Internationalization Strategy for the agrofood systems of olive oil and wine of the Alentejo

1. Introduction

The PACMAn project aims to promote the attractiveness, competitiveness and internationalization of agri-food cluster in Mediterranean regions. Olive oil and wine clusters and agribusiness are characteristic of Mediterranean areas. One of the objectives of the PACMAn project for Alentejo is to identify and define an appropriate international marketing strategy for two segments in focus, wine and olive oil.

That is the purpose of this study/report. The objective of the report is to present, based on the objectives, scope, activities, outputs and outcomes of the project PACMAn, an appropriate strategy for the internationalization of the segments of the supply chain food of olive oil and wine from the Alentejo. It includes identifying general guidelines and best practices in order to internationalize the sector including the best foreign markets, market position and value chain, and the suitability of the product process, marketing, major international fairs and events, among other aspects.

PACMAn project involves regions of the Mediterranean area and respective partners. Alentejo is one of these regions and ADRAL (Agência de Desenvolvimento da Região Alentejo) is the Portuguese partner of the project. Focus of the project is directed to agro-food supply value chains and critical areas considered include sustainability, networking, innovation and internationalization. Several previous activities and results of the project were, successively, developed and implemented in accordance with its objectives in these areas. These activities included pilot actions and networking events for the exchange of experiences and clusters marketing actions in all the regions, which results are presented in an e-book, an e-Guide for operators and stakeholders to promote business and networking opportunities and focus groups on targeted agro-food segments. This study/report benefits from these activities and their results for Alentejo and concludes this stage of the project.

Within this report on “Internationalization Strategy for the agrofood systems of olive oil and wine of the Alentejo” the concept of system has a broad interpretation of a segment, a cluster or a multi food chain collaboration group of companies and other stakeholders in the Alentejo. We will use these terms interchangeably. Additionally, according to our segment focus, we will be speaking of companies of the olive oil and wine systems. We will treat both systems at same time in the majority of sections in which the study/report is organised. When specific needs are necessary the section will be divided and each system will be treated under a particular point.

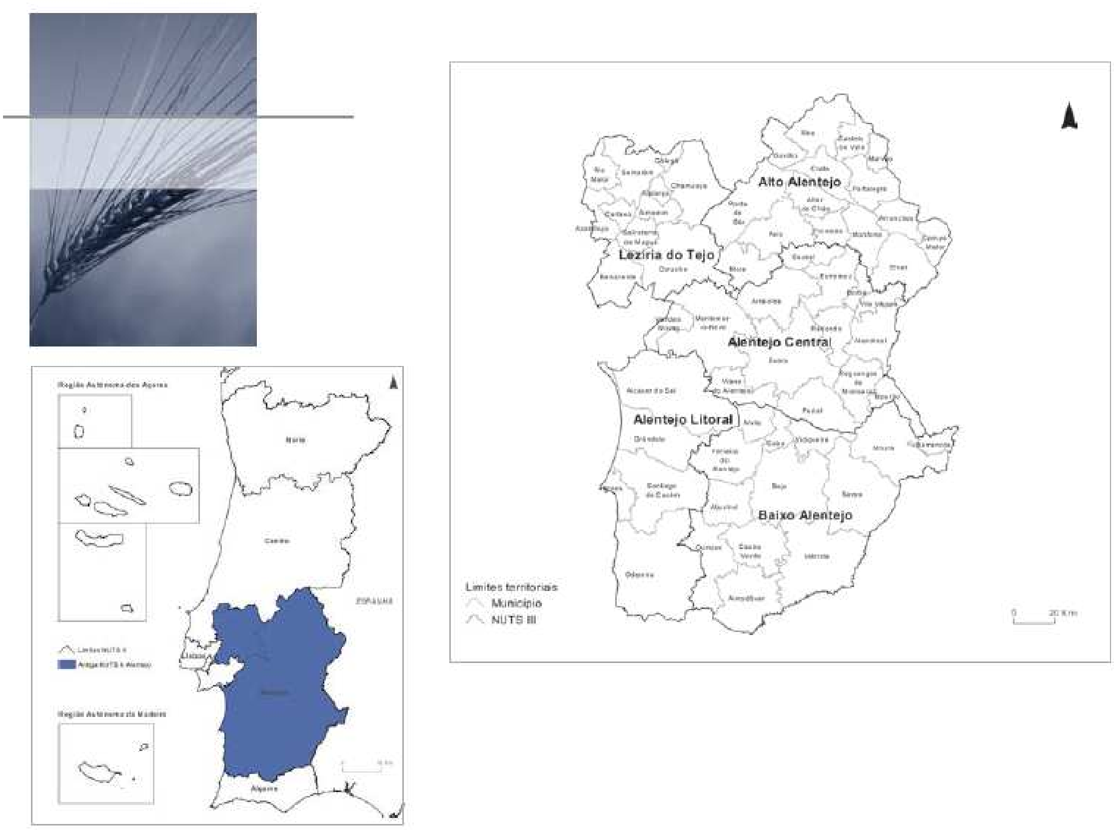
The study/report is organised in six sections, including this introductory which the first one. In the second the Alentejo region is presented in general terms and in the third section we characterize in particular olive oil and wine systems, their operators and stakeholders. In the fourth section we will address major points raised in olive oil and wine focus group in order to conclude about the main constrains and barriers that micro and SME's of these agro-food system face. A SWOT matrix concludes this section. In the fifth section the main internationalization strategy orientation guidelines for Alentejo olive oil and wine systems are proposed and justified. Brief major conclusions conclude this study/report.

