding to the increasing demand of this product with unique characteristics.

Spanish Total production

Year	2008	2007	2006	2005	2004	2003	2002
Volume (tons)	8,210	10,516	12,358	10,516	12,647	13,082	13,759

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*Spanish total production of grapes in 2008

This table grape goes leav this fertile valley in the South of the Valencian Community to the major national and international markets due to its proximity to the international airport of El Altet, resulting in a rapid distribution without deterioration, thus recognized their quality by the European Union, as evidenced by their designation of quality and origin label.

STRENGTHS Indicators	Description
Innovation	Incorporating singular packing systems which provide a greater life rank Product's identity (singularly concerning the "Moscatel" grape) Supply's identity (differentiation based on the work of packing and brand) Training of shopkeepers, cooks and prescribers about the product's identity Creation of culture among users
Networking	Intercooperation mechanisms among value chain's agents Optimization of the information and knowledge management
Internationalisation	The consolidation of the identity of the product and of the supply (brand) The emulation (benchmarking) of the actions initiated by lead firms The selection of strategic partners in third countries
Health qualities	Contributes to the Mediterranean diet to strengthen the healthy qualities High rates of 'Resveratrol', powerful anticancer substance that is concentrated in the skin Anti-aging effect cell and cell protection to diseases such as cataracts.

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3.1.2.- Aceite de Olivos Milenarios "Territorio de la Senia" (Olive oil from ancient olive trees)

Thanks to the high concentration of the olive trees in the Territori del Sénia Area, the teamwork between the administration and the industry, a total of 8 olive mills in the area (4 in Valencia and 4 in Catalonia, of which 6 are cooperatives and 2 private) have been able to come together to produce a unique product: the extra virgin olive oil from Territori del Sénia millennium olive trees. The origin of this oil that it has only come from the olive trees listed in the inventory is guaranteed. It is also in turn certified by some of the most demanding laboratories and tasting panels as a high quality food product. In the Territori del Sénia, historical fortune has favored the largest concentration of ´´millenarian´´ olive trees. Since 2010, all the ´´millenarian´´ olive trees whose olives are destined to making the Territori del Sénia millennium olive oil are being marked and identified. This is done by placing a small tie or a label with its own identification number on each olive tree. It is then checked by the food processing and certification company and is also a way to begin to give them the recognition they truly deserve.

Source: http://www.foodsfromspain.com

The Mediterranean climate and soil provided the optimum growing conditions for this valued product. The surrounding villages planted whole fields of olive trees, making this tree a defining element of the landscape. The olive tree has stood the test of time and has a spirit of the old classical wisdom. The fruits are renewed every year, but the trunk remains. Each year from the 200 olive trees in the Valencian Region there are produced more than 1200 liters of oil. Strengths: Apart from a natural and historical heritage, its uniqueness makes the Olive oil from ancient olive trees a highly desirable product for the countries where special assortment of oil are really appreciated.

3.1.3.-Cocas y coquetes

"tot ix de la mateixa pasterada" According to the old Valencian refrain, tot ix de la mateixa pasterada ('everything comes from the same dough'). In this way, from the pasterada or dough, the ingenuity and the needs of the people meant that cocas, coquetes, fried cocas, coques mintxos and many more, acquired as many ingredients as they could. "Coca" and "Coquetas" are varieties of a Mediterranean dish having counterparts all over the Mediterranean, especially in its savoury kind. The Valencian Patisseries, like other branches of culinary "art", are constantly developing. In Valencia today, it features largely in avant-garde cuisine, inspiring many of the great Spanish cooks to create original ways of enjoying sweet flavors, with new shapes, textures and tastes. The cocas are very popular in the east coast of Spain in which the dough is flavoured with crystallized fruit, almonds, lemon rind and cinnamon. "Cocas" and "coquetas" are symbolizing almost any kind of bread-based product. Its size can vary from 5 cm up to 1 meter. There are many diverse cocas, with four main varieties: sweet, savoury, closed and open. All of them use dough as the main ingredient, which is then decorated. This dough can be sweet or savoury. If it is sweet, eggs and sugar are added, and if it is savoury, yeast and salt. As regards the topping or filling, fish and vegetables are usual at the coast whilst inland they prefer fruit, nuts, cheese and meat. Some cocas can be both sweet and savoury (typically mixing meat and fruit).. It usually has an oval shape (although it can also be found rectangular and round). It is normally decorated with candied fruit, pine nuts and sugar. The typical geography and climate (in all its variety) of the eastern part of the Iberian Peninsula, and although the geo-climatic conditions are not so important today, in the past they determined the use of some or other ingredients, depending on their availability.

Strong points: The best valued traits of the "cocas" and "coquetas" in Valencian region are the confidence in the ingredients, its healthy character and good taste. In the same time Cocas and coquetas constitute an important part of the local particular cultural and gastronomic heritage.

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3.2. Matrix of thematic sections and opportunities in relation with the key organizations belonging to the agrofood system

This section shows the relation among the main key organizations (business operators as single companies, or their associations, or laboratories, or universities, etc…) of the 3 agro-food clusters of the Comunidad Valenciana participating in the PACMAn project. The objectives of this section is to facilitate a clear vision of which are the main business and networking opportunities for other external interested parties when approaching these operators.

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Matrix of Opportunities in Relation with the Operators of the Area	
01	The organization has the capacity to sell their product directly at international level
02	The organization (or their representatives) has the capacity to establish a consolidated commercial network at international level
03	he organization can make exchange of production good agricultural practices with other similar regional areas for its products
04	The organization has the capacity to make technology transfer and provide innovation solutions
05	The organization has the capacity to export
06	The organization has the capacity to provide education a nd specialized training
07	The organization has the capacity of attending to International fairs
08	The organization has the capacity of organization local events at regional or local level for promoting the innovation in several industrial sectors

Operator Identification	**01**	**02**	**03**	**04**	**05**	**06**	**07**	**08**
Denominación de Origen Uva del Vinalopó (PDO)	●	●	●	●		●		●
Olive oil Senia Territory Association	●	●	●	●				
Regional asociation of cocas and coquetes	●					●		
IVACE							●	●

ainia – Technological Centre				●		●		

3.3.- Contact points

In this section you can find the main contact points for some key organizations or access gates to the agrofood systems or segments….

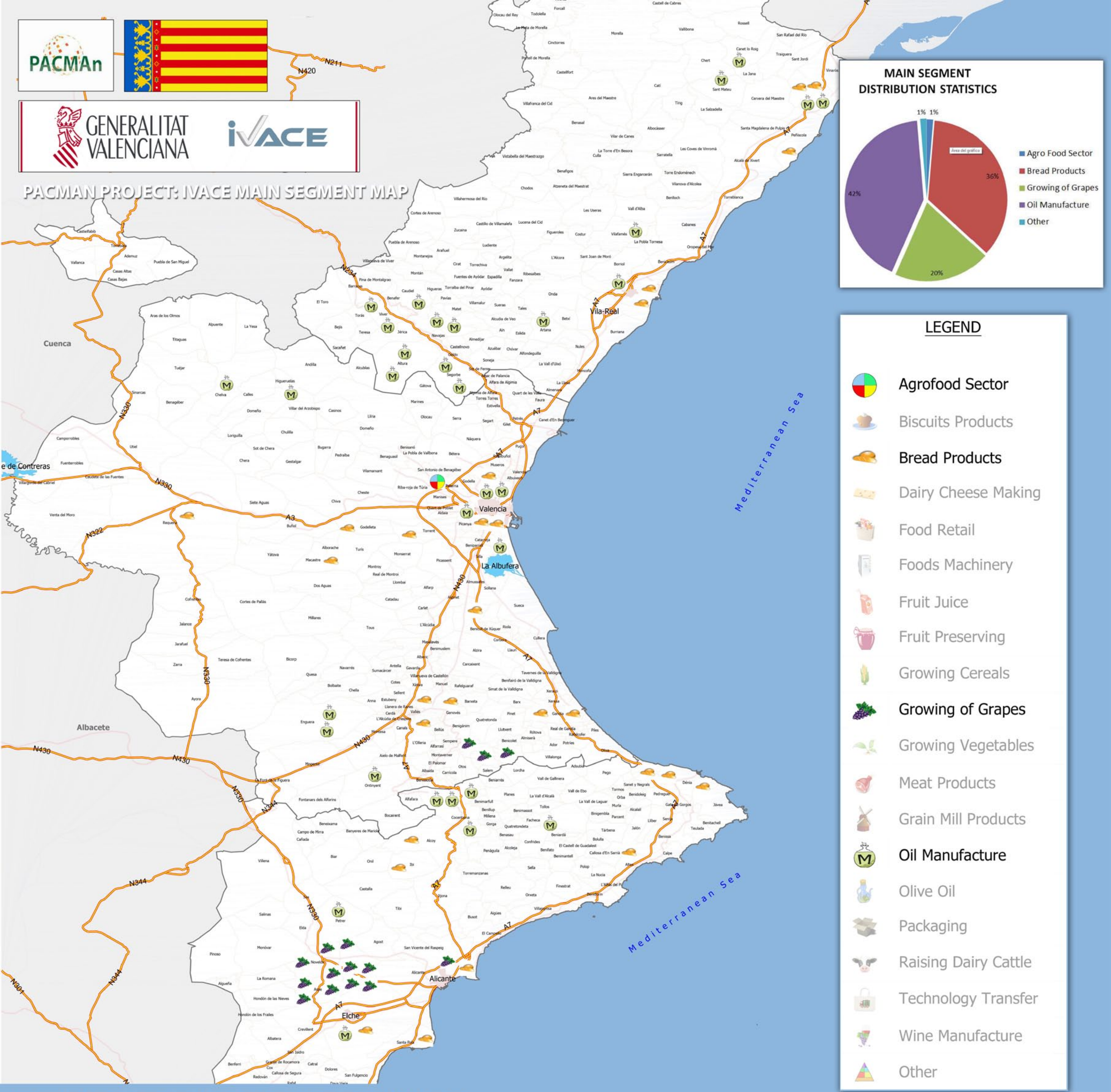
PDO "Uva del Vinalopó"	website
Denominación de Orígen Uva del Vinalopó (PDO)	http://uva-vinalopo.org/wp/archivo/consejo-regulador/

Aceite Olivos Milenarios Territorio Senia	website
Olive oil Senia Territory Association	www.asociacionterritoriosenia.org

Asociación Promoción Cocas y coquetes	website
Regional asociation of cocas and coquetes	www.cocasycoquetes.org

	website
IVACE	www.ivace.es

	website
ainia - Technological Centre	www.ainia.es



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Chapter 04

Networking Opportunities with the Agro-food Systems from the Murcia Region

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4.1.- Introduction to the agro-food systems in Murcia Region. The Agrofood Cluster

The Agrofood sector in Murcia Region, comes suffering in the last years, an increasing loss of participation in the markets, as consequence of diverse facts and trends. In one side the increasing competition of products from third countries in which the presence of fruits and similar vegetables, and the most limited prices of workforce, makes very difficult the presence of the products from Murcia Region in the international markets. On the other side, the sector traditionally has evolved a little for example in relation to the level of new products and of course in relation to the actions of presence on the markets. As well, many companies sell with client's brand, which makes them very vulnerable to the competition of third countries.

The products dedicated to the consumers, are suffering big changes, as consequence of the new social habits, and the incorporation of the woman to the active work, which does that we have, each time, major number of products, which with little modification are ready to eat.

In the Region of Murcia, the concept of Cluster, as a group of interconnected companies and associate institutions, tied by activities, geographically near and common and complementary interests, is strong. In a small geographical space, there are a strong presence of producing companies, suppliers, and institutions of support as it will be indicated later. It is given nevertheless, the paradox, of which the degree of relations between the companies and research institutions, is very limited, a trend that demonstrates the need of the development of a process of change.

Therefore we have in Murcia all the circumstances, for the need of a deep reflection between the actors of the sector, in order to define processes of change, strongly supported, for the different components of the agrofood cluster and the agrofood value chain.

Table 1. Number of companies of the subsectors that compose the food-processing sector and his numbers of employment in the Region of Murcia.

SUB-SECTOR	Microcompanies (less than 9 employees)	SMEs (From 10 to 99 employees)	Big Companies (more than 100 employees)
Agriculture, ganadería caza	2.018	50	3
Selviculture, Forest explotation	16	2	0
Fishing and fish farming (acuiculture)	135	15	0
Processing food industry and drinks	1.194	252	28
TOTAL	3.363	319	31
Employment	25.013		
% Employment	4,98%		

Table 2. Industrial census and productive capacity for sectors in the region of Murcia during the year 2010 and 2011.

	2010		2011	
AGROFOOD SECTOR	Number of industruies	Total capacity (Tn/year)	Number of industruies	Total capacity (Tn/year)
MEAT	945	358324,46	967	366509,56
OLIVE OIL	90	289553,5	89	282879,5
MINERAL WATER, SPRINLING WATER AND REFRESHING DRINKS	11	531420,5	11	531420,5
ANIMAL FEED	191	683988,77	209	1162926,95
FOOD PREPARED FOR DIETETIC AND / OR SPECIAL PEOPLE ∑	28	14623,88	30	14711,18
APPETIZERS: DRY FRUITS AND SNACK	94	405728,55	95	405818,55
SUGAR	11	1256,14	11	1256,14
COFFEE, TEA AND OTHERS INFUSIONS	13	3420,79	13	3420,79
BEER AND BEER MALT	1	133990,00	1	133990,00
MANUFACTURE OF PRODUCTS OF GRAIN MILL, STARCHES AND STARCHY	25	92354,2	26	93127,7
AGRARIAN INDUSTRIES	18	139758,00	19	140175,00
BYPRODUCT TREATMENT INDUSTRIES	13	747409,00	14	822409,00
CACAO, CHOCOLATE AND CONFECTIONERY PRODUCTS INDUSTRIES	37	56395,00	38	56469,99
FOREST INDUSTRIIES	27	31612,91	27	31612,91
OTHER OILS AND FATS	1	17780,00	1	17780,00
OTHER ALCOHOLIC PRODUCTS	37	206730,15	35	204330,15
OTHER FOOD PRODUCTS	135	1110857,63	137	1142038,13
FOOD PASTA	5	9,23	5	9,23
PREPARED AND TRANSFORMED OF FRUITS AND VEGETABLES.	684	4236420,61	703	4683415,61
RICE AND LEGUMES	5	1057,50	5	1057,50
BREAD, PASTRY COOK'S AND COOKIES	1118	69418,06	1136	70143,31
MILK SECTOR	109	781229,47	109	781229,47

MEANS OF PRODUCTION	3	1830	23	38493
PREPARED SOUPS, EXTRACTS AND SPICES	146	611783,78	151	609261,78
WINE	202	3598189,51	223	3623393,21

4.1.1.- Juices

According to the last statistical available information, the sector of the conserve food was integrated by 163 companies in 2011 (DIRCE-INE). The sector reached a number of turnover of 1.669 million Euros, almost 40 % of the regional food processing industry and 10,85 % of the VAB to basic prices. The conserve industry employed 7.734 persons in 2010 according to the Industrial Annual Survey of Companies 2010 of the INE

For his excellent raw materials and his high technological and specialization degree, the production of conserves and juices have positioned the Region of Murcia in the first positions regarding exports, commercializing their products principally in Europe and USA.

The sector presents a wide range of elaborated food, that comes out widely the traditional concept of ‘vegetable processing and conserve food’. Companies, that work in the area of vegetables processing (vegetables, fruits or both), acquire special protagonism. It is included in this area the activities corresponding to the “Manufacture of conserves of fruits and vegetables” and to the “Manufacture of Juices and nectars” (of fruits and vegetables); the jams and compotes and other cremogenades; pickles and olives, as well as sauces. It is very frequent that the companies work as well with the production of conserves of fruits with the production of vegetables, it isn’t the case with juices and conserves or other products.

4.1.2.- Canned (Fruits and vegetables)

In the group of conserves NACE 1533 it is included a varied group of elaborated products (conserves and frozen) from legumes and vegetables.

In this group the Region of Murcia is very importance, especially in certain products like: artichoke or pepper. In the national total stands out the value that reaches the production of olives (917 million Euros), followed by other vegetables and their mixtures (539 million Euros), legumes and frozen vegetables (352 million Euros) and elaborated of tomato (concentrates, in fresh and pasta, for this order).

