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Plan for the sustainable development of the agricultural sector in Messinia

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Outline

This study aims to contribute to the development of a plan for the sustainable development of the agricultural sector in the regional unit of Messinia. The study first examines the basic demographic and financial characteristics of Messinia and analyzes the structure of agricultural production—especially in relation to the other regional units of the Peloponnese—as well as the financial footprint of the agricultural sector in Messinia. The study then presents the latest developments concerning the agricultural sector's support framework, and attempts an initial evaluation of the possible impact of the changes in Common Agricultural Policy (CAP) on the Messinian agricultural sector. Moreover, it presents the strengths, weaknesses, opportunities and threats facing the agricultural sector in Messinia; and finally it defines a set of aims and actions that will help improve the agricultural sector's capabilities and the activities connected to it, which in turn will contribute to the development and creation of new job positions in the area, at a time when financial and social problems are especially acute.

Demographic and financial characteristics of Messinia

Amidst negative demographic developments in the period 2001-2011—a 4% reduction in Messinia's permanent resident population, compared to a 3.3% reduction in the region of Peloponnese, and an obvious ageing of the population—the per capita GPD in Messinia rose to €14.400 in 2009. This amount corresponds to 87% of per capita GPD in the Peloponnese region, as compared to 77% in 2002, establishing Messinia as the sole regional unit in the Peloponnese that improved both its absolute and relative position in terms of per capita GPD, between years 2002-2009.
The population's level of education is relatively low; 50.3% of the population has not completed secondary education, as compared to 43.1% in the rest of the country, while only 8.1% are higher education graduates, as compared to 12.3% in the rest of the country. Both the employment rate (75.1%) and the workforce participation rate (63.5%) in Messinia are higher compared to the rest of the country. At the same time, the unemployment rate in 2011 was lower, set at 14.3% (compared to 17.7% in the rest of the country).

Structure of financial activity

The services sector held 75.3% of total value added in Messinia in 2010. The processing sector's participation is slightly lower than that of the national average (12.8%), while the contribution of the primary sector was 8.1% in 2010. The greatest part of value added in the services sector comes from the fields of Commerce (20.8%), Public Administration (21.2%), and Real Estate Management (18.1%). The contribution of the primary sector showed a downward trend between years

2005-2010, from 12.1% to 8.1%, while the processing sector showed a corresponding increase (from 8.6% to 12.8%). The primary sector's contribution to total employment followed a similar trend, down from more than a third of 2002's total to just over one quarter of that of 2008. The tertiary sector occupied 56% of Messinia's working population, compared to 50.4% in 2002. There was a similar increase in the processing sector's contribution to total employment, its percentage steadily rising from 6% to 9.5%.

In terms of value added, Messinia steadily specializes in the primary sector and in constructions, while in recent years the processing sector has shown specialization tendencies. Similar conclusions have been drawn regarding specialization in terms of employment, even though no specialization tendencies can be observed in the processing sector.
Productivity in Messinia is lower than the country average, as well as the region average in every financial activity sector, which is indicative of the fact that specialization tendencies in the Messinian economy still have a long way to go. Furthermore, employment changes in Messinia mainly depend on the area's particularities, and less on national tendencies or financial structure issues.
The analysis on the one hand denotes the presence of favorable local factors, which can offer a significant boost to the area's financial development, and on the other hand signifies the presence of a sectoral structure, which is not favorable to this development.

Structure of agricultural produce

The phenomenon of agricultural land fragmentation is particularly pronounced in Messinia also, where small average expanse per plot and high rates of low economic holdings are observed. The farmers' age average is not favorable, as 67% of them are over 55 years of age. Among the advantages are the comparatively lower rates of land and holdings found in mountainous and less-favored regions, and a slight increase in holdings larger than 49 acres. Messinia's agricultural production specializes in olives for olive-oil making, dried figs, Corinthian raisins, watermelons, potatoes, cucumbers, and wine-producing vines.
The weaknesses in Messinia's olive-oil production sector can be traced back to ingrained forms of market organization, the producers' needs for cash flow, and the credit constraints, which have become more pronounced amidst the financial crisis; moreover there is the small size, which does not favor investment initiatives, the lack of trust in cooperatives, the lack of a common vision regarding the area's future, the lack of collaborations, clusters, regular consultation services, etc. Opportunities for the sector include the better capitalization on PDO olive oil, the reinforcement of the position of standardized olive oil in the local market, the reinforcement of the connections with the food industry and tourism, the introduction of product innovations, the turn towards standardized olive oil exports, etc. Given the rapid growth patterns of Spanish and Italian exports and the resulting drop in prices, maximizing value added from domestic olive oil production, with a higher penetration in the final consumer markets, is now