2. Background on 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). In addition population of Alentejo makes about 5 % of total Portuguese population. Hence, population density is very low. Alentejo is therefore a rural region that has a particular relevance for Portuguese agriculture.

Traditionally, Alentejo agriculture was rainfed, which meant that agricultural systems were based in arable crop rotations with 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 production of high quality in the so called *montado* areas(called *dehesa* in Extremadura and Andaluzia in Spain). Permanent crop included mainly olive trees for olive and olive oil production and vineyards for grape consumption and wine production. The latter ones 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. Fruits and vegetables and other horticulture crops, including tomatoes, 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.

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

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 EEC (European Economic Community) in 1986 and the application of the CAP (Common Agricultural Policy) 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 meat, 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 olive groves and vineyards agricultural producers and micro and SME's of olive oil and wine agro-industrial producers and marketers face major challenges. To characterize these agri-food systems is our major goals for next section.

3. The olive oil and the wine agro-food systems 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.

3.1 The Olive-oil system

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, not 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 (figure 2).

Figure 2: DOPs of the Alentejo region and mills location in the Alentejo

Source: CEPAAL

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

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 to be 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 41,720 farms in Alentejo, 14% of the total number in Portugal, with a utilized agricultural area of 2,151 thousand hectares, which represented about 59% of the utilized agricultural area in Portugal.

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

For the Alentejo, farms with olive represent 47% of total in Alentejo, i.e., nearly 1 in each 2 farms have olive groves in the Alentejo. In terms of agricultural area used, the olive area represents 8% of UAA (Usable Agricultural Area) of 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 olive has a great expression in the Alentejo since represents 49% of area of olive groves in Portugal. But with olive farms in Alentejo have very different sizes. About 9500 farms, 48% of the total number of Alentejo, with areas of olive groves are smaller than 2 hectares, but with a total area of olive groves only of 9000 hectares, i.e., 5% of the area. The low number of 656 farms (3%) with area over 50 hectares of olive grove has a very considerable grove area of about 80 000 hectares (48% of total area). 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 olive oil in external markets. A common or umbrella brand, "Azeites de Portugal" (olive oils from Portugal) was established to promote identity and associate a quality image 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 internal and external agro-food events, fairs and expositions in the past.

3.2 The Wine System

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, for both the UE and for 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 in 2010 is estimated to have been around 640 million litters.

In the region of Alentejo there are seven DOCs (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 (Figure 3).

Figure 3: DOCs and IGP of the Alentejo Region

Source: CVRA

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	White	Red / Rose	White	Red / Rose	White	Red / Rose
			PDO wine		PGI wine		Wines without certification	
		Wine production by quality						
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
Leziria 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 vineyards 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 % of total farms. Out of these only 0.7 thousand farms, or 21 %, have more than five hectares of vineyards. Alentejo makes about 13 % of total Portuguese area used in vineyards with an area of almost 23 thousand hectares. Relatively to Alentejo agricultural utilized surface vineyard area represents 1.2 % of total area. Finally, estimated average area of vineyards in Portugal and in Alentejo is 1.1 and 6.8 ha, respectively.

Main wine cluster specific stakeholders

VINIPORTUGAL is a national private inter-professional association of wine producers and traders and other private and public stakeholders of the wine cluster, including regional associations called Comissions of Vines and Wines of Regions (**CVR**s). International 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 and IGP wines of production zones and of the Alentejo region. 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 the Alentejo, Beja, Évora and Portalegre.

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 systems

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 and networks.

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, environment and local public administration, and regional public sectorial administration, involving Agricultural and Animal husbandry (**DRAP**), Forest (**DRF**), Economy (**DRE**), Tourism (**ERT**), Patrimony, Culture (**DRC**), among others, and public local authorities (**Câmaras Municipais**) and their sub-regional associations (**Associações de Municipios**). Obviously, crucial stakeholders are also superior teaching and research 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 fruits and vegetables, 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 the "gaspacho" 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. Fresh grilled fish from Alentejo Atlantic coast, the longer of any other region of Portugal, is an excellent complement and also a base of Mediterranean diet. Traditional seasoning and sauces of vinegar and olive with garlic, parsley as well as of and other aromatic herbs reinforce this Alentejo unique gastronomy as a fundamental immaterial heritage.