In relation to tomato, with a production very located in Extremadura, but also important in Murcia and Almeria, is used by companies of the second transformation for the production of sauces, juices or prepared plates, activity in which the Region of Murcia has companies with high level of technology and importance.

This group of products, in general very traditional, is suffering in a very intense way the competition proceeding from third countries. The loss of market is a reality. For example, the national production of asparagus is losing more and more in the last years - his production gets down 17 % in annual average in the period 2005/10-similar to the loss lived in the last years by the Region of Murcia in the conserve of artichoke, or pepper, where Murcia Region continues being a national leader.

The sector of the canned vegetables has experimented on the period 2004/10 an average annual growth of his GVA (Gross Value Added) of 6,66 % (of 6,08 % in his sales to exit of factory). The differences according to the size of the companies - expressed according to the number of workers- allow us to detect a different behaviour between the small canned food enterprises (of less than 19 employees), in which the growth of the employment in the last four years has been very negative (-6,60 %), as well as his GVA to the cost of the factors (-1,35 %) and his production (-0,47 %). This scanty growth of the value generated by the rate of companies of minor size, it is necessary to relate to the strong growth that the labour costs experiment on his component, to that it is necessary to join a brute surplus of exploitation that registers a considerable decline. Though his capacity of generation of employment has been negative, this one it has been less than the one which have lived in the companies of minor size.

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4.1.3.- Machinery

The sector of the machinery for the food processing industry is a top sector in the Region of Murcia, which has developed under the protection of the summit of other sectors of great importance like the food-processing industry, principally conserve, canned and horticultural of great quality.

The importance of the food-processing sector has favoured for years the creation of an industry destined for a better commercialization of their products. It is a question of a very heterogeneous sector that it includes machinery, technology and equipments specialized for all kinds of operations in the manufacturing and food packaging:

> Machinery for the food processing industry (for the subsectors of pastry shop, grain mill, treatment of cocoa, canned (vegetables and fish), wine, etc.) and equipments of conservation: chambers of refrigeration and lines of pre-cooling.
>
> Machinery of bottling and packaging of liquid products or pastas and mashes (cleaners, pasteurization machines, rotary of court of domes of bottles, filling, dosing machines, label machines, etc.).
>
> Machinery for packing (, machines to form and to close flexible packings, cardboards, equipments of control and measurement, and other technologies applies to machinery).

The machinery and food-processing equipment industry is the second sector with major weight in the regional industry in Murcia. According to the official numbers, the industry of machinery and food-processing equipment, formed by more than 2.000 companies, invoices more than 769 million Euros, which represents 25% of the GVA of the Community and 85% of the industry metalmechanic, employing directly more than 20.000 persons:

- NUMBER OF COMPANIES: 2.000 (98% SMEs)

- DIRECT EMPLOYMENTS: 20.900

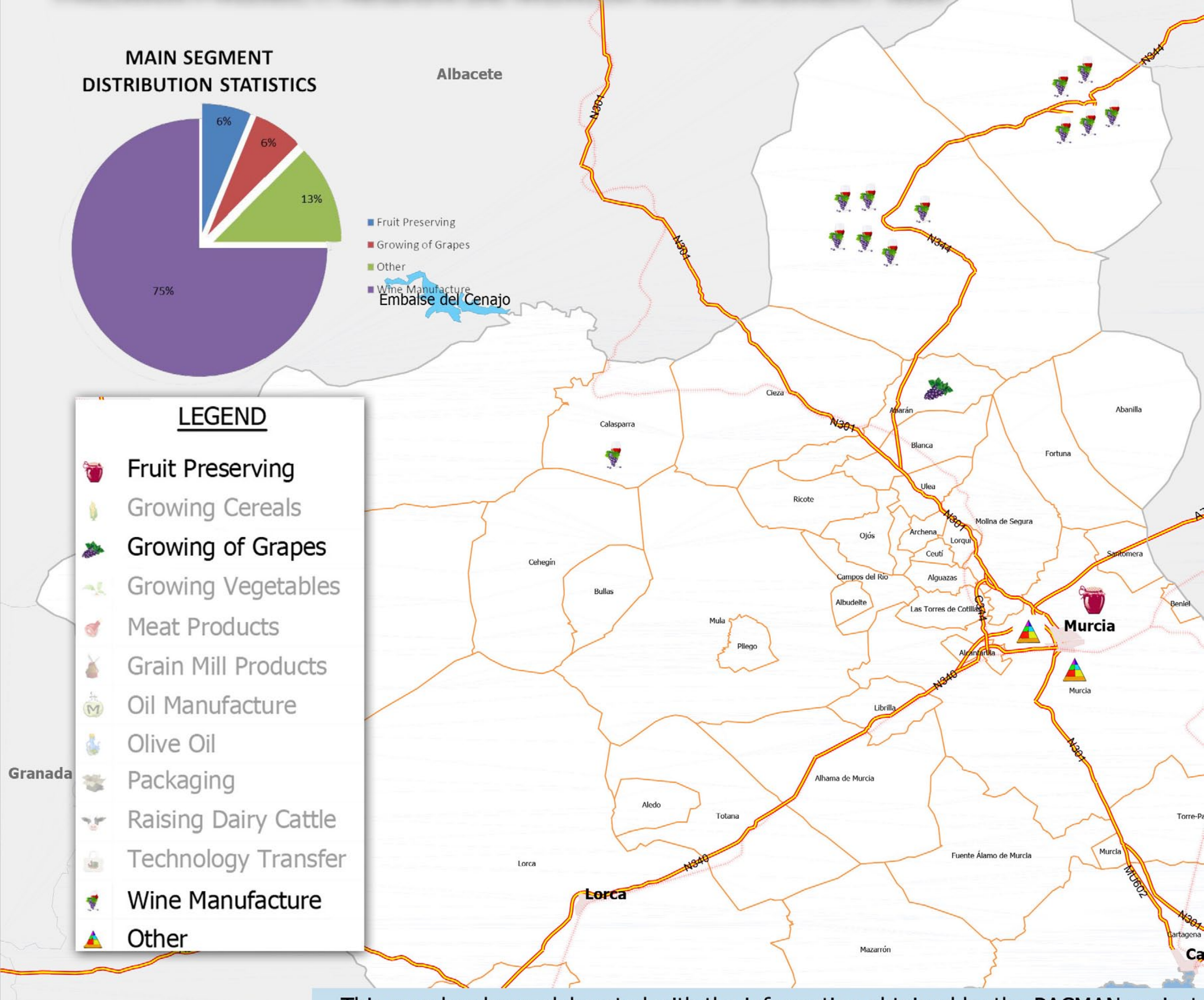
- TURNOVER OF COMPANIES (2008) 768 M€

The companies of the sector have increased its productivity and its sales in the exterior in the last years, thanks to his aptitude to adapt to the demands of the most exclusive clients. The sale of projects turnkey, that is, from complete processes tailor made to the client, it is used to be one of his strong points and the principal product exported by some of the machinery of packaging companies from Murcia, especially, of palleting.

The manufacturers of machinery for the food-processing industry have a wide experience, centred principally on his nearness to the important regional sectors of manufacture of tinned vegetables and juices and, in minor measure, to those of paprika, cereals and animal fodder, and a technical capacity that it allows them to design, to construct and to implant advanced equipments and complete lines of transformation and packaging, as well new technological developments.

During the last years a clear trend is observed towards the technological renovation and towards the innovation and the applied research. Some of the traditional manufacturers stand out for the high technological qualification of his offer of machinery, both on the domestic market and in the international one.

PACMAN PROJECT: REGIÓN DE MURCIA MAIN SEGMENT MAP



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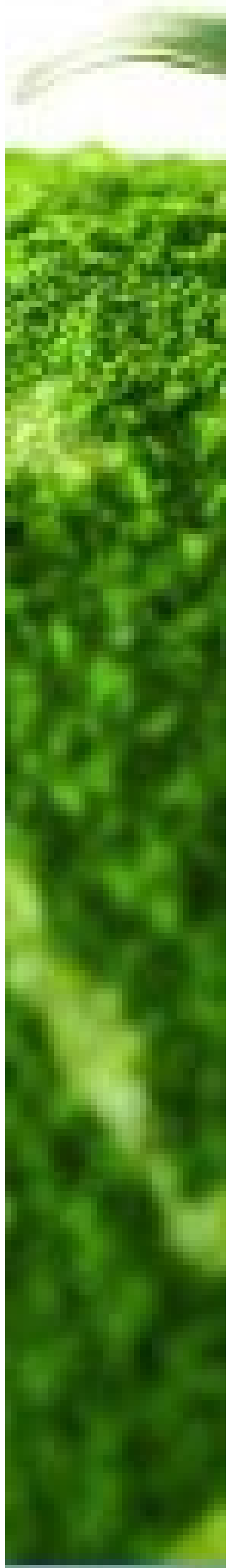
Chapter 05

Networking Opportunities with the Agro-Food Systems in the Region of Crete (Greece)



The primary sector is responsible for roughly 10% of the Gross Added Value produced in Crete. The structure of cultivation demonstrates specialization in traditional produce such as olive trees and viniculture. Market gardening covers only 3% of the total cultivated area, but Crete contains almost 50% of the country's greenhouses, with advantages in vegetable and flower production. Animal husbandry is dispersed in nature (mostly free-range sheep and goats), with a small number of organised farming units. There are significant preconditions for the development of hard cheese production, which comprises 25% of national production. Concerning the secondary sector, manufacturing is mainly connected to processing primary sector products (food and drink). According to the last available statistical figures, roughly 1/5 of the population in Crete is employed in the primary sector.

Manufacture of oils and fats

- 8.000 year old industry
- 65% of Cretan agricultural land
- 30 million olive trees
- 100-120 thousand tones olive oil
- Together with tourism largest income source
- Exporting vast majority

Producers organised in cooperatives mainly according to geographical region

Manufacture of wine from grape

- Ancient - traditional activity
- 15% of Greek wineries
- Cooperative and private wineries
- Second largest regional production in Greece
- Largest number of cooperatives
- Limited and declining exports
- Innovation challenges: Biological (organic) wines, vine tree replacements, increase quality, move to bottled wine, production automation

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Growing of vegetables and melons, roots and tubers

- 50% of Greek green houses are in Crete
- Majority of production consumed in mainland Greece and abroad
- Innovation challenges: Biological (organic) products, new kinds of vegetables with high demand and good prices, green house technology and education

-Contact details for above mentioned products:

-www.crete-exporters.gr (Crete Exporters Association)

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Chapter 06

Networking Opportunities with the Agro-Food Systems from the PACA area

6.1.- Introduction to the agro-food systems in the PACA Region

As an exemplary region of geographic and cultural diversity, the region of Provence-Alpes-Côte d'Azur is home to a wide variety of landscapes that have all influenced its culinary heritage, which boasts bountiful colours, scents and flavours, blending tradition and modernity.

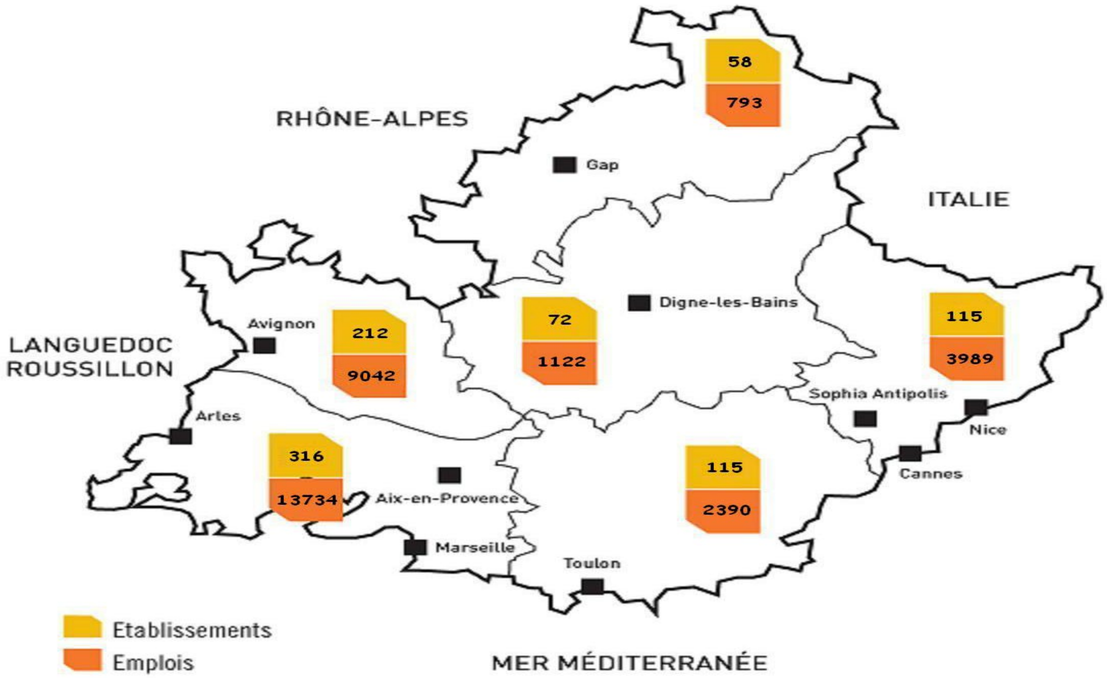
The agro-food sector (excluding the wine-growing sub-sector) is one of the flagships of the region and a major force by dint of its economic power. It is a dynamic sector and a major generator of employment, ranking as the 2nd biggest industrial employer in the region with more than 29,000 jobs.

The agro-food industrial fabric consists of 880 companies, most of them small enterprises, many of which are family-run: 66% of the agro-food companies in the PACA region have less than 20 employees (classed as 'very small enterprises').

738 agro-food companies export produce, the total turnover from exports amounting to 3.370.528.985€.

Made up of six departments (Alpes de Haute-Provence, Alpes-Maritimes, Bouches-du-Rhône, Hautes-Alpes, Var and Vaucluse), the PACA region embraces very different landscapes and climates. Its produce reflects this diversity, covering, amongst other things, fruit, vegetables, vineyards, livestock farming, cereals, olives, fishing and aquaculture, and aromatic, scented and medicinal plants.

Fruit and vegetables accounts for more than 50% of regional production, quality wines for 20%, and floral and horticultural products for 16%. The PACA region is also a major contributor to the national economy (representing 75% of France's olive oil production, 65% for lavender and lavandin essence, 30 to 50% of vegetable output, 30 to 60% for the main fruit varieties, 30 to 70% for flowers (roses, mimosas and carnations). It is the only region in France where rice is produced (76,000t of Camargue red rice) and also accounts for 16% of national hard wheat output (pasta products and semolina). It is also home to 30 AOC products (registered designation of origin) and a similar number of other labels and certifications. Its agro-food industry is the third most-successful in the country (behind only Brittany and Ile de France).



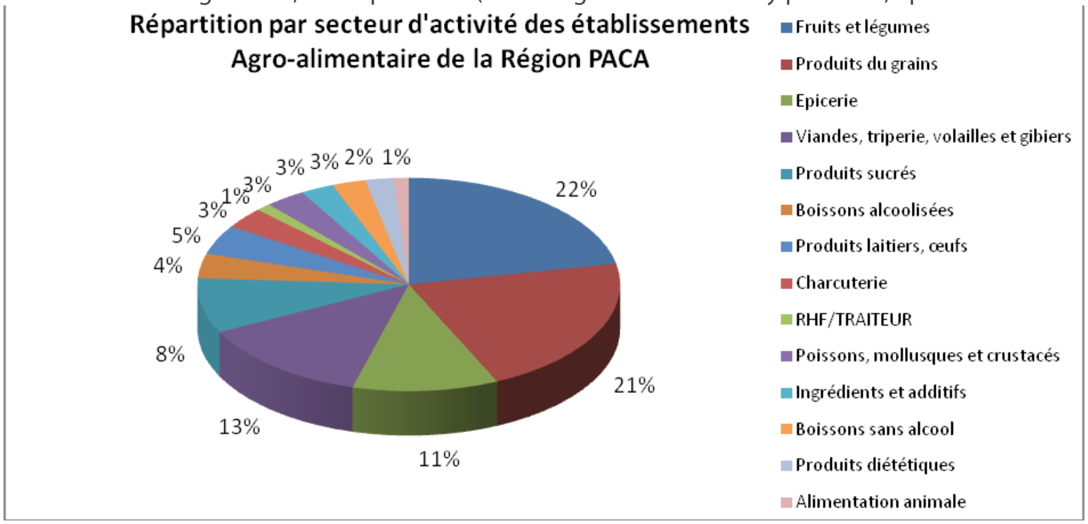
Répartition des établissements et des emplois Agro-alimentaires de la région Provence-Alpes-Côte-d'Azur
(Source CRITT - 2010)

PACA department	Number of companies	Number of employees	Average number of staff	Median number of staff *
Bouches du Rhône	316	13734	43	10.5
Vaucluse	212	9042	43	12
Var	115	3989	35	15
Alpes maritimes	115	2390	21	9
Alpes de Haute Provence	72	1122	16	8
Hautes Alpes	58	793	14	7
Total	**888**	**31070**	**35**	**10**

* media number of staff: This is the middle value where two groups are separated along the lines of 50% above and 50% below.