imperative for improving or at least maintaining financial activity in Messinia's agricultural sector. There are significant increase margins when it comes to profit (at least 50%) from redirecting exports from Italy to other countries. This, however, requires a different model of market organization, which will allow for reliable export of greater quantities of standardized olive oil towards the destination markets abroad.

The financial footprint of the agricultural sector in Messinia

In 2010, the agricultural sector's contribution to Messinia's total value added was €163.000.000. Thus, 26% of the sector's value added in the Peloponnese region is owed to Messinia. 8.1% of the regional unit's value added came from the agricultural sector, with a share 0.5 percentage points higher compared to the region. Messinia contributed 2.6% of value added to the country's agricultural sector in total.

According to the input-output charts, it has been estimated that for very €1.000 brought in by the agricultural sector in Messinia, €716 are exported by the regional unit towards other areas in the country or abroad, €90 are intended for final consumption by the regional unit's households, €25 go towards replenishing stock and as input to investment works, and the other €169 supply the local economy sectors. Sector-wise, the biggest client, according to estimations, is the agricultural sector itself, with €95 (eg. animal feed for stock-farmers), followed by the food-and-drinks sector, with €57 (or 5.7% of total demand for agricultural products in Messinia), and the tourist sector (hotels and restaurants), with €15. Each of the remaining sectors consumes less than 0.1% of Messinia's agricultural production.
For comparison purposes, it is worth mentioning that on a national level, the intermediate demand share (i.e. the demand from other financial sectors) amounts to 53%, clearly higher than Messinia's 17%. This significant difference in rates is an indication that the regional unit's value added could be higher if the local food industry, tourism and other sectors using agricultural products were developed at the country level.

The agricultural sector's support framework

The EU's Common Agricultural Policy (CAP) supports the agricultural sector financially, thus ensuring adequacy of food products and promoting balanced development of all rural areas. The CAP's budget is distributed into three closely interdependent categories of measures: a) farmers' income support (approximately 70% of the budget), b) agricultural development (approximately 20% of the budget, with extra co-financing by the member states), and c) actions to support the market.
In October 2011, the European Commission presented its final proposals regarding the regulations that will define the CAP for the period beyond 2013. It has been

suggested that a new, basic payment scheme be implemented, which will still be subject to "cross-compliance." From 2019 onwards, the member states will be obliged to adopt a single payment system per hectare, while by adjusting aid on a national level, the amounts for those who currently receive less than 90% of the average EU-27 per hectare aid will increase. For the post-2020 period, the intention is for full convergence through the equitable distribution of direct payments in all EU member states.

The basic payment scheme will be supplemented by the so-called "green scheme," according to which every plot will be granted extra space, so long as it follows agricultural practices that are beneficial to the climate and the environment. 30% of the national envelope for direct payments will inevitably be steered towards this type of support.

There are no additional requirements for organic farmers. Areas that are naturally at a disadvantage will be eligible to receive extra support, up to an amount that corresponds to 5% of national resources for direct payments, while young farmers (up to 40 years old) will receive extra support—25% for the first 5 years of setting up. Total funding cannot exceed 2% of national envelopes.

Moreover, the possibility of coupled payments by the member states has been provided for, as well as the possibility to transfer up to 10% of the national envelope to directly support agricultural development programs. With the aim of avoiding paying support to persons who engage in no real agricultural activity whatsoever, the definition of "active farmer" now becomes stricter.