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.

4. SWOT analysis of Olive oil and wine systems of Alentejo in an internationalization context

The following SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis includes key aspects of olive oil and wine systems of Alentejo determinant in an internationalization context:

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
- Low consumption growth and prices with pressure from distribution groups to commercial campaigns and cost sharing

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.

Olive oil and wine agro-systems have a large potential as food products. They are base products of Mediterranean diet. Their consumption is associated with positive a large number of positive effects and relations (even with the wine when dinked with moderation) including health, elegance and style, fashion, taste, nature and environment, territory, cultural heritage, gastronomy, tourism and general appealing lifestyle.

Olive oil and wine as food products can be differentiated and directed for different markets and segments, including home consumption, HORECA (hotels, restaurants and coffees) channel, institutional (in organizations with catering services such as schools, hospitals, among many others), gourmet stores, local and regional territorial marketing products and souvenirs, olive and enotourism. But olive oil and wines can have alternative utilizations, such as decoration purposes, leisure, health and massage uses, oils and creams for skin, among others.

Threats come mainly from internal market characteristics of slow growth of consumption, low prices and pressure from distribution groups to "crush" prices and share commercial costs.

With respect to external markets, although consumption of emergent countries has a large potential current macroeconomic growth rates of developing countries are below past trends and internal financial markets result on high interest rates and investment costs.

Olive oil and wines systems have experienced dynamic and rapid changes that currently constitute relevant and general cluster strengths. In both systems of olive oil and wine, agricultural production and industrial transformation technologies have evolved considerable. It is generally recognised the importance and results of investing in the productive area of olive groves and vineyards, including mechanization, namely of harvesting, as well as in mills and wineries. Widespread modernization of productive areas included restructuring in the olive groves and vineyard, new plantings, olive oil and winemaking technologies, storage, packaging and bottling systems. This is an area where some success from application of structural funds from UE can be claimed.

Technical production characteristics and innovations were progressively introduced by olive oil and winemakers whose professional capacity and influence on the quality of the olive oil and wines is recognized. Customer demand and international awards winning are frequent at different contests and prizes.

On the other hand, major weaknesses come from post production stages which are new activities for the large majority of SME's. Whereas in the production area technical associations were implemented with success , namely ATEVA, providing technical support and promoting technological innovation in varieties, factors of production, field operations and technologies, lack of cooperation between producers in commercial operation, insufficient investments in professional management, reduced marketing activity and lack of involvement in research and development activities have had negative consequences and inability to capture value to supply chain of olive oil and wine.

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

5. A mixed strategy for attractiveness, competitiveness and internationalization

A mixed strategy of developing domestic (national and Alentejo regional) markets and of active involvement and participation in the Portuguese internationalization is proposed to promote sustainability and development of olive oil and wine systems of the Alentejo.

Both internal and external markets are of great importance for attractiveness, competitiveness and internationalization of olive oil and wine systems of the Alentejo. These markets complement each other and support the integrated mixed strategy proposed.

Internal (domestic national and regional Alentejo) markets need to be developed and supply chain must be organized around major objectives of integrating and concentrating operators to gain scale and promote market development and response. Alentejo quality and brands should be promoted internally through territorial geographical origin and provenience (DOPs and IGP). A regional inter-professional organization or agency, such as CEPAAL, must coordinate efforts involving and promoting networking and clustering of private and public stakeholders of the region.

External markets support image of prestige of olive oil and wines of Portugal. Promotion in external markets is based on a common umbrella image of "Olive Oil from Portugal" and "Wines of Portugal" of inter-professional organizations of national olive oil and wine systems, namely ViniPortugal and an inter-professional olive oil organization, which might result from Casa do Azeite (that today represents large producers, transformers and bottlers) but must also include other public and private operators, including regional inter-professional organizations representing micro and SME's agricultural producers and agro-industrial companies and cooperatives, such as CVRs in the caso of Wine, that in the case of Alentejo can result from CEPAAL.

These two market components of the integrated strategy proposed are the focus of the next four sections. Their titles constitute key orientation guidelines.

Organization and scale of the supply chain

Current context of olive oil and wine agro-food systems have many similarities and some peculiarities. Structural characteristics from agricultural and agro-industry human capital determine major similarities of development path of both agro-food systems in terms of strengths and weaknesses.

Focus groups for olive oil and wine concentrated on major barriers and needs, positive and negative aspects, namely with respect to innovation, cooperation networks and internationalization. Conclusions of focus groups of these agro-food systems reinforce the need for SME's to overcome structural characteristics of the olive oil and wine segments.