(Source: Agronet FRIAA/CRITT base – April 2011)

The diagram below illustrates that the three sectors that are the most heavily represented in PACA are: Fruit and vegetables, Grain products (including industrial bakery products, Spices



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The impact of R&D projects in PACA is hindered by the insufficient training of staff in methodologies specific to product development. Human and financial resources that should be allocated to R&D are instead assigned to food quality and safety issues. It is important, therefore, to gain better understanding and control of innovation methodologies in order to avoid, for example, problems arising from the absence of product specifications.

The Regional Council offers a financial support scheme for agro-food producers in the form of subsidies for business start-ups and support for consultancy, investment (in production equipment, infrastructure upgrades, etc.) and employment, etc.

There are also support mechanisms that are not exclusive to the agro-food sector, such as OSEO Innovation's subsidies or refundable advances for, in particular, technological projects, and feasibility studies for innovative projects and so on.

Companies can get help with applications for such support from bodies that are heavily involved in the economic development of the regions, such as the Fédération Régionale des Industries Agroalimentaires (Regional Federation of Agro-Food Industries - FRIAA), the Centre Régional d'Innovation et de Transfert de Technologies Agro-alimentaire (Regional Centre for Agro-Food Innovation and Technology Transfer - CRITT), the Institut de Formation Régional des Industries Agroalimentaires (Regional Training Institute for Fruit and Vegetable Innovation - IFRIA) and the European Fruits and Vegetable Cluster (PEIFL). The Regional Council provides substantial subsidies to help accomplish this type of endeavour.

Strengths in the regional agro-food :

	STRENGTHS

Positioning	The sector has substantial economic size and impact Increasing number of companies Diversified sub-sectors
Export	Some companies have virtually unrivalled commercial dynamism and export rates Marseille: a hub for spices and aromatic products
Renown/image	Provence has a strong image + nutritional assets of regional dishes High number of quality, authentic and organic products and of niche products Strong image and renown facilitates marketing and capitalising on the recognised link between the land/people and the product
R&D Innovation	R&D dynamism and local potential
Workforce	A very highly qualified workforce Availability of high-quality specialist and multi-disciplinary education High calibre company management.
Corporate environment	Close relations between contractors and subcontractors in the PACA region Good land availability in the west of the region High number of bodies for supporting the agro-food industry and wine sub-sectors A crossroads in the Mediterranean
Environment	Cultivation of perfume plants and aromatic and medicinal plants is deeply rooted in the region and very respectful of the environment

6.2. Matrix of thematic sections and opportunities in relation with the key organizations belonging to the agrofood system

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This section shows the relation among the main key organizations (business operators as single companies, or their associations, or laboratories, or universities, etc…) of the 3 agro-food clusters of the PACA region participating in the PACMAn project. The objectives of this section is to facilitate a clear vision of which are the main business and networking opportunities for other external interested parties when approaching these operators.

The key opportunities for collaboration are classified in the following possibilities:

Matrix of Opportunities in Relation with the Operators of the Area	
01	The organization has the capacity to sell their product directly at international level
02	The organization has the capacity to sell their product through an already existing network of distributors in Europe
03	The organization (or their representatives) has the capacity to establish a consolidated commercial network at international level
04	The organization can make exchange of production good agricultural practices with other similar regional areas for its products
05	The organization has the capacity to make technology transfer and provide innovation solutions
06	More suggestions from the partners
07	The organization has the capacity to export
08	The organization has the capacity to provide education and training
09	The organization has the capacity of attending to International fairs
10	The organization has the capacity of organization local events at regional or local level

Operator Identification	01	02	03	04	05	06	07	08	09	10

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Association Representative	●			●	●	●		●		●
Development Agency	●			●						
Laboratories	●				●	●		●		●
Training bodies					●	●		●		●
Other						●				●

6.3.- Contact points

In this section you can find the main contact points for some key organizations or access gates to the agrofood systems or segments….

Here is a non-exhaustive list of the main regional bodies involved in these three sub-sectors:

body	Sub-sector of activity	website
AFIDOL	olives – olive oil	http://www.afidol.org/
AGROSCIENCES	Fruit and vegetables	http://agrosciences.univ-avignon.fr/

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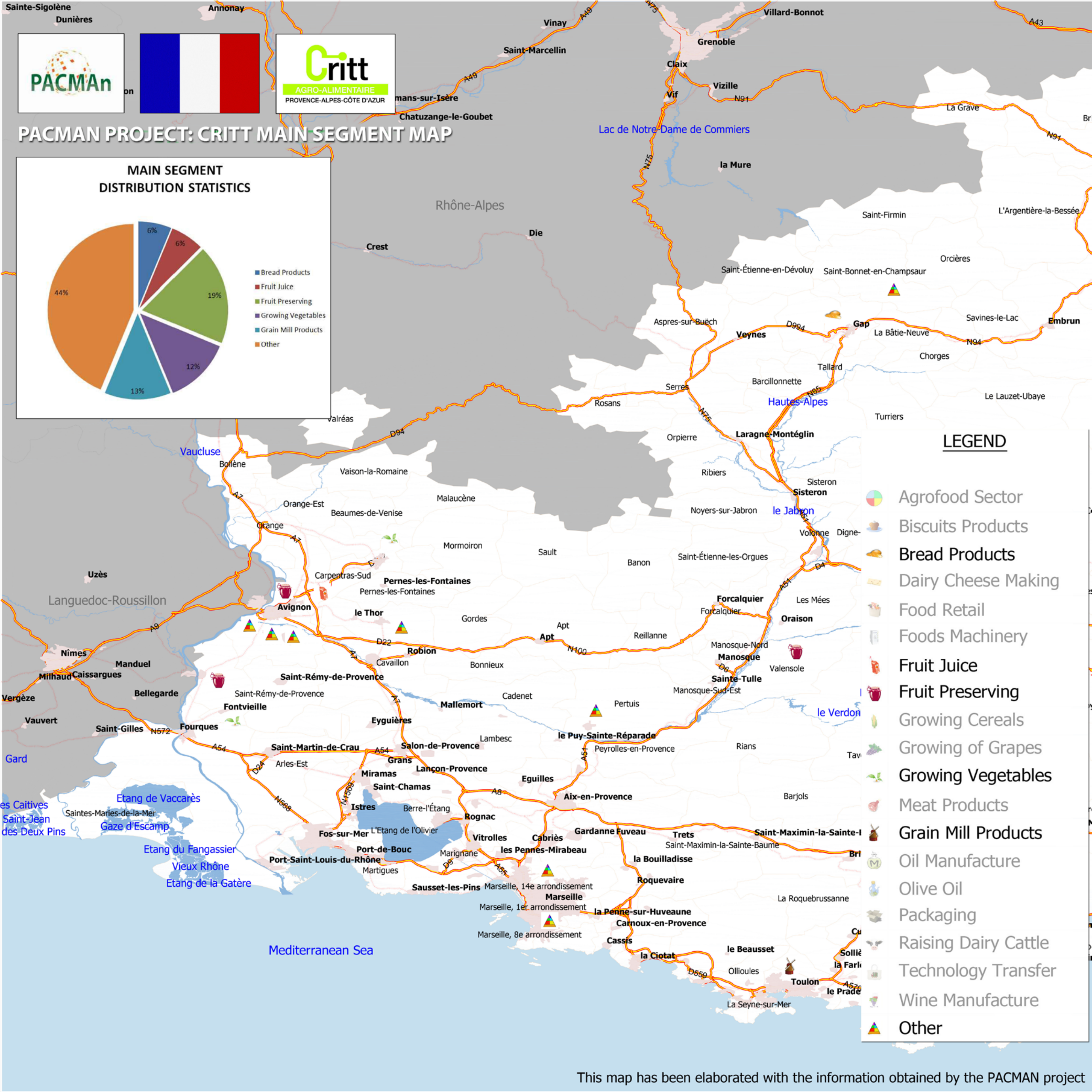
ARVALIS	cereals	http://www.arvalis-infos.fr
GENERAL COUNCIL	various	http://www.vaucluse.fr/
REGIONAL COUNCIL	various	http://www.regionpaca.fr/
COOP DE France	various	http://www.coopdefrance-alpesmediterranee.coop/frca/presentation-FRCA/nos-valeurs.html
CTCPA	Tinned fruit and vegetables	http://www.ctcpa.org/
FRIAA and CRITT	Various sector	http://www.friaapaca.com/ http://www.critt-iaa-paca.com
INRA	Fruit and vegetables	http://www.inra.fr/
PEIFL	Fruit and vegetables	http://www.peifl.org/v2/public/


PACMAn
Critt
AGRO-ALIMENTAIRE
PROVENCE-ALPES-CÔTE D'AZUR
PACMAN PROJECT: CRITT MAIN SEGMENT MAP
MAIN SEGMENT
DISTRIBUTION STATISTICS
6%
6%
19%
12%
13%
44%
Bread Products
Fruit Juice
Fruit Preserving
Growing Vegetables
Grain Mill Products
Other
LEGEND
Agrofood Sector
Biscuits Products
Bread Products
Dairy Cheese Making
Food Retail
Foods Machinery
Fruit Juice
Fruit Preserving
Growing Cereals
Growing of Grapes
Growing Vegetables
Meat Products
Grain Mill Products
Oil Manufacture
Olive Oil
Packaging
Raising Dairy Cattle
Technology Transfer
Wine Manufacture
Other
Mediterranean Sea
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Promoting attractiveness, competitiveness and internationalisation of Agro-food Clusters of the Med Area

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Chapter 07

Networking Opportunities with the Agro-food Systems from Province of Modena

7.1.- Introduction to the agro-food systems in the Province of Modena

Modena Province is located in Emilia Romagna region in the North-East of Italy, in the centre of the Italian most productive area and advanced economy. The efficient network of infrastructures and its strategic geographical position makes Province of Modena an important commercial hub well linked to northern and southern Italy, and between the Mediterranean and Northern Europe. The Province of Modena area is functionally integrated within an efficient regional system of social and economic infrastructures that keep together a dense network of manufacturing and services enterprises. Modena ranks among leading areas for entrepreneurship and economic dynamism of its industry and high performances in terms of export sector and high return of R&D activities.

The system of industrial districts characterize the productive structure of Modena with the presence of several industrial poles involving hundreds of specialized and independent small and medium sized businesses, concentrated in specific areas and operating in the same sector, either collaborating or competing. The districts are caracterized by a strong vertical integration along the value chain and they grew around some localized industrialized segments that brought to the development of a dense and integrated network of enterprises, with a high level of specialization that allow them to be strongly competitive both nationally and internationally. Such competitiveness is also due to the development of integrated production chains spread in the territory, deeply linked to knowledge, skill and the system of territorial relationships. The main strength of the industry system can be identified in its considerable vocation to learn, innovate and co-operate. In term of internationalization, exchange development, relations with foreign Countries the local economy is characterized by a strong aptitude and a long tradition of openness. Modena's territory Internationalization strategy focus on export the well-known brands all over the world and also attract foreign multinationals, trade with foreign markets with production agreements and direct investments abroad. In particular for the agro-food sector, the regional imports are 1,17M€ against 0,8 M€ of exports. The Italian dairy sector is characterized by the greatest amount of Protected Denomination of Origin (PDO) and Parmigiano Reggiano cheese is the most representative of the province of Modena.

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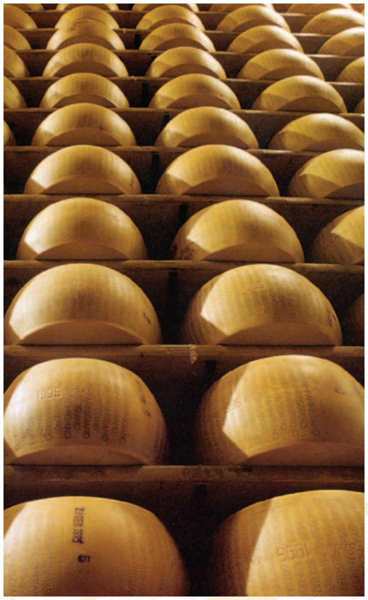
7.1.1.- Parmigiano reggiano (chesse)



The agro-food district of Parmigiano Reggiano Cheese is an example of excellences for the territory, known and exported throughout the world. The area interested by the production of Parmigiano Reggiano cheese is located between 5 Provincial territories and is composed of about 384 dairies representing 3507 farmers and milk producers. Parmigiano Reggiano is a product with Protected Designation of Origin (PDO), according to European EEC REG No 2081/92 and the recognition of Reg (EC) n.1107/96. It is estimated that the turnover linked with Parmigiano Reggiano is more than 1924 M€, of which 34% related to exports. Only cheese rigorously produced according to the rules can bear the trademark Parmigiano Reggiano and therefore it must be stated on the form marks in their entirety, which are intended to identify and distinguish the product. They are distinguished between signs of origin and brand selection. The guarantee of authenticity and conformity of the product is given by the Consortium of Parmigiano Reggiano, which define the product specification and checks its application. It is also responsible for the supervision of the Denomination of Origin (PDO). Despite the size of the area devoted to production, the strong sense of identity promoted by the consortium justifies the classification of the district.

PARMIGIANO REGGIANO EXTRA

PARMIGIANO REGGIANO EXPORT

EXTRA
It is the Parmigiano-Reggiano cheese that, after 18 months of maturation, has passed an additional quality assessment test upon
request of the cheese holder.

EXPORT
Symbols and Marks Like the EXTRA mark, it is Parmigiano-Reggiano cheese that, after 18 months of maturation, is classified as first
grade by the experts of the Consortium

Three seasoning, three variations of flavours, tastes and aromas. Since 2007 three stamps identifies the minum maturity of Parmigiano-Reggiano sold in packs, to give consumers more and clearer information.

1.- STRENGHTS of the agro-food system
Presence of industrial districts and entire chains of production mainly related to the production of traditional foods known worldwide. “Quality” and “Tradition” represent the real value of the certified products and are considered more relevant targets than reducing the costs required for the production process, leading to a niche market, characterized by small availability of high added value specialties. Some of the Modena typical traditional products are: PDO Parmigiano-Reggiano, PDO Aceto Balsamico Tradizionale di Modena, PDO Prosciutto di Modena, PGI Zampone Modena, PGI Cotechino Modena, DOC Lambrusco di Sorbara, DOC Lambrusco Grasparossa di Castelvetro, DOC Lambrusco Salamino di Santa Croce.

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Large adherence to the organic sector, both by farmers and by the processing companies, for instance Parmigiano Reggiano made by milk from organic farming system that follows directions to products specifications. The industry interest into organic production is considered strength as far as this sector is a market in rapid expansion worldwide.
Consortia of traditional products producers, able to ensure and to enhance the value of local PDO and PGI products on national and international markets.
Strong propensity to internationalisation
Widespread membership of business associations that make possible a practical level of consultation with stakeholders. For instance, the 80% of Parmigiano- Reggiano cheese producers in Modena are cooperatives.
Consumer perception of the safety and high quality level of traditional productions;
Product differentiation in terms of presentation and packaging (vacuum packed pieces, snacks and ready grated cheese);
Contribution to rural development plans with “excellences” business activities located in disadvantaged such as mountainous areas.