The new agricultural development planning period lays down 6 priorities that are consistent with the objectives of the "Europe 2020" strategy (sustainable, ingenious, and global development), on which the relative programs will center. The new program for agricultural development in Greece for the period 2014-2020 is under construction, with the proposed strategic choices aligning with the aims of the new CAP for agricultural development. More specifically, in December 2012, it was proposed that the program focus on 7 main priorities, based on the challenges facing the local agricultural sector: a) Reinforcement of the agro-food industry's competitiveness, b) Provision of knowledge to the sectors of agriculture, stock-farming, and forestry, and the rural areas, c) Reinforcement of competitiveness and support of entrepreneurship in rural areas, d) Improvement of food chain organization, e) More efficient use of resources in an economy low in CO_2 emissions and strong against climate change, f) Maintenance, restoration, and reinforcement of the ecosystems that are dependent on agriculture and forestry, g) Reinforcement of the agricultural area's attractiveness through the improvement of human resources and quality of life.

According to scenarios processed by the Ministry of Rural Development and Food regarding how to allocate the basic single payment aid to the domestic agricultural sector, the final selection of criteria that will determine the basic scheme will significantly impact the amount of aid given to selected stretches of land per geographical area. In several regional units, the unit value of payment entitlements will fall considerably compared with the current situation, especially in areas that used to receive large amounts as aid, in accordance with the historical claim system. Another factor that leads to a decrease in the entitlements' unit value is the introduction of new plots (mainly pastures), which did not have any entitlements in the past.

In Messinia, certified olive groves comprise the majority of the expanses (approximately 70%), on the basis of single applications on behalf of the beneficiaries. Furthermore, according to the historic model for the distribution of single-release payment entitlements, it has been estimated that the olive growing sector in Messinia receives approximately 84% of a total of €104.000.000 in direct support (according to estimations for 2010). Direct support in Messinia is assessed at €460/hectare, higher by 21% compared with the national average (€380/hectare). Especially for olive growing, support is assessed at €552/hectare. Consequently, Messinia is among the regional units that used to receive direct support that exceeded the national average, which will be restricted by the new CAP, depending on the regionalization model selected in the end. Of course, the possible extension of the areas under support entails that the final impact will depend on the existing distribution of property, especially between olive-growing areas and the other areas of the regional unit which have not received subsidies until now. In order to limit losses in Messinia, there must be a clear turn towards the demands linked with the "green scheme" mentioned above (eg. organic farming, farming diversification, maintenance of permanent pastures, and assignment of areas for ecological purposes). From a policy options perspective, a crucial factor in the amount of possible losses will be the amount of resources that will be allocated towards supporting areas with natural restrictions, small farmers, as well as toward coupled support. However, it is clear that there might be benefits from the active involvement and exploitation of rural development funds, which provide the opportunity to build a competitive primary sector that will succeed in securing its financial sustainability through the markets.

Agricultural sector in Messinia SWOT analysis

Strengths
- Prominent position in local economy
- Products closely associated with the Mediterranean diet
- Standardized products, PDO/PGI, organic
- Existence of a large urban center (Kalamata)
- Increased contribution of processing sector
- High percentage of agricultural land in use
- Geological and morphological relief
- Tendency to improve agricultural land distribution according to expanse
- High relative productivity in olive trees and arable crops
- High level of mechanization

Weaknesses
- Small size of agricultural land
- Insufficient connections with the processing sector and tourism
- Age composition
- Low level of education

- Low efficacy of cooperatives
- Deficiencies in basic infrastructure
- Weaknesses in processing, distribution, trade and promotion of agricultural products
- Dependence upon foreign enterprises
- Dependence upon community grants
- Incomplete specialization in comparative advantages
- Worsening tendency in agricultural land distribution, based on financial importance
- Relative isolation because of geographical location

Opportunities

- Utilization of community grants in order to produce high added value products
- Utilization of the increasing demand for organic and quality products
- Promotion of contract farming
- Opportunity to connect the agricultural sector with the increased activity in the tourism industry
- Emerging trend to resettle in the countryside
- Increase in international prices for olive oil substitutes
- Increase in olive oil exports towards emerging markets

Threats

- Restrictions in community grants
- Worsening of the country's fiscal issues
- Increased competitiveness in the international olive oil market
- Difficulty adapting to the new CAP

Development priorities and possible actions for the agricultural sector in Messinia

In an effort to create and implement an action plan for the agricultural sector's sustainable development, the local government, the Periphery, and other local collective bodies (eg. the Chamber of Commerce, various cooperatives, and foundations) have a significant role to play; beginning from a common vision regarding the area's development, they must join forces, work together, and share the work they have to complete on a realistic basis, according to their responsibilities and capabilities.