Key focus group conclusions point to aspects as major barriers to the development of their business. In the domestic market, the most referred are the difficulty of differentiation and sustainability of commercial brands of small-scale production and the pressure from distribution to lower prices and facilitate payment conditions in the domestic market.

A strategy of competitiveness for olive oil and wine systems of the Alentejo must take into account the structural characteristic of different size of olive and vine producers and olive oil and wine companies and cooperatives in the region.

Olive oil and wine 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.

The integration of primary olive and vine production of micro and SME farms and agro-food companies in the supply value chain requires institutional organization at the base of the supply chain.

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 that requires differentiation trough own brand and marketing.

There are a large number of brands, the large majority with low market shares. To sell appropriately in domestic markets and to reach external markets is crucial to have a common umbrella mention in order to construct and benefit from regional and 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.

Networking, joint agreements, cooperating exchanging relational capital, among other tools and processes are particularly important for these micro and SMEs enterprises, companies and cooperatives to have access to domestic and 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.

Large companies, originally transformers and bottler groups of olive oil and wine, have more recently directed their attention to vertical integration and have invested in olive groves and vineyards of large dimensions. These companies, both of national and international, mainly from Spain in the case of olive oil, have commercial knowhow and their productive base in Portugal allows them to benefit from markets which favour Portuguese products.

Domestic and international promotion of olive oil and wines requires scale of business and production as well as brand management. This requires, even for these large companies, association to promote products with common characteristics domestically and internationally.

Enterprise association organizations are weak and there is low representativeness of micro, small and medium enterprises and cooperatives at the sector level and governance model in production but especially in marketing and sales.

Large increases in the cost of wine after production output due to long circuits and marketing channels domestically and pressure on prices and payment terms with long periods from monopsonist large distribution groups squeeze producer margins and affect their investment ability.

Proliferation of brans raises problems of image. Need to define common strategies with low ability to associate businesses raises, frequently, difficulties and lack of cooperation and working in company groups and joint-ventures.

Production and marketing concentration of SME's and cooperatives could also generate positive aspects in terms of efficiency, business strategy and marketing bargaining power. This concentration and association process of SME's and cooperatives could be useful to promote in internal markets the "Alentejo" brand. Joint promotion should be done through regional associations, namely CEPAAL in the Alentejo, valuing not only olive oil and wines in national terms but also reinforcing regional characteristics and quality, territorial origin, olive and grape varieties, production methods and other specific aspects.

Without success of this concentration process SME's will continue to have low capacity in domestic and foreign markets. Hence, they will go on being subject to high pressure from large surfaces to decrease their margin and "crush" prices. In the medium to long run SME's profitability and probably sustainability will be threatened.

Casa do Azeite and Viniportugal are national private associations of companies, in the case of olive oil, and interprofessional agents in the case of wine, that support efforts for operator's internationalization. In both cases, olive oils and wines, whatever the region of origin, are associated with the brand "Wines of Portugal" and "Olive Oil of Portugal". Public efforts to support external trade and exports are directed towards large producers and market operators of these two organizations. These have scale and sufficient size to put together promotional international activities supported by national organizations and national public entities that support enterprise internationalization. Micro and SME's can't do it by themselves and they must rely on regional associations and organizations of the systems, such as CVRA and CEPAAL, to do it.

Excessive bureaucracy and administrative bottlenecks are also referred by SME's to constitute relevant barriers to their effectiveness and efficiency. Licensing processes take too long and investment support of public institutions is often delayed at the risk of promoters and investors. SME's support additional financial costs and negative consequences on profitability. Organization of supply chain and networking will also reduce these negative aspects and promote specialization and expertise of organizations on technical and administrative knowledge.

Developing Domestic Markets for olive oil and wines of the Alentejo

The innovation in olive oil and wine systems has focused primarily on technical-productive and improving the transformation process, technics, methods and factors. Agricultural and industrial innovations have not been followed by management and marketing innovation.

Recently, producers and SME's have been dynamic and started to transform their own production and start selling on their own, even creating their own brand, but they have a small scale and market penetration. They experience difficulties in terms of launching innovative products and business processes (limited to the introduction of some new brands). They need to gain critical mass through partnerships in marketing.

Differentiating products for different marketing channels and segments is important to develop traditional markets, promote alternative uses and create new markets as well as to create and capture value along the supply chain. Home and exterior uses and consumption, Horeca channel, institutional, gourmet stores, local people and territory marketing association, green aspects such as recycled packaging, nature and environmental friendly methods of production, transformation and marketing. Differentiation of products according with marketing channels and ability to adapt products to markets broadening the range of products of the supply chain has proved to be particularly important for the systems. These include both intrinsic and extrinsic characteristics, including packaging diversification, for instance the *Bag-in-box* in the wine case, and anti-dripping devices.