7. 2.- Origin of the agrofood system

There is a very strong connection between Parmigiano-Reggiano and its place of origin which cannot be disregarded. Parmigiano-Reggiano derives from its territory and from the mastery of man. Today, just like nine centuries ago, it is still made with the same ingredients (milk, salt, rennet) and the same care and passion, in the same area of origin. The milk is produced and then converted into mature cheese for a minimum of 12 months up to over two years, each wheel is checked until maturation.

When it is said that Parmigiano-Reggiano cheese has been “a great cheese for at least nine centuries”, it is not only highlighting its ancient origin. Indeed, it means pointing out that this cheese today is still identical to how it was eight centuries ago, having the same appearance and the same extraordinary fragrance, made in the same way, in the same places, with the same expert ritual gestures.

Today like in the past, cheese masters continue in their effort and in their risk by sincerely and proudly persisting in making their cheese with solely milk, rennet, fire and art, and in abiding by the rigorous centuries-old methods and application of the technique that is the result of special vocations and matured experiences.

Parmigiano-Reggiano is guaranteed from more than seventy years from the Consortium and, above all, it is loved for its generous taste it is the story of how the guarantee of genuineness of Parmigiano-Reggiano cheese is now an absolute guarantee, thanks to the precise rules, applied with strict conformity self-discipline and control.

7. 3.- Which are the food products involved..(farmed, manufactured…)?

Nace Code 10.51 – operation of dairy and cheese making : PDO Parmigiano-Reggiano cheese.

7. 4.- Who is part of the agro-food system?

The dairy industry is characterized by a remarkable presence of highly specialized cooperative enterprises; about 3705 firms in 5 Provinces: Modena, Parma, Reggio E. Bologna on the left bank of river Reno and Mantua on the right bank of the river Po . The dairy chain accounts for all upstream and downstream milk processing activities, from the production of milk to its distribution to the final consumer. These activities are divided into 6 phases: Dairy cattle feeding, Milk production and gathering, Transport, Processing, Packaging, logistic/distribution. In the province of Modena there are almost 750 farmers that produce milk to deliver it to the dairies. Milk producers are the starting point of the Parmigiano-Reggiano supply chain. In the Parmigiano-Reggiano producing area, most dairy farms are highly specialized, since the technological innovations introduced in milk production (especially in feeding and milking techniques) are managed by highly professional farmers. The chain of Parmigiano-Reggiano is complex, given the presence of different types of actors and stakeholders that influence the structure and the behaviour of the chain:
1) Farmers (milk producers that follow specific discipline of farming system) : the production structure of Parmigiano Reggiano is based on a dense network of farms that supply milk

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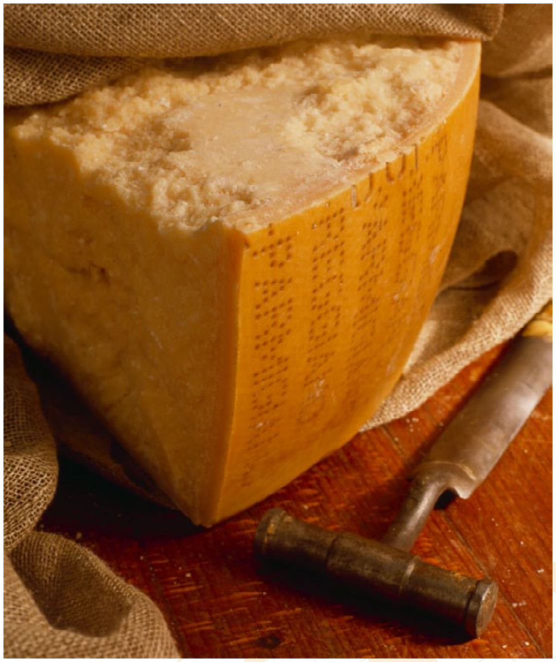
to co-operative and / or private dairies located within the area defined by the PDO code of practice.



2) Dairy Cooperatives (80%): collect the milk and process the cheese, and can be divided by cooperatives with and without cheese ripening phase. Dairy Cooperatives are at the core of the Parmigiano Reggiano system.

3) Private dairies are important in the supply chain of Parmigiano Reggiano: Artisans Dairies process the milk into cheese. Private dairies can be with and without cheese ripening phase.

4) Farm dairies: these are dairy farms, which produce Parmigiano Reggiano directly from their own milk. They have developed recently from larger farms, thanks also to subsidies from the Regional Rural Development Plans.

5) Ripeners and wholesalers: Ripeners and wholesalers carry out ripening of cheeses after 12 months until it is ready for sale. They thus carry out the technical function of ripening bearing the economic risk of trading on price variations.

6) Retailers: the retail system is quite differentiated, as Parmigiano Reggiano is a product that must enter the assortment of all retailers, and is often a key element of their policy to attract customers and retain loyalty.

7. 5.- Who are other organizations around the agrofood system?

The organization around the agro-food system are public actors or intermediate institutions: Consortium managing the brand (Consorzio Formaggio Parmigiano-Reggiano – CFPR) it plays an important role in the development of the entire sector. Its role in safeguarding was officially recognised by a law of 1955. This law awarded the PDO (Protected Denomination of Origin) marker to Parmigiano Reggiano.

Other institutional actors are:

- Region of Emilia Romagna;
- Provincies of the area of Parmigiano Reggiano;
- Chambers of Commerce;
- CRPA (research centre of animal production) Institute of research;
- Research centre for innovation and technological transfer ASTER (Bologna), DEMOCENTER SIPE (Modena)

These are public institutions at Regional and Provincial level. One of their functions is to support the Parmigiano-Reggiano system through EU financed Regional Development Programs (RDP) and manage EU dairy policy instruments. An example of this is the technical assistance provided to farms and dairies, largely financed by the regional government. Local Chambers of Commerce also make a contribution in promoting the image of the product and in supporting local traders. They also play a technical role in fixing the reference prices for the Cheese at different levels of aging.

7. 6.- Key figures:

NUMBER OF ORGANIZATIONS	TOTAL VOLUMES	QUALITY MARKS	% OF PRODUCTION EXPORTED
384 dairies representing 3507 farmers and milk producers	turnover linked with Parmigiano Reggiano is more than 1924 M€	Parmigiano Reggiano is a PDO, according to European EEC REG No 2081/92 and the recognition of Reg (EC) n.1107/96	34% (in 2012 year)

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7.7. Matrix of thematic sections and opportunities in relation with the key organizations belonging to the agrofood system

The key opportunities for collaboration are classified in the following possibilities:

Matrix of Opportunities in Relation with the Operators of the Area	
01	The organization has the capacity to sell their product directly at international level
02	The organization has the capacity to sell their product through an already existing network of distributors in Europe
03	The organization (or their representatives) has the capacity to establish a consolidated commercial network at international level
04	The organization can make exchange of production good agricultural practices with other similar regional areas for its products
05	The organization has the capacity to make technology transfer and provide innovation solutions
06	The organization has the capacity to promote the food Safety and quality control
07	The organization has the capacity to export
08	The organization has the capacity to provide education and training
09	The organization has the capacity of attending to International fairs
10	The organization has the capacity of organization local events at regional or local level

Operator Identification	01	02	03	04	05	06	07	08	09	10
Producers of Parmigiano-Reggiano cheese	•	•	•	•		•	•	•	•	•
Chamber of commerce and Public Authorities			•	•	•	•		•	•	•
Consortium of Parmigiano-Reggiano cheese	•	•	•	•	•	•	•	•	•	•
Research and technology transfer Centres			•	•	•			•	•	•

STAKEHOLDERS (Dairies, Manifacturers & operators) a GPS guide of the dairies for the main satellite navigation systems and the full list of dairies with e-commerce, with direct sales or with a web site can be downloaded from the website http://www.parmigianoreggiano.com/where/search_dairies/ext/cercacaseifici/default.aspx

GUIDED TOURS OF DAIRIES: Is possible to visit the dairies trough the "Guided tours of dairies": http://www.parmigianoreggiano.com/where/guided_tours_dairies_1/default.aspx

The Consortium of Parmigiano-Reggiano offers the opportunity to make guided visits to the

dairies in the province of Modena to see the cheese makers at work, repeating the antique actions of milk processing. Visitors will be led to the discovery of a true "living myth", from its birth, which happens only once a day, to the long and slow maturing in the maturing store rooms. Guided visits are free and held from Monday to Friday Visits start by 8.30 am and take about two hours Visitors are always accompanied by a representative of the Consortium. For further information you can contact: telephone 059.208630 fax 059.208635 e-mail: sezionemo@parmigiano-reggiano.it

PARMIGIANO REGGIANO MUSEUM: The objects on display can be placed in a time frame between the second half of the XIX century and the first half of the XX century, it's on display the maturing process, marketing and sales, as well as information about use of the cheese in gastronomy and its history. Museum of Parmigiano-Reggiano Tel +39.0524.596129 E-mail: prenotazioni.parmigiano@museidelcibo.it

THE ROAD OF PARMIGIANO REGGIANO DAIRIES & TERRITORY OF THE PROVINCE OF MODENA: Buying Parmigiano Reggiano directly from the maker becomes the chance to discover the territory around the dairy, the real "cradle"of this gastronomic excellence, the travelling guide is to learn about the constellation of tastes, art, culture and nature that shines in the territory of Modena, from the lands of the lower plain to the Apennine ridge. http://storage.parmigiano-reggiano.it/file/lestrade_modena_eng-2.pdf The guide presents the list of 79 operators details (57 dairy retailers and 22 dairy wholesales) from the Province of Modena.

For updated information on the world of Parmigiano-Reggiano and the dairies making the cheese visit the website www.parmigiano-reggiano.it

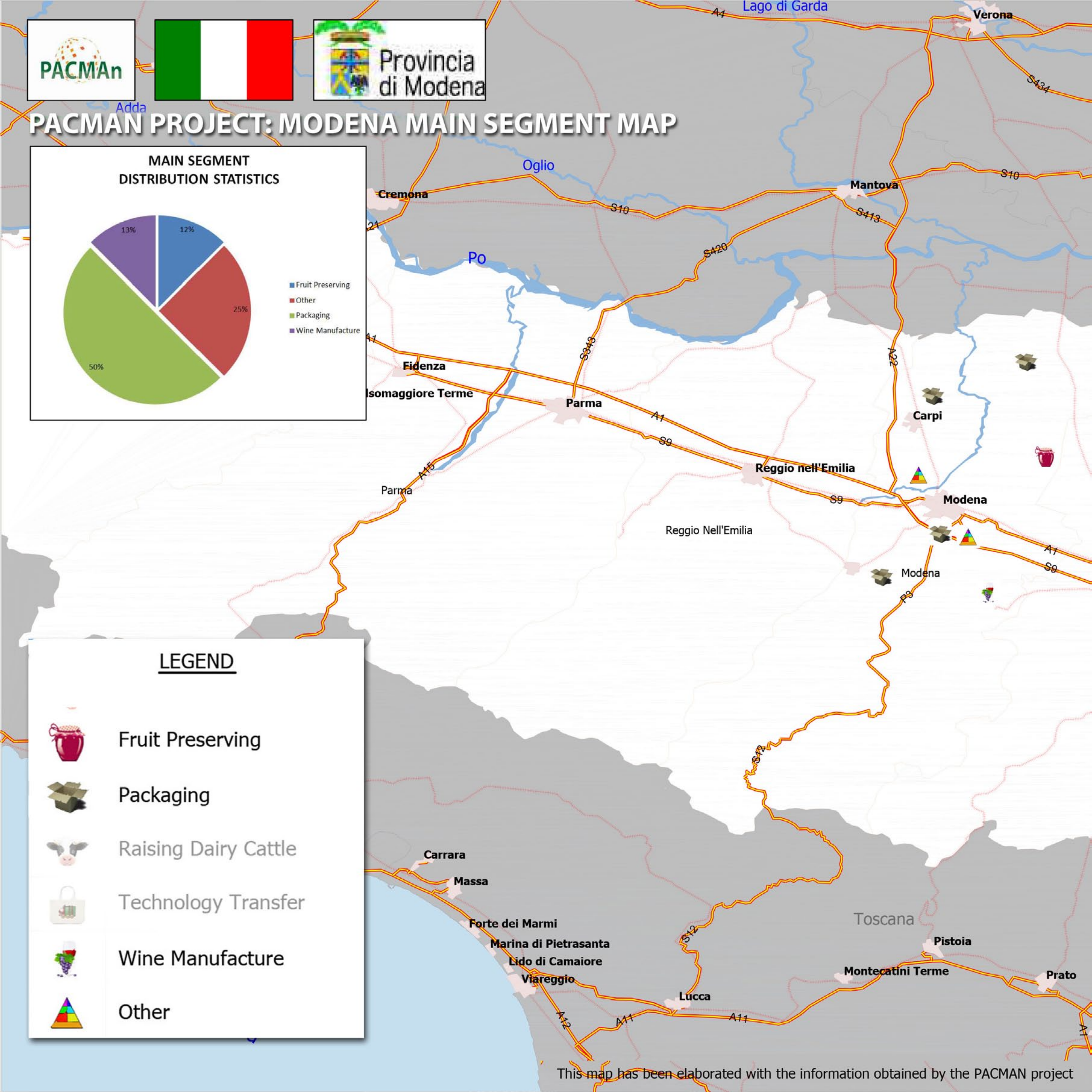
8.3.- Contact points for the PROVINCE OF MODENA

PDO "Parmigiano Reggiano"	website
Consortium of Parmigiano-Reggiano cheese	*www.parmigiano-reggiano.it* *Modena section: Viale Virgilio, 55 - 41123 Modena Tel. 059.208630 Fax 059.208635*

PDO “Parmigiano Reggiano” Producers	website
Parmigiano Reggiano Dairies: *Dairies with direct sales* *Dairies with e-commerce* **Dairies with a web site**	http://www.parmigianoreggiano.com/where/search_dairies/ext/cercacaseifici/default.aspx

EXPORT	website
48 Exporting firm of Parmigiano Reggiano	*http://storage.parmigiano-reggiano.it/file/2013_05_17_Elenco_Esportatori_per_sito.pdf*

All Modena Certified Products PALATIPICO	website
***Piacere Modena** is the brand of Palatipico srl enterprise*	*http://www.piaceremodena.it/en.aspx* *Consortium that gets together all the main **protection and promotion consortia** representing the Modena DOP und IGP food production. The company’s goal is to promote Modena area and products at a national and international level*


PACMAn
Provincia di Modena
PACMAN PROJECT: MODENA MAIN SEGMENT MAP
MAIN SEGMENT DISTRIBUTION STATISTICS
12%
25%
50%
13%
Fruit Preserving
Other
Packaging
Wine Manufacture
LEGEND
Fruit Preserving
Packaging
Raising Dairy Cattle
Technology Transfer
Wine Manufacture
Other
Lago di Garda
Verona
Adda
Oglio
Cremona
Mantova
Po
Fidenza
Parma
Carpi
Reggio nell'Emilia
Modena
Reggio Nell'Emilia
Carrara
Massa
Forte dei Marmi
Marina di Pietrasanta
Lido di Camaiore
Viareggio
Lucca
Toscana
Pistoia
Montecatini Terme
Prato
A1
A4
A11
A12
A15
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S9
S10
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S343
S413
S420
S434
P3
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“Promoting Attractiveness, Competitiveness and Inter

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Promoting attractiveness, competitiveness and internationalisation of Agro-food Clusters of the Med Area

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Chapter 08

Networking Opportunities with the Agro-Food Systems from Cyprus

8.1 Introduction to the agro-food systems in Cyprus

Agriculture and the food and beverage manufacturing industry are very important elements in Cyprus' economy. Although agriculture's share of the national economy declined in the 1990s, as the Greek Cypriot economy became even more dominated by the service sector, the island's favourable climate and its location near its leading market, Western Europe, meant that farming remains an important and stable part of the overall economy. Government irrigation projects encouraged farming's existence, as did research in new crops and new varieties of ones already in cultivation. The broad agro system is an important sector of the Cyprus' economy, both with respect to the production of essential food items for the population and exports and for the employment of thousands of rural residents and the containment of the depopulation of the villages. The agricultural sector spans a diverse range of activities including animal husbandry, forestry, fishing and crop production with potatoes, other vegetables, citrus, grapes and cereals being the main crop products. The diversity of the agro-food production reflects the wide range of soils and unique micro-climates in Cyprus which allow for the cultivation of strawberries, cherries, apricots and kiwis, as well as subtropical varieties such as avocados and bananas. In winter and early spring, substantial volumes of new potatoes, carrots and beetroot are exported. Recent years have also seen a major expansion of out-of-season salads and vegetable exports to the European Union with items such as okra and tomatoes doing especially well.

8.1.1 Dairy Products

Dairy products, and especially Halloumi cheese is Cyprus' major cheese export with volumes showing a year-on-year increase. The UK remains by far the major export market taking around 32% of the total exports followed by Germany (14%). Countries of the Middle East have traditionally been important haloumi customers and total exports to these countries are estimated at 1.200 tons (22% export share). The US and Canadian markets are also regarded as important but demand has remained fairly stable over the years at around 300 tons of halloumi made exclusively from sheep and goat milk. Current potential for halloumi exports is high as people gradually appreciate its value and learn its cooking secrets. Dairy products exports reach 26% of the total agrofood exports.

Strengths of the segment are: Cyprus' dairy products are already internationalized as export (26% of agrofood exports) especially halloumi cheese that is being sold in supermarkets in UK, USA, Australia etc., Cypriot traditional dairy products are becoming very popular and can create chain connections with many other countries, Cypriot entrepreneurs are highly educated and qualified in milk product processing and alliances with foreign milk processors and supermarket chains provide new market opportunities for local produces.

There are approximately eighteen associations of producers as well as manufacturers related to the agro-food system. These associations are well structured and organize and participate through their collective bodies when decisions are to be made regarding their field and many times managed to get very high reimbursements when needed. The association of dairy producers is very strong and the dairy products manufacturers are important stakeholders in the agrofood system.

The organizations/institutions that are solely oriented in agro research are the Agricultural Research Institute, The Department of Fisheries and Marine research, the Geological Survey Department, where there are also research bodies that not only conduct agro research but are involved in several other research studies as well such as the Cyprus University, Cyprus University of Technology, Private Universities, the Institute of Technology, State General Laboratories, and the Research Promotion Foundation which is the state body that one can apply for EU research funding. Since Cyprus is a very small island there are not any organizations that are solely oriented into dairy products related research.

8.1.2. Meat Products

The food and beverage manufacturing industry's annual turnover according to recent figures reaches almost 32% of the whole manufacturing industry with dairy products production to reach almost 18% of the F&B production turnover. The traditional meat products (Loukanika, Lountza, Hiromeri, Zalatina, Tsamarella, etc.) are produced by a small number of major manufacturers, three of which make up 70% of the total production these manufacturers produce a broad range of meat products in retail packs but a great focus is also given in the traditional Cypriot authentic meat variety mentioned above. The industry's other 30% is comprised of another twenty five or so small, local manufacturers who focus mainly on the production of the above mentioned authentic food products.

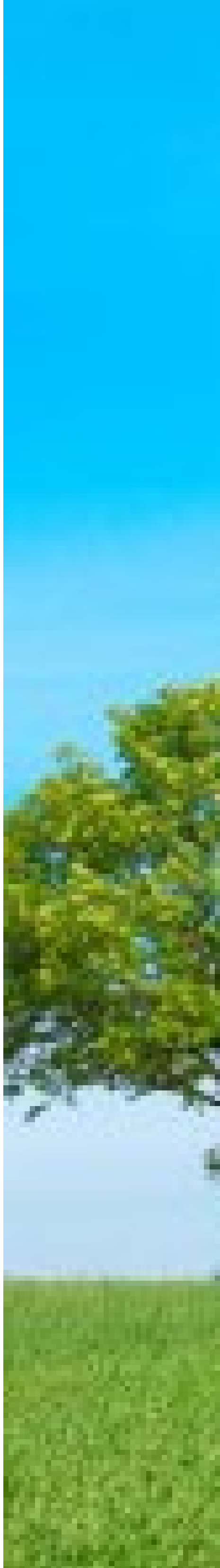
These traditional meat products are mainly produced with pork and, in less quantity, by the other kind of meat. The most well-known traditional kind of delicatessen is the «smoked» products and includes hiromeri, lountza, bacon and sausages which are made out of pork meat. Other traditional meat products are tsamarella and apohti. After Cyprus' entrance in the European Union in May 2004, manufacturers are trying to comply with the European Law and Regulations, in order to produce and provide quality products, based on the European patterns. Exports in meat products are increasing and reaching 7% of the total agrofood exports while the main importing countries of the traditional meat products are Greece, UK, Germany, Australia, USA, and Lebanon. .

The strengths of the segment are: Cypriot meat processed products constitute an important component of the diet of the local population, most of these delicatessens are made out of pork and only a small percentage of pork is imported, the rest is from local production, and can create chain connections with other countries that have tradition in producing similar products and cooperate in respect in innovation and R&D activities.

8.1.3. Traditional Sweets

The traditional Cyprus's sweets such as Phiniotika Loukoumia, Soutzoukos &Palouzes, Spoon Sweets, Loukoumia Geroskipou, and Carob tree products, are starting to grow and apart from making traditional sweet products at home, small commercial producers are becoming established in Cyprus, all of them though yet are small in size but with many potentials.

The traditional Cyprus's sweets such as Phiniotika Loukoumia, Soutzoukos & Palouzes, Spoon Sweets, Loukoumia Geroskipou, and Carob tree products (recently some carob production has been certified as organic, a move that may provide a new concept for the promotion of carob based products as an important part of a healthy and balanced



diet), are starting to grow. Apart from making traditional sweet products at home, small commercial producers are becoming established in Cyprus, all of them though yet are small in size but with many potentials. These, mainly family businesses are headed usually by village women who are committed to the preservation of traditional recipes and have developed the skills of commercializing the production of spoon sweets and other traditional sweet products. Over the course of time they learned how to run businesses and educated themselves with regard to marketing their products. Traditional homemade spoon sweets are now widely available through these small manufacturers who are serving the local market and are constantly trying to tap into international culinary market. At the moment only few producers have the ability to export due to the high costs of exporting but many have the capacity to export when the circumstances permit it.

Strengths of the segment are: the traditional Cypriot sweet have centuries of tradition in Cyprus and the recent years started to internationalize, after Cyprus' entrance in the EU, it is a field with much potential since networking and internalization are in is early stages and traditional sweets, and especially carob tree products, are considered beneficial for health and are sold in many health food stores. Companies in the field of traditional Cypriot sweets export to countries such as England, Australia, USA, France, Japan, Egypt, etc.

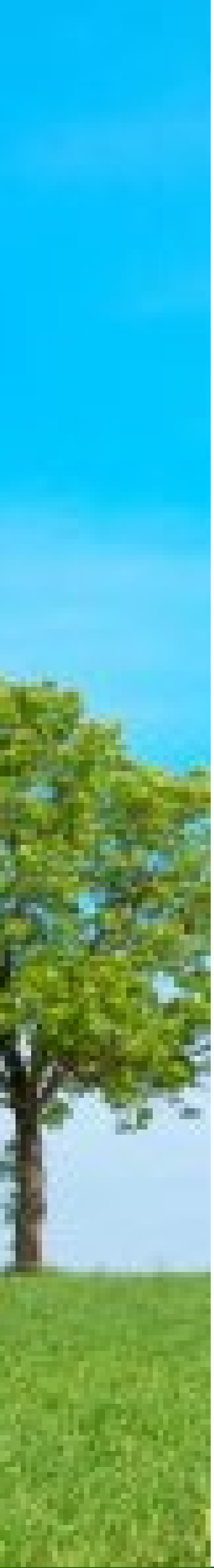
8.2. Matrix of thematic sections and opportunities in relation with the key organizations belonging to the agrofood system

This section shows the relation among the main key organizations (business operators as single companies, or their associations, or laboratories, or universities, etc…) of the 3 agro-food clusters of the Comunidad Valenciana participating in the PACMAn project. The objectives of this section is to facilitate a clear vision of which are the main business and networking opportunities for other external interested parties when approaching these operators.

The key opportunities for collaboration are classified in the following possibilities:

Matrix of Opportunities in Relation with the Operators of the Area	
01	The organization has the capacity to sell their product directly at international level
02	The organization has the capacity to sell their product through an already existing network of distributors in Europe
03	The organization (or their representatives) has the capacity to establish a consolidated commercial network at international level
04	The organization can make exchange of production good agricultural practices with other similar regional areas for its products
05	The organization has the capacity to make technology transfer and provide innovation solutions
06	The organisation has the capacity to promote agrofood as regional cultural assets
07	The organization has the capacity to export
08	The organization has the capacity to provide education and training
09	The organization has the capacity of attending to International fairs
10	The organization has the capacity of organization local events at regional or local level

Operator Identification	01	02	03	04	05	06	07	08	09	10
Association Cyprus Chamber of commerce & industry			●	●	●			●	●	●



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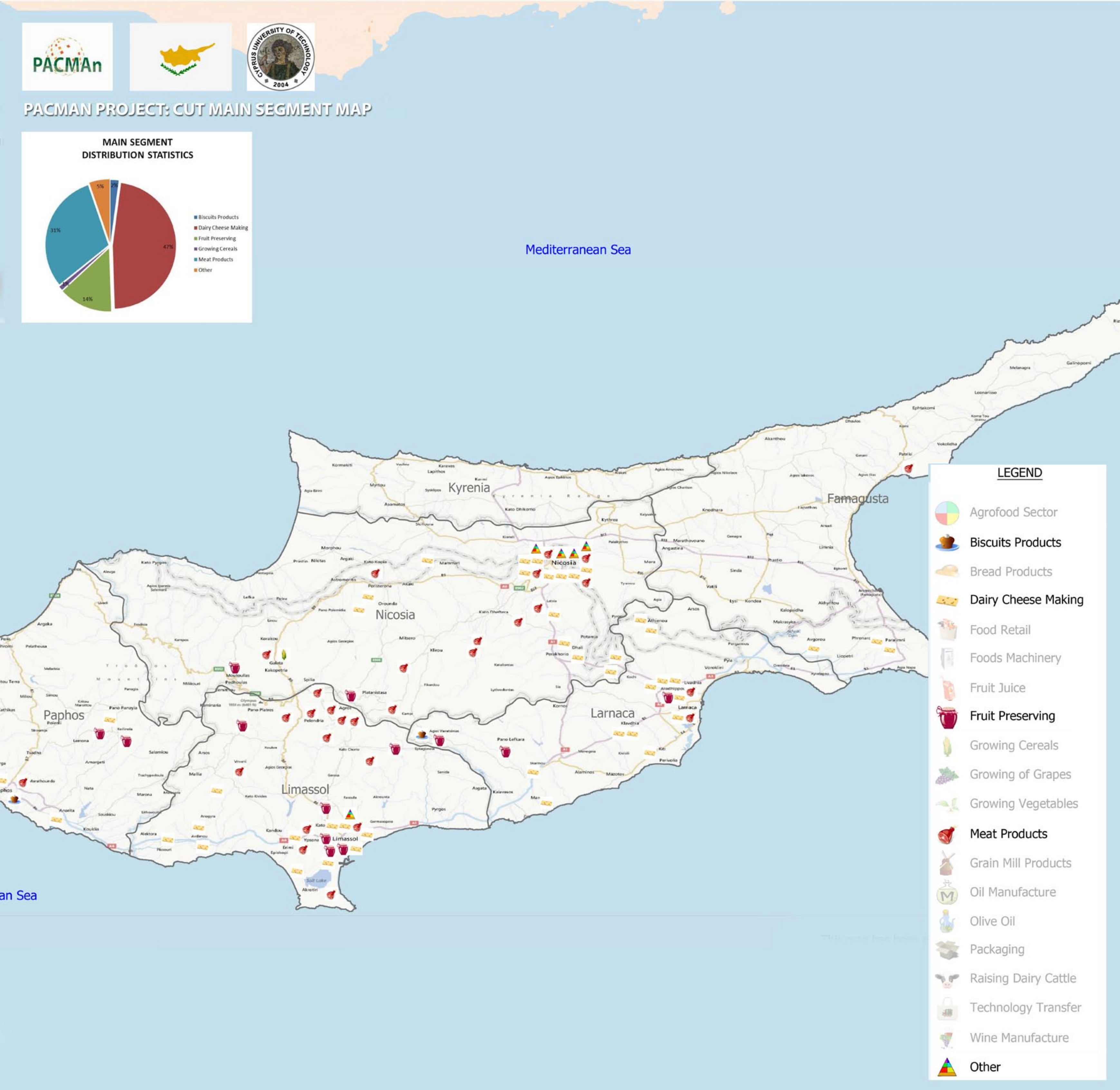
Association Pancyprian Association of organic growers			●	●	●				●	●
Development Agency Troodos Development Company			●	●		●		●	●	●
Development Agency Larnaca Development Company			●	●		●		●	●	●
Laboratory Agricultural Research Institute					●			●		
Training body Filagrotiki Symvouleftiki				●	●	●		●		
University C.U.T Faculty of Food Technology					●			●		
Gastronomy Tourism Kafkalias Cured Meats	●	●				●	●			
Gastronomy Tourism Niki's Sweets	●	●				●	●			
Cultural association Slow Food Cyprus				●		●		●		●
Cultural association Cyprus Food Museum				●		●		●		●
Farmers Association Panagrotikos Symdesmos				●				●		●

8.3.- Contact points

In this section you can find the main contact points for some key organizations or access gates to the agrofood systems or segments

Name	Identification	Address	website
Cyprus Chamber of commerce & industry	Association	Georgiou Griva Digeni 38, Nicosia	www.ccci.org.cy
Pancyprian Association of organic growers	Association	P.o.Box 25082, 1306 Nicosia	www.biocyprus.eu
Troodos Development Company	Development Agency	Galata, Troodos	n/a
Ministry of Agricultural and Natural Resources	Government Body	Louki Akrita 1411, Nicosia	www.moa.gov.cy
General Food laboratory	Government Body	44 Kimonos Str., Acropolis, 1451 Nicosia	www.moh.gov.cy
Agricultural Research Institute	Research Institute	P.o.Box 22016, 1516 Nicosia	www.ari.gov.cy
Network Cyprus food & Drinks	Agrofood Cluster	Neas Engomis 14, Engomi Ind. Estate 2409 P.o.Box 25102, 1306 Nicosia	www.cyprusfoodndrinks.com
C.U.T Faculty of Food Technology	University	Archiepiskopou Kyprianou 30, 3036 Limassol	www.cut.ac.cy
Slow Food Cyprus	Cultural association	international@slowfood.com	http://www.slowfood.com/joinus/membership/cyprus
Cyprus Food Museum	Cultural association		www.foodmuseum.cs.ucy.ac.cy
Panagrotikos Symdesmos	Farmers Association	P.o.Box 20758, 1663 Nicosia	



This map has been elaborated with the information obtained by the PACMAN project

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Chapter 09

Networking Opportunities with the Agro-Food Systems in Kilkis (Central Macedonia - Greece)

PACMAn

Promoting attractiveness, competitiveness and internationalisation of Agro-food Clusters of the Med Area

9.1. Introduction to the agro-food systems in the Kilkis Area

The main traits of Kilkis agricultural economy include impressive units within organized stock-breeding zones, as well as the vertical integration of production, especially with regard to dairy products,. The cattle's direction is the dairy production and the largest numbers of cows are bred in the areas of Chorigi, Messiano, Kastanies and Megali Vryssi.

The ratio of crops to livestock is 55:45 (the national level is 70:30), underlying the importance of livestock-breeding in the area. The predominance of durum wheat is due to very generous levels of subsidies from the Common Agricultural Policy (CAP).

Vines ale also grown (in Kilkis Prefecture there are more than 5,000 acres of vineyards) mainly in the semi-mountainous areas of Paionia, which has been classified as an Area of Designated Origin, producing the famous Goumenissa wine (more than 3,000 acres are situated in Goumenissa).