Clustering is essential to develop new products and services and innovation in terms of vertical integration of the supply chains of olive oil and wine, from input purchase to product and marketing services, and horizontal integration with other supply chains, namely tourism, patrimony, culture, history, arts and immaterial heritage. Agents from these systems and sectors must contribute to create new products and services in an integrated and appealing manner to favour local and regional populations and create value.

Development of olive oil and wine tourism with routes and tourism packages involving visiting, tasting, historical background and production methods, nature preservation and sustainability, tasting, and on-companies own shops with products and souvenirs, including other regional quality products that are olive oil and wine complements, because they are usually consumed simultaneously, to constitute packages or baskets of product combinations are activities that must be arranged, organized, implemented and promoted at local and regional levels.

Alentejo olive oil and wine routes, agricultural activities and operations in olive groves and vineyards, varieties characteristics and choices, transformation processes and technologies used in olive mills and wineries, product characteristics, tastings and other numerous number of activities can be integrated in packages of tourism products to promote various tastes and combinations of nature, gastronomy, culture, history, art, sports and leisure, including associating sun and seaside beaches and landscape of the long coast of Alentejo.

Product differentiation through the brand "Alentejo" and networking between cluster operators including services, tourism and catering, gastronomy and Mediterranean food, health and leisure, will create value for the supply chains and clusters and promote quality image among national and international visitors.

Finally, continuous innovation also requires in the medium term the operationalization of the relationship between national and sectoral institutions and organizations and greater involvement of these companies in R&D (Research and Development) together with regional and national units of scientific infrastructure and applied research of several areas, such as environment and landscape, agronomy, engineering and technology, history and sociology, management and economy. It is critical in our knowledge based society to overcome ineffectiveness of research centers and technology transfer (some organisms are directly connected to the wine industry and some academic researchers that support dispersed in terms of R & D). Alentejo wine system developed from close and effective cooperation actions and results of applied research set out by producers, namely Fundação Eugénio de Almeida, input supplier companies, such as Bohm Viveiros, and research and development from Évora University, with Antero Araújo and Colasso do Rosário. Competitiveness requires continuous innovation which means defining priorities of research to respond to major changes and challenges, including production, technologies and services in the different scientific areas of environment and natural resources, agriculture, engineering, economics and management, among others, and incorporating results to capacitate companies.

A regional strategy for Alentejo in line with a national Portuguese internationalization strategy

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, but particularly to emergent markets targeted by national and sectorial authorities. However, long term potential of Portuguese olive oil and wine systems require an internationalization strategy that promotes these systems in the long run.

Key focus group conclusions aspects point as major barriers to internationalization the weak experience of micro and SME's on export activities. Most companies, particularly small companies, argue about difficulties of setting up procedures, mechanisms for organizations and partnerships for that purpose, need for greater external institutional support and to launch joint projects and support producers in associating brands to gain a commercial scale and to promote and improve the image of the Alentejo olive oil and wine in the international market. They claim for rethinking the influence and role of support from institutional promoters, namely AICEP, Casa do Azeite, ViniPortugal and of IAPMEI, to support micro and small enterprises and their needs and efforts, their regional associations and agencies and from public national institutions that support and define broad international promotion policies objectives, strategies and orientations with large companies and groups.

Although Alentejo olive oil and wine systems are of great relevance among other Portuguese regions its internationalization strategy has to be integrated in the overall Portuguese internationalization strategy.

Portuguese markets represent for both olive oil and wine around 2.5 per cent of world production. In 2012, Portuguese exports of olive oil were slightly above 60 thousand tons. Total world exports in the same year reached 692 thousand tons and world production practically 3 000 million tons. In the same year, 2012, Portuguese exports of wine reached 2.5 million of hl out of a production of 6.1, which represents 42 % of total production of Portuguese wine. World exports reached 25.2 million and world production was estimated in 252 million of hl. Wine export value reached 362 million euros but this value rises to about 706 million euros if to wine we add must exports.

Hence, Portuguese traded quantities both for olive oil and wine represent low global market shares. Although Alentejo represents in both systems an important part of Portuguese production, these production levels are low in absolute and relative terms in an international scale. An internalization strategy based on cost with low prices would result in the creation of low levels of value.

Additionally, Alentejo and Portuguese olive oil and wines are of high quality. A strategy of differentiation of Portuguese production can result in the creation of value. Positioning Portuguese product at high level and target market segments should allow for creation of value added. Brands and other extrinsic characteristics, such as image, package, design, should be directed to those segments.