The last decades have witnessed a spectacular increase in agricultural production in the Kilkis prefecture with farms decreasing in numbers and increasing in size. Nevertheless, the size of the farms still remains rather small compared to the European average.

According to the latest available data (2009, Hellenic Statistical Authority), the total area of agricultural ground in the Kilkis prefecture amounts to 1,145,725 acres (195,414 acres of irrigated land).

The crops of: cereals, barley, maize, cotton, smoke and sugar beets, represent the biggest percentage of the agricultural ground of the Kilkis Prefecture, while garden stuff, energy crops and vines represent a smallest percentage.

More specifically, in the Kilkis prefecture the cereals are placed in the first position (79%) in terms of cultivated land (904,501 acres), while the Kilkis prefecture holds the first place in Greece in cereals growing (production of almost 130,000 tons of wheat). The crops of maize are cultivated in 48,997 acres and the crops of cotton in 73,968 acres. The cultivated land of sugar beets amounts to 1,995 acres while the cultivated land of smoke 1,187 acres. Energy

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crops are cultivated in 12,000 acres in the Kilkis prefecture.

Contrary to the National and European directions even today local farmers still prefer cultivating crops of cotton which face problems stemmed from the general European but also global evolutions (entrance of new producers-countries after the last enlargement, abolition of protectionism derived from the EU, etc.). It is also a fact that the rural subsidies constitute the irreplaceable “blood-donor” of the producers of the Prefecture of Kilkis. Therefore a high degree of dependence on the subsidies of European Union still exists.

The restrictions placed by the Common Agricultural Policy (CAP) imply future bottlenecks, considering that human capital in the agro-food sector is inadequately trained and financially endowed when it comes to the required restructuring of agrarian production.

However, apart from the subsidies it is required the continuation of infrastructure works in rural areas with actions aiming at the reduction of costs and the protection of the environment as well as actions of alternative sources of income (i.e. agro-tourism, farms able to be visited, etc.).

An equally restrictive factor for the growth of plant production to new directions is the fact that the cultivators invested excessive amounts in mechanical equipment and structures, towards the promotion of traditional crops. The resources spent to that direction, offer today a small increase in the production, whilst they deprive the possibility of reinvestment in new modern dynamic kind of crops.

The following six (6) agro-food segments were examined and analysed, in the framework of the PACMAn project, in the Kilkis area:

- *Segment 1: Operation of Dairies and Cheese Making*
- *Segment 2: Manufacture of Wine and Alcoholic Drinks*
- *Segment 3: Growing of Cereals*
- *Segment 4: Processing of Cereals*
- *Segment 5: Fruits and Vegetables Processing and Preservation*

- Segment 6: Manufacture of other food products (e.g. eggs production).

9.1.1. Operation of Dairies and Cheese Making

The area of Kilkis prefecture is suitable for livestock activity since it is surrounded by three mountains (Paiko, Belles, Krousia) and it has a good climate. During the Ottoman occupation, apart from home farming, husbandry was developed by local shepherds. The refugees coming from Pontos in the early 1920's enriched the area's cheese making tradition with unique traditional cheeses. The main types of traditional cheese of the area include: feta cheese (or white cheese in brine, or 'sirna', or goat cheese), the 'batsio' or 'batzo', the 'manouromytzithra', the 'tsemen', the 'paskitan' and the 'tsiokalik'.

Nowadays, impressive units within organized stock-breeding zones, as well as the vertical integration of production, especially with regard to dairy products, are the main traits of Kilkis agricultural economy. Cattle-farming represents the major livestock activity in the Kilkis prefecture and it is almost exclusively geared towards milk production in industrialized cattle breeding units. The largest numbers of cows are bred in the areas of Chorigi, Messiano, Kastanies and Megali Vryssi (annual production of 66,359 tons of milk).

The Kilkis prefecture boasts several renowned dairies that produce cheese, many of them having Protected Designation of Origin (PDO) and traveling throughout Greece, Europe and internationally.

According to the latest Kilkis Chamber data, there are in total twenty two (22) companies registered in the "Operation of dairies and Cheese making" segment (NACE Code: 10.51) in the Kilkis prefecture.

9.1.2. Manufacture of Wine - The 'Wine Roads of Northern Greece'

In Kilkis Prefecture there are more than 5,000 acres of vineyards mainly in the semi-mountainous areas of Paionia (more than 3,000 acres), which is an area renowned for its wines for centuries. Local geological and climate conditions create an excellent microclimate

for the production of fine wines. Goumenissa, the capital of Paionia, was once an important commercial centre due to the viniculture and the sericulture. There are several writings speaking of its fine red dry wines, which have been exported since the 19th century. Goumenissa area is one of the PDO Greek zones producing red dry wines from the red grape varieties 'Xynomavro' and 'Negoska'. Another white grape variety cultivated in the Goumenissa area is 'Roditis'.

Over the last few years more and more Greek wine-producers create their own Departments of Research and Development in order to ensure that they produce competitive products with common relative advantages, as well as establishing procedures which protect both the environment and humanity. In the area of Kilkis almost all wineries have created or plan to create Departments of Research and Development.

The 'Wine Roads of Northern Greece'

Through the Association 'Wine Roads of Northern Greece', 39 wineries of Northern Greece have directed part of their corporate activity towards a set of common objectives, such as: focusing primarily on grape growing and wine and on local cultural activities, participating in the formulation of general rules governing the relations between growers, wine-makers and wine merchants, with a view to optimizing co-operation, serving consumers and improving the quality of both products and services, building up the image of the wines of the Northern Greece Vineyard and promoting them in Greece and abroad, offering visitors an all-round wine tourism proposal around the vineyards and the beautiful landscapes of Northern Greece, supporting Greece's cultural heritage.

The following wineries of the Goumenissa area are represented in the 'Wine Roads of Northern Greece' (one of the very few successful examples of networking in Greece): the Winery of Christos Aidarinis, the Tatsis Family Winery, the Vaggelis Chatzivaritis Winery, the Boutari Winery.

According to the latest Kilkis Chamber data, there are in total twelve (12) companies registered in the "Manufacture of Wine and Alcoholic Drinks" segment (NACE Code: 11.01) in the Kilkis prefecture.

9.2. Matrix of thematic sections and opportunities in relation with the key organizations belonging to the agro-food system

This section shows the relation among the main key organizations (business operators as single companies, or their associations, or laboratories, or universities, etc…) of the agro-food sector in the area of Kilkis. The objectives of this section is to facilitate a clear vision of which are the main business and networking opportunities for other external interested parties when approaching these operators.

The key opportunities for collaboration are classified in the following possibilities:

Matrix of Opportunities in Relation with the Operators of the Area	
01	The organization has the capacity to sell their product directly at international level
02	The organization has the capacity to sell their product through an already existing network of distributors in Europe
03	The organization (or their representatives) has the capacity to establish a consolidated commercial network at international level
04	The organization can make exchange of production good agricultural practices with other similar regional areas for its products
05	The organization has the capacity to make technology transfer and provide innovation solutions
06	The organisation has the capacity to promote agrofood as regional cultural assets
07	The organization has the capacity to export
08	The organization has the capacity to provide education and training
09	The organization has the capacity of attending to International fairs
10	The organization has the capacity of organization local events at regional or local level

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Operator Identification	01	02	03	04	05	06	07	08	09	10
Association **KILKIS CHAMBER OF COMMERCE & INDUSTRY**				●	●	●		●	●	●
Development Agency **DEVELOPMENT AGENCY OF KILKIS**				●	●	●		●	●	●
Association / Union **UNION OF AGRICULTURAL COOPERATIVES OF KILKIS**							●		●	
Association **THE WINE ROADS OF NORTHERN GREECE**	●	●	●	●	●	●	●	●	●	●
Institute / Research Centre **INSTITUTE OF AGROBIOTECHNOLOGY / CENTER FOR RESEARCH AND TECHNOLOGY - HELLAS**					●			●	●	●
Educational Institute **AMERICAN FARM SCHOOL**	●	●	●	●	●	●	●	●	●	●
University **ARISTOTLE UNIVERSITY OF THESSALONIKI**					●			●		
Cluster **THE ORGANIC PRODUCTS CLUSTER**	●			●	●	●	●	●	●	●
Milk Products Company **KOUKAKIS FARM S.A.**	●	●	●	●	●	●	●		●	

Ecological Vineyards, Manufacturing of Wine CHATZIVARYTIS S.A.	●		●	●	●	●	●		●	
Manufacturing of wine KTIMA TATSIS S.A.	●		●	●	●	●	●		●	
Cheese and Dairy Local Traditional Products RAGIAN S.A.	●		●	●	●	●	●		●	
Consultancy Company EUROCONSULTANTS S.A.					●		●	●	●	●

9.3.- Contact points

In this section you can find the main contact points for some key organizations or access gates to the agro-food systems or segments.

Name	Identification	Address	website
KILKIS CHAMBER OF COMMERCE & INDUSTRY	**Association**	**Stenimaxou 2, 61 100, Kilkis, Greece**	**http://www.ccikilkis.gr**
DEVELOPMENT AGENCY OF KILKIS	**Development Agency**	**Solonos 13, 61 100, Kilkis, Greece**	**http://www.anki.gr**
REGIONAL AUTHORITY OF CENTRAL MACEDONIA – REGIONAL ENTITY OF KILKIS	**Public Authority**	**Andrea Papandreou 3, 61 100, Kilkis, Greece**	**http://www.kilkis.gr**

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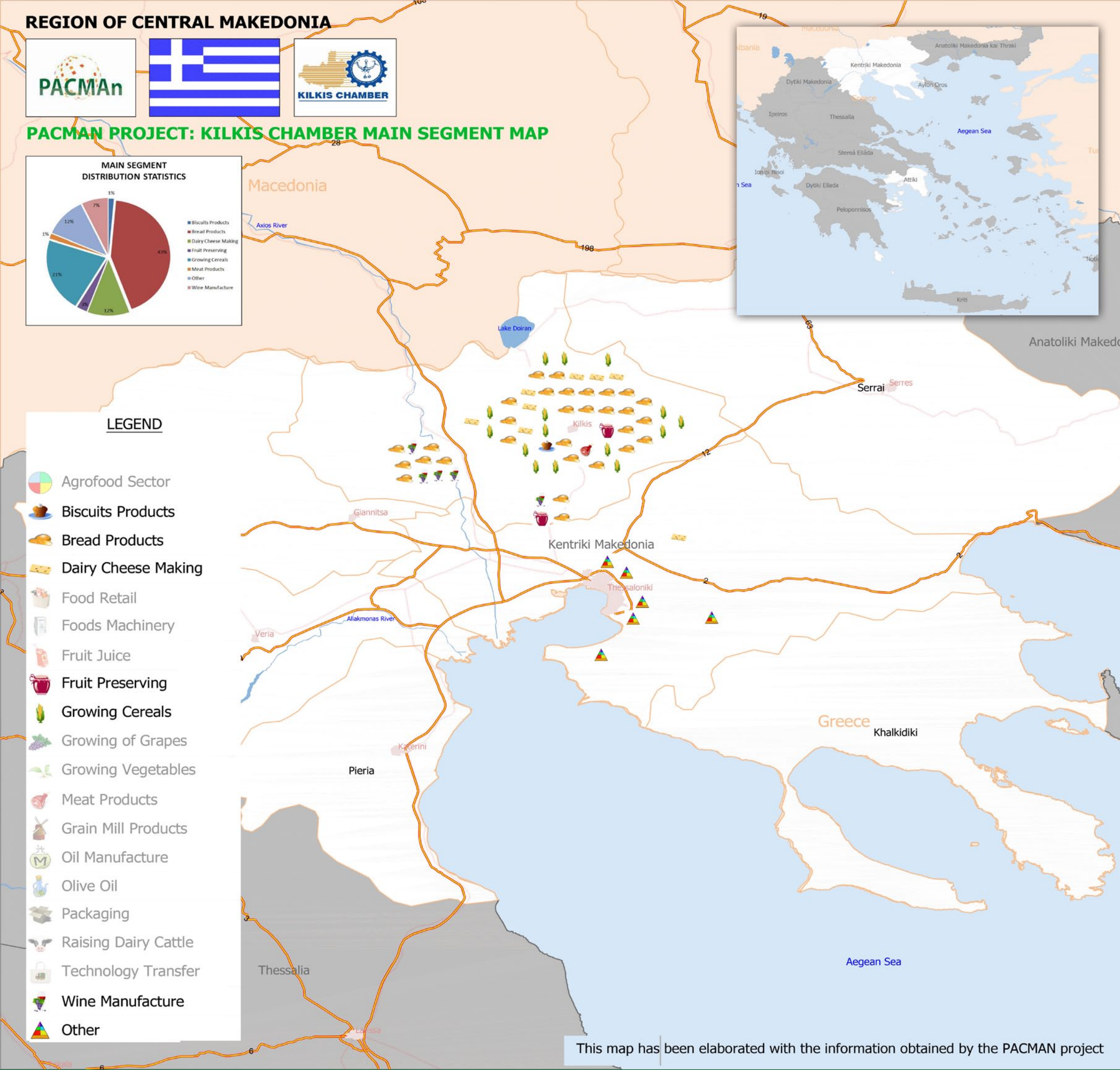
Name	Identification	Address	website
MUNICIPALITY OF PAIONIA	Public Authority	M. Alexandrou 75 - 77, 61200, Polykastro Kilkis, Greece	http://www.municipalityofpaionia.gr
MUNICIPALITY OF KILKIS	Public Authority	Georgiou Kapota 16, 61 100, Kilkis, Greece	http://www.e-kilkis.gr
MINISTRY OF RURAL DEVELOPMENT & FOOD	Public Authority	Axarnon 2, 111 43, Athens, Greece	http://www.minagric.gr
UNION OF AGRICULTURAL COOPERATIVES OF KILKIS	Association / Union	Thessalonikis 21, 61 100, Kilkis, Greece	n/a
THE WINE ROADS OF NORTHERN GREECE	Association	Giannitson 90, 54627 - Thessaloniki, Greece	http://www.wineroads.gr
INSTITUTE OF AGROBIOTECHNOLOGY / CENTER FOR RESEARCH AND TECHNOLOGY - HELLAS	Research Institute	6th Km Charilaou - Thermi Rd., P.O. Box 361, 57001, Thermi Thessaloniki, Greece	http://www.ina.certh.gr
AMERICAN FARM SCHOOL	Educational Institute	Marinou Antipa 12, P.O. Box 23, 551 02, Thessaloniki, Greece	http://www.afs.edu.gr
ARISTOTLE UNIVERSITY OF THESSALONIKI	University	University Campus, 54124, Thessaloniki – Greece	http://www.auth.gr

Name	Identification	Address	website
THE ORGANIC PRODUCTS CLUSTER (O.P.C.)	Cluster for Organic Products	1, Morihovou sqr., 54625, Thessaloniki, Greece	http://www.biocluster.gr
KOUKAKIS FARM S.A.	Private Company	Kato Apostoloi, 61 100 Kilkis, Greece	http://www.koukfarm.gr
CHATZIVARYTIS S.A.	Private Company	6th Km Provincial Road Goumenissa – Giannitsa, 61300, Goumenissa Kilkis, Greece	http://www.chatzivaritis.gr
KTIMA TATSIS S.A.	Private Company	2nd Km National Road Goumenissa – Filiria, 61300, Goumenissa Kilkis, Greece	http://www.ktimatatsis.gr
RAGIAN S.A.	Private Company	Vathi Kilkis, Greece	http://www.ragian.gr
EUROCONSULTANTS S.A.	Private Company	Antonis Tritsis 21, 57001, Pylaia – Thessaloniki, Greece	http://www.euroconsultants.com.gr



nationalisation of Agro-food Clusters of the Med Area”

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Chapter 10

Networking Opportunities with the Agro-Food Systems from the Alentejo Region in Portugal

10.1 The Alentejo region agro-forest complex and its recent evolution

Alentejo is the largest region of Portugal, situated in the South between the River Tagus and the Algarve (see figure 1). The climate is Mediterranean with rainfall between 400 and 600 mm, highly concentrated between October and April, and the summer is dry with almost no rain. Average temperatures are between 21 and 25 degrees centigrade, but maximum temperatures are sometimes over 40 during the summer and minimum temperatures during the winter nights are frequently below zero (Marques, 1988). As all "alentejanos" know Alentejo region was known in a time not too far away as the "bread basket of Portugal". This saying illustrates immediately and simultaneously two points. It is an agricultural region and has no parallel as such in Portugal. Alentejo represents roughly a third of Portuguese continental area but includes the majority of the usable agricultural surface (SAU concept used by National Statistical Institute in the Agricultural Census). Population of Alentejo makes about 5 % of total Portuguese population. Hence, population density is very low.