To improve the image of Portuguese olive oils and wines abroad should be a long term purpose. There is a major need to promote the image of olive oil and wine of Portugal abroad. Note that since Alentejo quantity and quality of olive oil and wine production of Alentejo is a major or a dominant part of Portuguese production to promote externally Portugal means to promote at the same time Alentejo. Since scale aspects are crucial for internationalization promotion and external trade should focus on the brand "Portugal". However, the representativeness of regional aspects and characteristics on overall external efforts should be in accordance with its importance. This is somehow accounted for in the wine system with the integration of CVR (Comissões Vitininícolas Regionais) of different regions on ViniPortugal. In the olive oil system, Casa do Azeite only includes large olive oil traders and does not include regional organizations. Hence, an inter-professional organization is needed in the olive oil system.

Setting External Markets priorities and targets for Alentejo olive oil and wines of Portugal

External markets for Portuguese agro-food products including olive oil and wine were, for a long time, based on emigrants or colons of several generations that are spread through the five continents. Portuguese communities in Brazil and Venezuela in South America, PALOPs (Países Africanos de Língua Oficial Portuguesa – African Countries with Portuguese as Official Language) in Africa, especially Angola, and in Asia, namely locals in India and in Macau and Timor, in the United States of America, namely Boston and Newark, in European countries, such as in France, Luxemburg and Germany, among others. Historical, social and commercial ties since Portuguese sailors and discoveries reinforce our relations with other emergent countries like China and other countries of the Pacific Bay, Arabic Countries and India, South Africa in the African continent, as well as other European countries, namely England and Spain. This net of foreign communities is an enormous asset that Portugal has to value properly. Portuguese communities spread through the world are a "baseland" of Portuguese culture and represent hotspots to initiate internationalization particularly for SME's. The Portuguese in these communities are ambassadors of our products.

Hence, opportunities for olive oil and wine systems internationalization come mainly from the Portuguese diaspora scattered around the world. Historical roots and cultural ties with Portuguese speaking countries are a major competitive advantage for Portuguese exports. Lack of market information and financial risks are reduced and market entrance can be safer and smother.

Both for olive oil and wine from Portugal and from Alentejo these are the emergent foreign markets that should be targeted to trade. Among them some should deserve especial attention to be studied and characterized in terms of increase of consumption because of their potential as well as their preference. Threats to the SME's internationalization are of different sorts. Strong international competition requires adequate study and planning of the process, including markets study and priorities definition to profit from competitive advantages.

Portugal and Alentejo have privileged markets, where there is a recognition of quality and preference for the Portuguese olive oil and wines such as the Portuguese-speaking countries, especially Brazil, where Portugal is leader, and Angola, which is also a market with a large potential, and should assert this quality in other emerging regions in terms of consumption, particularly in North America, the United States and other countries of South America, and in Asia, especially the Chinese and Indian market.

In olive oil, Brazil is a foreign market that has an enormous growth potential. Portuguese language is a competitive advantage and Brazil market is growing with economic growth. In addition, in the short run international events that will be hosted by Brazil will boost demand for agro-food quality products, including olive oil and wine, leaving trade arrangements, commercial contacts and distribution channels. Portuguese olive oil is market leader. This position must be reinforced in this period of increased demand to obtain gains in structural terms in the medium term as market grows with large potential. Brazil must be a market priority for Portuguese olive oil and wine.

For different reasons, other important markets are Angola and USA. Angola is relevant because it is a traditional market with increasing traded quantities and potential for growth. USA is an important external market because of steady increasing consumption levels related with income levels and living standards together with health concerns and product differentiation. Other traditional Portuguese markets, namely France and Venezuela, and PALOPs, like Cabo Verde, and emergent markets, including China and South Korea dispute very low initial shares. Spain is a major European trade partner of Portugal obviously because of neighbourhood production and commercial reasons.

In wine, European Union countries are major trade partners. PALOPS are major clients from Africa. Angola leads Portuguese exports market share with 26.7 %, in 2012. In America, both USA and Canada are larger markets than Brazil, which follows in market value importance degree but is second after USA in volume. Shares in volume of total exports are for USA 4 %, for Brazil 3.4 % and for Canada 2.7%. In Asia, China, leads export list representing 2.3 % of total Portuguese exports followed by Macau and Japan both with less than one per cent (0.7 and 0.3, respectively). European countries are responsible for the majority of exports, with special weight of France, Spain, Germany and United Kingdom, with shares of 13.9, 8.1, 7.7 and 4.5 %, respectively, followed by several countries of European Union.

Depending upon the degree and share of the targeted market, internationalization can be facilitated through association of companies in the olive oil and wine segments or of other regional and national products. AICEP, the Portuguese national agency for international promotion and national producer and inter-professional organizations can support and encourage first experiences and contacts and networking for clustering can be a good way to get in touch and contacting in events, contests and shows in regional (southwest of Iberia) and Mediterranean, European and countries from the rest of the world with important impact. Media specialized in olive oil and wine, expert invitations and territorial marketing involving integrated activities such as nature, sport, gastronomy and tourism.

These aspects have particularly consequences for the internationalization capability of these systems, for instance lack of direct external investments with partnerships, creation of subsidiaries, joint ventures, or acquisitions of other companies, including with large distribution and retailing. Export activities are still insignificant in most companies (though growing). SME´s scale tends to push for differentiation and brand development in local, regional and domestic markets. The opposite is required to cooperate and associate capabilities to promote internationalization where quality image must rely on common characteristics and a unique brand.

Custom administrative barriers and taxes, particularly on wine, increases prices and decreases consumption, reducing market potential and profitability. Barriers to trade and market protection, for instance through quotas, will affect liberalization. International guidelines and agreements will tend to increase competition. Further liberalization of world markets and the foreseeable increase in competition from foreign wines in internal markets might reinforce the need to internationalization and global competition.

Promoting olive oil and wines of Alentejo in national and international events, fairs and media

One of the key aspects of national and international promotion is a marketing plan that includes participating and monitoring major events both in national and international fairs. There are national, regional and international events that are important to attend and participate to promote wine and olive oil quality, to meet and establish commercial contacts with market operators from different countries, to be in touch with major developments of the sectors and clusters, namely production, package and marketing technologies and technics and to understand market tendencies and changes. These missions can be done in groups of companies that also want to cooperate and make joint efforts to market and even with other sector companies that associate their products to promote the same region, territory or quality product image. Sectorial olive and wine fairs both national and international are particullarly important but sinergy and potentiation of positive effects can be derived from assotiation with other portuguese food and drink quality products and companies in general food fairs and events .

In wines, ViniPortugal has an annual marketing plan of activities directed to priority markets which includes a wide variety of international and national events in those markets. To paricipate in this effort means to capture results and to benefit from expertise and knowledge of other producers and companies and to follow other brands and national products which may well be good sources of information and knowledge about those markets. In olive oil, promotion of olive oil culture and product unique characterísitcs, assotiated with mediterranean region and diet, are a major goal of COI, the International Olive Council. COI has regular promotional group's aims, activities, international agreements, information and current and future events in emergent countries. Casa do Azeite also tries to focus and follow international promotional efforts and participation on international events of priority countries .

The strategy to select among fairs and competitions should aim to target the high level international events in order to bring reputation and the countries which constitute priorities for portuguese olive oil and wines, namely Brazil, Angola, other Palops and countries where portuguese diaspora has cultural inflence such as USA, Venezuela, Canada. Of course that other emerging markets with high potential must, progressively, be studied and analised, such as major Asiatic markets.

Los Angeles International Competition is one of the premier olive oil competitions in the world, bringing together the highest standards of integrity and professionalism in awarding medals to the best oils from around the globe. New York International olive oil competition is another major north american fair and aims distributers and marketers, package designers and culinary chiefs. Olive Japan International Extra Virgin Olive Oil Competition judging followed by the Olive Japan Trade Show and accompanying symposium and seminars and China Oil are particular relevant for emergent asian markets with enormous potential.

In wines, the London International Wine fair, the Hong Kong international Wine and Spirits fair in the asian market, The Brasil International Wine Fair in Rio de Janeiroand in USA the Miami International Wine Fair are international specialized fairs of reputation in ythe sector.

Food and drink international events include in several countries Alimentaria fairs, an international leader in agro-food fairs. Alimentaria Brazil is one of the world's most important food and beverage trade fairs, including different segments, products and company profiles of companies, including importers, distributors, purchase centers, major retailers, cash and carry, restoration and hotel, catering, wholesale and retail. Agrobusiness in Brasil represents almost one fourth of GDP and is the leading trader of the world. Hence, to follow and maintain close contact with Brazil agro-food evolution is important not only because of Brasil market relevance for Portuguese olive oil and wine but also because of Brazilian dynamics and innovation in the sector. Alimentaria has also an important fair in Barcelona targeting consumers and agro-industry companies with two specific fairs. Other European fairs and events of Germany, France and Spain also require Portuguese participation not only because of trade and market share but also because of consumer behavior and market taste, sophistication, research and development trends.

National fairs of international dimension includes Portugal Alimentaria, an international fair of food, hotel and agro-industry technology, promoted by AIP (Assotiation Industrial Portuguese) at International Lisbon Fair which is one of the most important events of Europe agro-food market. SISAB is an annual national event in February that works as a business platform of the sectors of food and drinks that puts together exhibitions, tasting and networking spaces, business rounds of more than 400 companies, including leading brands in different segments that exhibit their new products and services. AGROTEC is another related food event also focusing in technology.

At regional level OVIBEJA in the South of Alentejo and Zafra fair in Andaluzia are important events that include local and regional Portuguese and Spanish producers and companies. Expoliva of Jaén in Andalusia, the leading production region of Spain, is an international fair of olive oil and industry of major importance in the world.