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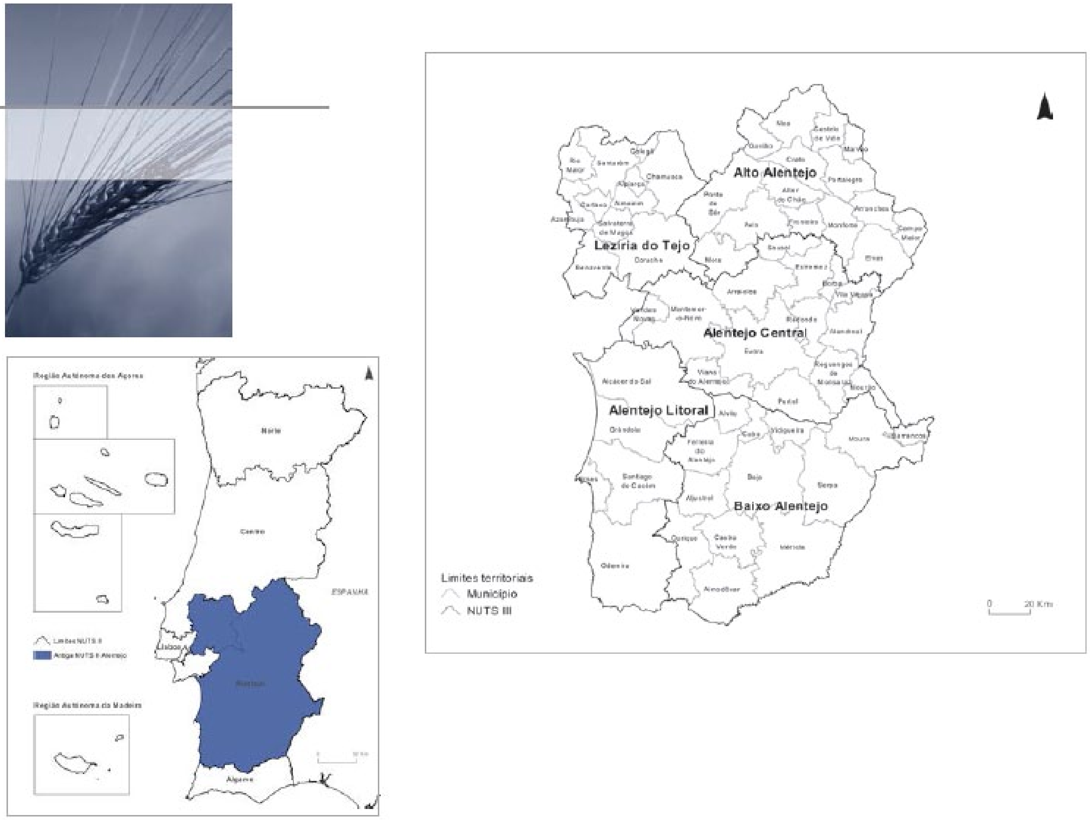
Figure 1: Alentejo region (NUTS II) location in the Portuguese continental surface and administrative division (NUTS III) and "concelhos" (counties)



Source: Alentejo region, The Territory, INE, 2012

Traditionally, Alentejo agriculture was rainfed, which meant that agricultural systems were based in arable crop rotations in good productivity potential areas associated with animal husbandry in medium to low potential areas, from cattle to sheep production according to forage production capability and natural pasture availability, and in areas under oak and cork trees associated with native pork breed of high quality in the so called montado areas(called dehesa in Extremadura and Andaluzia in Spain). Permanent crops, such as olive trees for olive and olive oil production and vineyards for wine were transformed in small units or cooperatives, which provided that service and returned part of the product related to raw material delivered and negotiated the rest of the production for sale in local markets. Vegetable and other horticulture crops were limited to small irrigated areas for household consumption and mainly small valleys and zones particularly endowed with water for production and sale in markets nearby, when farms were around consumer areas of small and average villages and towns.

With irrigated public perimeters implemented in the second half of the last century horto-industrial crops associated with agro-industry projects evolved and in the majority of the cases were successful with protected internal markets from outside competition that characterised the industrialization policy of Portugal before 1974. The gradual openness of the Portuguese economy with the new democratic regime and the Portuguese entrance to the European Economic Community in 1986 and the application of the Common Agricultural Policy (CAP) together with the rapid integration path promoted with the common market and the creation of the European Union some of these agro-industry projects closed down and others strived with difficult times.

Other traditional productions include high quality vegetable, fresh and dry fruits, beef and pork, sausage and ham, sheep and goat meat and cheese, olive oil and wine, honey, associated with territories and local areas from the Atlantic ocean to the border of Spain and from Tagus river to Algarve strip. From household and local markets these products were typified and associated with indications, denominations and certifications associated with traditional technology used and territory characteristics where they are produced, using appropriated EU instruments available to that purpose.

Alqueva, a multi-purpose socio-economic regional development based on a dam used to produce energy, to develop irrigated agriculture and to promote tourism has promoted important socioeconomic changes, particularly in the agricultural sector, with the availability of irrigated land to diversify agriculture and support scale dimension.

Wine and more recently olive oil clusters have had particularly success in developing their potential and gaining production and marketing scale. However, economic agents of these clusters and particularly wine and olive oil producers as well as their agricultural vineyards and olive suppliers face major challenges. To characterize these agri-food systems and explore their opportunities from networking is our major goals for this chapter.

10.2 The olive oil and the wine agro-food clusters of the Alentejo Region in the context of Portugal

Wine and olive oil are traditional Mediterranean products. Although Portugal continental territory latitude range is relatively small, Alentejo Mediterranean characteristics in the south are very different from center and north Portuguese regions which have other influences, namely atlantic and continental characteristics which influence their production potential and conditions. These together with other structural characteristics, namely topography and size, differentiate the Alentejo from other Portuguese regions. Hence, it is not of course a surprise that the relative importance of Alentejo olive and wine clusters, in terms of quantity and quality, be determinant in Portugal.

These two agro-food clusters have incorporated technological innovation, with genetic material, namely varieties, substitution of machinery for labour in different technical operations, such as cutting, pruning and harvesting, as well as industrial transformation technology and control. These two clusters experience high growth and rapid institutional and cultural change attracting investments and investors as well as agri-business activities including internationalization.

10.2.1 The Olive-oil cluster

The agro-food sector volume of sales of Portuguese agro-industries (excluding the beverage sub-sector), in 2010, was about 8.6 billion of euros and represented the largest share, 15 %, of total industry sales of 60 billion. Sales in internal markets represented 85 % of total value. Among agro-industries, olive oil is included in the group of production of animal and vegetal fat and oils. This group made up almost 0.8 billion euros and ranked sixth in relative importance of total value of agri-food industry sales. This group included 495 companies with 109 in Alentejo. Labour employment in this group was 2 308 persons. Total production was estimated to be 1.8 million tons.

In the region of Alentejo there are three DOPs (Denominações de Origem Controlada) Olive oil from North Alentejo (Azeite do Norte Alentejano), from Interior Alentejo (Alentejo Interior) and olive oil from Moura (Azeite de Moura), which respect east Alentejo north, center and South zones respectively. However, recently, Alentejo became, nor yet in definitive terms, a global IGP (Indicação Geográfica Protegida) which can be used to promote olive-oil of the whole Alentejo, subject to some limitations including the varieties used.

In 2011, Portuguese olive oil production was estimated to be 831.99 thousand hl. Alentejo production was 533.5 thousand hl which represented 64 % of total production. Olive oil mills operating in Alentejo also are on average of larger dimension than in Portugal, because they were 105 out of 527 in Portugal, i.e. a fifth of the total operating in Portugal but processed 311.8 tons of olives or a total share of more than 60 % of olive production. Lower Alentejo is by far the most important sub-region with 68 % of total Alentejo olive oil production.

Table 1: Olive oil mills, olive processed and olive oil production declared, 2011

	No.	t	hl/100kg	hl			
	Olive oil mills operating	Olives processed for oil	Oil produced per quintal of olives	Total	up to 0,8	from 0,9 to 2,0	over 2,0
					By degree of acidity		
				Olive oil collected			
Portugal	527	510 733	0,16	831 914	638 425	166 600	26 888
Alentejo	105	311 776	0,17	533 538	425 244	91 392	16 903
Alentejo Litoral	6	6 403	0,14	8 729	5 723	2 281	724
Alto Alentejo	26	25 906	0,16	40 483	26 688	11 974	1 821
Alentejo Central	22	56 919	0,17	98 256	64 031	31 149	3 076
Baixo Alentejo	29	211 314	0,17	368 664	316 035	43 020	9 609
Lezíria do Tejo	22	11 234	0,15	17 406	12 766	2 968	1 673

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Source: Statistical Yearbook of Alentejo, INE, 2011

Agricultural producers

In Portugal, there are approximately 130 000 farms, i.e., 43% of the total of 305 thousand farms surveyed in 2009, with olive groves. The occupied area of olive trees was estimated at about 336 000 hectares of olive groves which constituted 9% of the total utilized agricultural area of Portugal 3.67 million hectares.

The size distribution of farms with olive reveals a highly fragmented area of olive groves. Nearly 99 700 farms have an area of olive groves of less than 2 hectares, 28 600 with areas between 2 and 20 hectares and 2.1 thousand farms with areas above 20 hectares olive grove.

It is estimated that there were approximately in Alentejo 41,720 farms, just 14% of the total number in Portugal, with a utilized agricultural area of 2151 thousand hectares, which represented about 59% of the area in Portugal.

In the Alentejo area of olive groves is less fragmented. The number of farms with olive Alentejo is estimated at around 19 700 farms, representing only 15% of the total number of farms with olive groves in Portugal. The olive grove in the Alentejo area estimated at 164 000 hectares constitutes about 49% of the area of olive groves in Portugal. Estimates for the average area of olive farm in Portugal and Alentejo is 2.6 and 8.3 hectares respectively.

For the Alentejo, with olive farms represent 47% of total in Alentejo, i.e., nearly 1 in 2 farms have olive groves in the Alentejo. In terms of agricultural area used the olive represents 8% of UAA Alentejo. These figures mean that although less fragmented than in Portugal, as a whole, the structure of farms with olive grove in the Alentejo is nonetheless also fragmented. This can be seen by analyzing the distribution area of the olive farms, where 9500 farms had an area under olive trees under 2 hectares, 8700 with areas between 2 and 20 hectares, and 1500 farms with an area of over 20 hectares olive grove.

In conclusion, we should say that the olive is a great expression for the Alentejo area of olive groves in Portugal, the Alentejo is 49%. But with olive farms in Alentejo have very different sizes. About 9500 farms, 48% of the Alentejo, with areas of olive groves are smaller than 2 hectares, but with a total area of olive groves only 9000 hectares, ie 5% of the area. The low number of 656 farms (3%) with an area of over 50 hectares olive grove has a total area of very considerable grove of about 80 000 hectares (48%). These 656 farms represented 84% of the total of 783 farms in Portugal with an area of over 50 hectares olive grove.

Main olive oil cluster specific stakeholders

There are some stakeholders at national and regional level that have key roles in the sector. The "Casa do Azeite" (House of Olive oil) is a national private organization of olive oil market operators that promotes Portuguese oilive oil in external markets. A common or umbrella brand, Azeites de Portugal (olive oils from Portugal) was established to promote identity and associate quality to Portuguese olive oils.

In Alentejo, CEPAAL, a private Center for Studies and Promotion of Alentejo Olive oils, created in 1999 has been operating since then. CEPAAL includes public and private associates, including the University of Évora and Politechnic Institutes of Portalegre and Beja, a professional School, 3 local municipalities, including Moura and Campo Maior, and their sub-regional associations, 3 national institutes and the and regional organization of the Agriculture Ministery, Cooperatives, companies and local development associations. CEPAAL has realized several trials and experiences of promoting Alentejo olive oil of different producers in external agro-food fairs and expositions have been done in the past.

10.2.2 The Wine cluster

In 2010, beverages industry sales, including wine production, were approximately 2.35 billion euros. Internal Portuguese market represents 71 % of this value and share of external markets has increased, both of UE and of the rest of the world. Wine production industry made up almost 1 billion euros of sales which is above 40 % of beverage industry, followed by beer production with 0.7 billion. The industry had 1 035 companies operating, out of which 125 were from Alentejo, and involved 13 901 workers employed. Production of wine

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in 2010 is estimated to have been around 640 million litters.

In the region of Alentejo there are seven DOPs (Denominações de Origem Controlada) respecting production zones of Borba, Évora, Granja-Amareleja, Moura, Portalegre, Redondo, Reguengos e Vidigueira, and a global IGP (Indicação Geográfica Protegida) which corresponds to the territory of the three major districts, Portalegre, Évora e Beja, included in the region of Alentejo.

In 2011, total wine production was estimated in 5.47 million hl. The Alentejo region production represented 24 % of total Portuguese production, or 1.32 million hl. However, the importance of the region in the Portuguese wine sector is more clear if we look to the proportion of production in IGP which is 51.8 %, i.e., 665,2 thousand hl in a total IGP Portuguese wine production of 1 283,6 thousand hl. In other words, more than 50 % of Alentejo wine production is IGP whereas this proportion is only 23.5 % for Portuguese wine. Central Alentejo sub-region is the most relevant in wine production making almost 57 % of total Alentejo production.

Table: Wine production declared (in grape must) 2011

Unit: hl	Total	PDO liqueur wine	Wine production by quality					
			PDO wine		PGI wine		Wines without certification	
			White	Red / Rose	White	Red / Rose	White	Red / Rose
Portugal	5 466 258	539 505	821 786	1 299 370	286 008	999 302	367 335	1 152 952
Alentejo	1 319 319	445	91 023	362 680	126 887	538 282	103 344	96 658
Alentejo Litoral	5 053	0	0	0	910	3 615	15	514
Alto Alentejo	59 429	0	785	6 560	7 694	43 544	445	401
Alentejo Central	748 099	232	65 909	293 070	55 876	330 254	21	2 736
Baixo Alentejo	160 558	4	15 622	31 081	20 659	90 898	210	2 084
Lezíria do Tejo	346 181	209	8 706	31 968	41 748	69 971	102 655	90 924

Source: Statistical Yearbook of Alentejo, INE, 2011

Agricultural Producers

In Portugal, 156 thousand out of a total of 336 thousand farms had vineyards, which means that almost half of farms had vineyards. The distribution of olive area by farm size indicates that 98.6 thousand, almost two thirds, had vineyard areas with less than 0.5 ha. Only 5.6 thousand farms, less than 4%, had 5 or more ha of vineyards. With respect to area, Portuguese estimated production area is almost 180 thousand hectares, which makes 4.9 % of Portuguese utilized agricultural area (SAU).

In Alentejo this proportion is considerably smaller with 3.4 thousand out of approximately 41.7 thousand farms which represents 8 %. Out of these farms 0.7 thousand, or 21 %, have more than five ha. Alentejo makes about 13 % of total Portuguese area used in vineyards with an area of almost 23 thousand ha. Relatively to Alentejo agricultural utilized surface vineyard area represents 1.2 %. Finally, estimated average area of vineyards in Portugal and in Alentejo is 1.1 Ha and 6.8 ha, respectively.

Main wine cluster specific stakeholders

VINIPORTUGAL is a national private association of wine producers and traders. Promotion of producer wines is done with the umbrella brand of Wines of Portugal.

The Alentejo Regional Winegrowing Commission **(CVRA)** was created in 1989 as a privately run organization and one of its functions is to certify DOC Alentejo and Regional Alentejo wines. The CVRA promotes Alentejo wines in both domestic and international markets. It is financed by the sale of seals of origin which are printed on the back label of Alentejo wines.