Portuguese distribution groups are also a way of promoting at national and intenational markets varieties, brands and regions. In national terms, one group works with their own distribution brand differentiang regional origin or varieties. Other group has a distribution specific brand assotiated to regional origin. Another group has further grouping brands or denominations assotiated but maintainig producer brand and region origin. Since some of these groups are operating in other countries, national and regional producer assotiations and stakeholders organizations can also work with these distribution groups to promote olive oil and wines in these countries and sell in these markets.

Nacional and international fairs specialized in olive oil and wines represent specific events where major operators of these agro-food products cooperate and compete to promote their supply chain and markets. Horeca markets and culinary TV shows are promotional means extremely powerfull. Assotiating gastronomy and tourism promotion pachages diversifying supply of products and services puts and creates value for territories and stakeholders including SME's, with low production scales and traditional local and regional values and methods.

Assotiation with territory and landscape also promotes produts and places with potential effects on enotourism and olivetourism of those producers and regions, like the cases of San benito, National organization of Cities de Olive oil of Italy, San Martino, in olive oil. The same is true for wine specific regional events. Other Mediterranean country food cluster fairs including other sectorial fairs and events such as tourism, gastronomy, cultural and heritage, such as many of the events of PACMAn in the participating regions of Cyprus, Greece, Italy, Spain and Portugal, reinforce the relevance of objectives and territorial traditional values and authenticity of Mediterranean products including olive oil and wines.

Media specialized in olive oil and wines are also critical to evaluate private and public efforts in these sectors, promote quality and spread a favourable image of the sectors at national level and products at brand level. Magazines and yearbooks, contests, distinctions and prizes represent recognitions that end up creating and spreading value to brands, products and companies. International and national olive oil and wine guides, the latter with much larger scope and development in different countries and in the world, represent another way to promote products, regions and countries.

6. Conclusion

The Portuguese olive oil market represents approximately 2.5% of the world market. A large part of the Portuguese and the overwhelming majority of the Alentejo olive oil are of great quality with Alentejo representing 64 % of total Portuguese olive oil production. Portuguese production of wine represents 2.4 % of world production. Alentejo wine production share of Portuguese total production is approximately 25 % but represents more than half of the production of quality wines, namely wine produced under DOP or IGP mentions.

These two food systems have a large potential for success due to their consumption characteristics in terms of qualities associated with Mediterranean diet and fashion, namely nature and territory, health, cultural heritage, gastronomy, sophistication, taste and lifestyle.

In both olive oil and wine agro-food systems value can be created to olive oil and wine supply chain sectors and respective stakeholders through internationalization having as target emerging markets in developed and developing countries and adopting differentiated product strategies for high segments and proper positioning.

Alternatively, particularly for SMEs, there are other ways to internationalize olive oil and wine which will contribute to its image and future sales abroad as well as of our other regional products of Alentejo. Tourism activities directed to complement olive oil and wine clusters can promote the activities and resources employed in both supply chains, including the landscape, territory and olive groves and vineyards, its history and tradition, growers and olive and vine crop production techniques, the mills and cellars with the production and packaging of olive oil and wine, and the ways they did innovate over time, the agro-industrial and services, namely gastronomy and cultural operators, and the overall economic viability and sustainability of rural areas. Private and public stakeholders can all gain with organizing and networking that promote the provision of tourism products associated with olive oil and wine.

Hence, five orientation guidelines were set to implement a mixed strategy for attractiveness, competitiveness and internationalization of olive oil and wine systems of Alentejo region. These guidelines address simultaneously capacity building and institutional support of these systems in internal and external markets trough organization and scale of supply chains, developing internal markets differentiating and diversifying consumption products and services, following a regional strategy in line with the national internationalization strategy, setting external markets priorities and targets and promoting olive oil and wines of Alentejo in national and international events, fairs and media.

Bibliography and References

ADRAL, Report of Focus group, Wine Sector, PACMAn Project

ADRAL, Report of Focus group, Olive oil, PACMAn Project

CCDRA, Plano Regional de Inovação do Alentejo, 2005

CVRA, Produtores, http://www.vinhosdoalentejo.pt

INE, Statistical Yearbook of Alentejo, 2011

INE, Agricultural Census, 2009

INE, Estatísticas Agrícolas, several years.

IVV, Mateus, Francisco (2013), Exportações de Vinho e Mercado Nacional em 2012

OIV, International Organization of Vine and Wine, Statistical report on world vitiviniculture, 2013ViniPortugal, O sector do Vinho, http://www.viniportugal.pt/OSector

ViniPortugal, Estatísticas do Sector, http://www.viniportugal.pt/Estatisticas

Vivas, Carla e Sousa, António (2012), Globalization and Internationalization Strategies of the wine sector companies in Portugal, 6th Annual Conference of Wine Economists AAWE-proceedings, Princeton