CVRA includes 245 wine producers and traders distributed in the three major districts of Beja, Évora and Portalegre of Alentejo. There is a global regional indication of geographic provenience of wine from Alentejo (Vinho Regional Alentejano) and several sub-zones of VQPRD (Wine Quality Produced in Region Delimited).

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A ATEVA (Associação Técnica dos Vitivinicultores do Alentejo) is a technical assotiation of wine producers that provides production technical support and services and promotes technological innovation in technologies. It was a key organization to promote vineyards production and excellence in the Alentejo wine sector.

The Confraria dos Enólogos do Alentejo is a wine producer association that promotes cooperation and networking of Alentejo wine producers. Their activities involve visits to wineries of associates and wine contests with awards for best wines in each crop season.

Other common stakeholders of agro-food clusters

Besides specific stakeholders of the sectors of olive oil and wine sectors there are other national, regional and local stakeholders which are common to the whole traditional agro-food Mediterranean cluster.

At national level, AICEP (Agência para o Investimento e Comércio Externo de Portugal), the Portuguese agency to promote Portuguese economic activity and services abroad, provides guidance and support to exporters and companies that want to implement their internationalization process of different sectors, including agro-food cluster products, particularly wine and olive oil. Another national institute that encourages entrepreneurship and support PMEs, small and medium enterprises, is IAPMEI (Instituto de Apoio às Pequenas e Médias Empresas). This institute has a regional office and a service, the Center for Entrepreneurial Development of Alentejo, to support businesses development and internationalization of PMEs of the region, including agro-foof cluster operators. Finally, IFAP (Instituto de Financiamento da Agricultura e das Pescas), is the Portuguese Institute for Common Agricultural Policy (CAP) both with respect to co-financing farmers and agro-industry cluster operator investments and to manage direct payments to farmers. At farm and agro-industry rates of support of investments reach high percentages and represent relevant financial options, particularly in these times of shrinking credit amounts and availability and relatively high interest rates. IFAP has a regional delegation and staff in the four sub-regions of Alentejo that support, evaluate and control proposals, projects and activities.

Public regional stakeholders that are related with territory and landscape, namely regional coordination, the Coordination and Development Comission (CCDRA), which includes territory and environment, and regional public sectorial Directions, involving Agricultural and Animal husbandry (DRAP), Forest (DRF), Economy (DRE), Tourism (ERT), Patrimony, Culture (DRC), among others, and public regional and local authorities (Câmaras Municipais) and their sub-regional associations (Associações de Municipios). Obviously, crucial stakeholders are also Superior Teaching Public Institutions in the region, that include the University of Évora (UÉ)and Politechnic Institutes of Portalegre (IPP), Beja (IPB), Santarém (IPS), as well as other superior education and science and technology institutions connected to these and cooperating to transfer knowledge and promote innovation.

Private stakeholders, namely companies and associations such as ADRAL, sector business and leisure associations to promote agrofood clusters of Alentejo are also relevant. Regional and local Gastronomy Confraries, such as Sousel Gastronomy Confrary, that was particularly involved in PACMan activities, promote traditional Mediterranean gastronomy and its major characteristics and specificities, namely its agro-food products, including meats, sausages, cheeses, honey, and naturally, involving wine, olive oil and bread. Olive oil is considered the "golden" liquid of Alentejo gastronomy, that is used in several soups that are based and associated with bread, with the local name of "açorda", or a mix of bread with the sauces from fried native asparagus or pork meat called "migas", or a cool soup " o caspacho" that is based in tomato and sausage with pieces of bread that is complemented with fried fish, and obviously red and white wines of Alentejo.

Improving the governance of the cluster integrating different mediterranean products and services and their producers and providers through networking in order to create stakeholders clusters namely creating tourism products, routes and packages is essential to promote local nature characteristics, agro-food quality assurance by visitors and leisure and rest experiences and activities to local and regional populations and attract visitors and tourists to enjoy nature, food and culture of Alentejo.

10.3 Strenths, opportunities, weaknesses and threats for olive oil and wine cluster operators of Alentejo region

Olive oil producers sell their products in different markets according to their scale or dimension. As this scale differs from a small and not differentiated production to a large and market oriented commercial orientation options are diverse.

Cooperatives and associations or groups of producers (Agrupamentos de Produtores) receive grape and olive productions from agricultural producers, to produce agro-food transformed products and to market them as a whole. These cooperatives have been operating in Alentejo for decades and have upgraded their technical and management capabilities. More recently, small scale producers which are simultaneously first transformers, namely in olive oil mills or wineries, sell their production in local markets, firstly as undifferentiated or bulked product and later as quality or scale of marketing requires differentiation trough own brand and marketing.

Current situation of internal markets with depressed demand requires from agro-industrial producers attempt to turn to external markets both to intra-UE and to the rest of the world, particularly in markets targeted by national and sectorial authorities.

Networking, joint agreements, cooperating exchanging relational capital, among other tools and processes are particularly important for these SMEs (PMEs), small and medium enterprises, companies and cooperatives to have access to external markets at reasonable efforts. They allow for sharing market information, spreading costs among partners of exploring and setting up new markets and decrease individual risks of different natures, including cultural, commercial and financial.

There are a large number of brands, the large majority with low market shares. To sell in external markets is crucial to have a common umbrella brand in order to construct and benefit from national image and investment. Small and medium wine and olive oil companies must concentrate their production in target markets and position their products at high segments.

Opportunities:

- Trends of public health and new generation preferences for consumption of agro-food products of high quality, nutritional balanced and produced with safe and sustainable technologies;

- Tourism demand for mixed packages products based on immaterial and monumental patrimony and new knowledge application including nature and environment, leisure, cultural heritage and traditions, including in particular gastronomy and the use of original characteristics of territory and endogenous natural resource production based local agro-food products;

Threats:

- Current economic and financial trends and consequences for internal markets and financial costs

Strengths:

- Resource endowments availability to increase and promote clusters production;

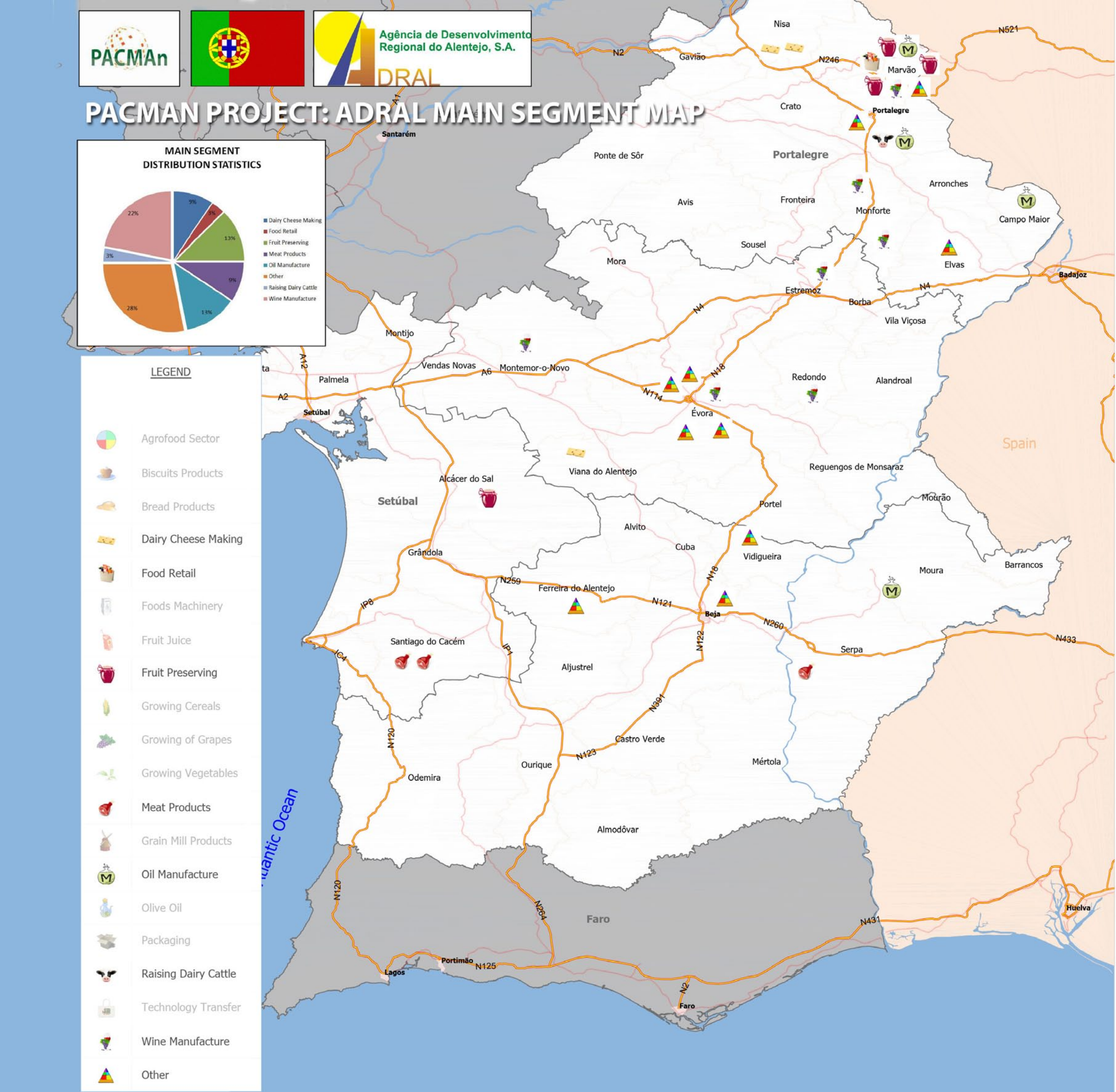
- High quality products with top intrinsic characteristics and potential;

Weaknesses:

- Low technical and management capacitation to promote extrinsic characteristics and innovation in new technologies, management and markets;

- Total quantity produced is reduced in international market relative terms.

These aspects are of course determinant to define and implement a strategy to promote attractiveness and competitiveness, including the internalization, of wine and olive oil clusters of the Alentejo region.



This map has been elaborated with the information obtained by the PACMAN project

“Promoting Attractiveness, Competitiveness and Inter

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Chapter 11

Networking Opportunities with the Agro-food Systems from the Province of Parma: the processing tomato chain

3.1. **Introduction to the agro-food systems in the Province of Parma and to the processing tomato chain**

The very long history (more than a century) of production of processing tomatoes in the province of Parma and neighbouring provinces (mainly Piacenza), is a very specific aspect of the local system. The recent experience of improved networking realized through a simple association first, and a more formal and structured Interbranch Organization later, is a positive and quite peculiar experience with positive effects on competitiveness. This chain is very strong from a competitive point of view and it has a very relevant position in Italy (and in Europe); moreover it is also highly internationalized.

When in the year 2006 the reform of the Common Agricultural Policy for the sector was in sight, tomato processing firms and producers organizations (POs), together with local administrations (in particular the Province of Parma) started to think about new tools for facing drastic changes that they were expecting, both in terms of a new political framework and a new economic scenario. The principle of decoupling, i.e. separating income support for farmers from the effective production of processing tomatoes, would have generated major changes at the farm level and therefore also in the industrial processing tomato sector.

In order to face these changes, POs and processors, together with all other related stakeholders, decided to innovate their relationships, trying to develop and strengthen both horizontal and vertical networking, with the aim of improving the overall com-

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petitiveness of the local processing tomato chain.

In the year 2007 a new association called "Distretto del pomodoro da industria" ("District of processing tomatoes") was created, in order to address many issues of interest of all associates.

Later, in the first half of 2011, the Association evolved into a more formal Interbranch Organization (IO), recognized by the Emilia-Romagna region first, and with the formal approval of the EU later.

The IO, similarly to the association, has created many working groups with respect to different issues like: environmental issues related to tomato production at the farm level and tomato processing, the evolution of the Common Agricultural Policy, field trials of new varieties of processing tomatoes, coordination of research activities of general interest for the sector, definition of common rules with respect to relationships among farmers, POs and processing firms, production data collection and sharing.

4.1. Processing tomato chain and its Inter-branch organization

Members of the IO are individual processing firms, both private and cooperative, of the area of interest (Northern Italy), all POs active in the processing tomatoes sector in the area, representatives of private processing firms and farmers; all of these share a full membership of the IO. However, few other institution are "consulting" member of the IO, i.e. their membership has more the aim of supporting indirectly the activity of the IO; these members are Local administrations (Provinces), Chamber of Commerce, public and/or research centres.

The main stakeholders involved in the "best practice" are, with reference to the area of interest, i.e. Northern Italy, and in particular the provinces of Parma, Piacenza, Cremona, Mantova, Alessandria, Ferrara, Rovigo, are the following:

- farmers cultivating processing tomatoes in the area;
- cooperative processing tomatoes;
- private tomato processing companies;
- producers organizations (POs).

Other stakeholders that are indirectly involved also in the form of indirect beneficiaries, are:

- workers involved in the processing tomato chain, both at the agricultural and processing level;
- (local) food machinery industry;
- logistic services;
- research and extension services;
- related agro-food industries: seeds, agro-chemicals, financial services, etc..

Networking is the main characteristic of the IO and the key words of this project have been "collaborate to compete".

On the other hand, the localized economic system represented by this inter-regional IO is characterized by a strong internationalization: the reference market for the local tomato processing industry is the European and also the extra EU market: from Emilia-Romagna only (i.e. only part of the area of interest of the IO), exports of processed tomato products in 2011 have been equal to about 330 millions of euro. Moreover, almost all processing firms (private and cooperative), have customers all over Europe and often all over the world and many of them (customers) are multinational firms.

Among other important and positive characteristic of this successful IO, we can notice, in

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particular, the following.

After few years of informal networking (i.e. the experience of the simple Association) in 2011 the quantity of processing tomatoes processed in Northern Italy has been greater, for the first time in history, to the one processed in Southern Italy. And this fact is not due simply to chance: better contracting, better economic environment and a positive and common view of the choices that are needed to improve competitiveness of the chain are showing their effective impact also on the economy of farmers, POs, cooperatives and private processing firms.

Another strength of this network is less evident but nevertheless quite clear. The processing tomato chain, even in Northern Italy, is under stress both because of major changes in the CAP and in the international competition (devaluation of the US dollar, increased competitiveness of Chinese production, etc.). Therefore, even in this area where the IO has developed, few processing firms have experienced deep crisis (and few cases are still in place). However, differently from many other cases (i.e. other industries, both in the food or in other sectors), these crises have generally evolved less traumatically: i.e. few plants/firms have been bought by other firms of the same area, in another case a firm has been saved from closure by the intervention of new partners. In other words, the IO and its networking activity, have not created any new specific intervention tool for these cases, but has created a more positive economic and social environment that has made more plausible (and therefore possible) for other firms to invest, with positive overall effects on the entire localized system.

4.2. Matrix of thematic sections and opportunities in relation with the key organizations belonging to the agrofood system

The key opportunities for collaboration are classified in the following possibilities:

Each operator is linked to one or several opportunities of the matrix.

Matrix of Opportunities in Relation with the Operators of the Area	
01	The organization has the capacity to **sell their product directly at international** level
02	The organization has the capacity to **sell their product through an already existing network of distributors in Europe**
03	The organization (or their representatives) has the capacity to **establish a consolidated commercial network at international level**
04	The organization can make **exchange of production good agricultural practices** with other similar regional areas for its products
05	The organization has the capacity to make **technology transfer and provide innovation solutions**
06	**More suggestions from the partners**
07	The organization has the capacity to export
08	The organization has the capacity to provide education and training
09	The organization has the capacity of attending to International fairs
10	The organization has the capacity of organization local events at regional or local level

Operator Identification	01	02	03	04	05	06	07	08	09	10
Inter-branch organization				●					●	●
Producer organizations				●	●					●

Public institutions (i.e. Province of Parma, Chamber of Commerce)									●	●
Research centres					●			●	●	●
Private processing companies	●	●	●			●				●
Cooperative processing companies	●	●	●			●				●

4.3.- **Contact points**

Processing tomato chain **(Northern Italy)**	**website**
Organizzazione Interprofessionale "Distretto del pomodoro da industria de nord Italia	http://www.distrettopomodoro.it

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