Institutional bodies ought to embrace private initiatives in a way that will facilitate effective action. Moreover, any potential horizontal actions, financed by public funds, should be prioritized in order to achieve the best possible outcome at a time marked by a shortage of resources that discourages new initiatives, while simultaneously rendering them more necessary than ever, in order to combat the crisis and to improve the area's prosperity prospects.

Encouraging the agricultural sector's sustainable development, creating and maintaining jobs, and improving the income of Messinia's producers require the reinforcement of the agricultural sector's competitiveness, which must be combined with the commitment to apply good practices in the sustainable management of natural resources, the support of human resources, and the improvement of market access and presence.

Aims and actions for the development of the agricultural sector in Messinia

Strategic aim	Some indicative aims and actions
Improvement of the agricultural sector's competitiveness	1. Support collective forms of production organization(producer groups, cooperatives), in order to increase production scale and improve productivity and market access. 2. Disseminate optimal practices and innovations to reduce costs, increase performance and/or improve crop quality, in collaboration with experts. Reduce the gap in the implementation of applied research results. 3. Focus on product quality throughout all stages of production, standardization-processing, and marketing (quality labels, safety and hygiene certification, standardization). 4. Schedule key infrastructure projects in collaboration with the municipalities, to reduce the cost of handling agricultural products. 5. Support connections with downstream sectors (contract farming, clusters, forward integration, link with the food/tourism industry) – Partnerships.
Sustainable management of natural resources	6. Environmentally friendly cultivation methods (efficient use of inflow, integrated management systems, organic products). 7. Efficient use of water resources (conservation, managing salinization, irrigation networks: modernization and irrigation techniques). 8. Utilization of renewable sources of energy (utilization of olive tree biomass and olive mill waste for energy purposes). 9. Systems for recycling greenhouse cultivation materials (management of cultivation plastics). 10. Plant protection programs, accumulation and management of biomass and waste, pasture management.

Human resources	11. Provide regular consulting services, as well as technical support and training for existing and new cultivations, and for existing and new producers. 12. Provide information regarding market developments and the institutional framework, create an innovative outlook, adopt new technologies and point out "smart" investment opportunities. 13. Attract new producers – renew human resources.

The agricultural sector should not be regarded as separate from the food processing sector, since the goal is to effectively support and promote its development. While conditions in the agricultural product markets are highly competitive, profit margins low, and uncertainty over income level high because of price fluctuations, food processing offers—under certain circumstances—the possibility to increase the products' added value and to access the market under better terms. Consequently, a robust and expanding food processing sector in Messinia will ensure demand for local primary products, at the same time boosting the development of the agricultural sector. Within this framework, it is important to support openness and improve the sector's access to the markets.

Aims and actions for the development of the food processing sector in Messinia

Strategic aim	Some indicative aims and actions
Development of the food processing sector in Messinia	1. Creation of stronger corporate or collective structures in the food sector, with a portfolio of diversified, traditional Messinian products, focusing on the following: • Develop contract farming • Improve logistics (eg. with the concentration of trade flow) in order to reduce transport and distribution costs • Focus on the better use of the area's PDO products (standardized exclusively in Messinia) • Introduce innovative products, provide combined services-products • Support position in the domestic market and substitute imports • Keep track of market developments, determine target markets, proceed with market segmentation, determine product line and pricing policy per market segment, analyze distribution channels, and create a market presence development plan

	• Examine all possible sources of public funding, prepare investment proposals and participate in outreach programs
Support market openness and presence	2. Integrate commercial prospects, with the collaboration of the area's export businesses. 3. Collaborations with established businesses and distribution networks in Greece and abroad – examine synergy prospects. 4. Joint presence of Messinian products in international exhibitions, and steady presence in competitions and product reviews. 5. Quality pact with the catering-hotels sector. 6. Create model e-shop for Messinian products. 7. Establish international business meetings in Messinia. 8. Utilize special promotional methods (eg. build relationships with influential groups, improve the use of social networking tools).

Aims and actions for the development of the olive oil sector in Messinia

Sector	Some indicative aims and actions
Olive growing	1. Commit to the implementation of good agricultural practices and expand the production of integrated management and organic farming products, combined with the use of PDO/PGI labels and certification with brands that are recognized in Greece and abroad. 2. Integrate traceability systems on table olives and olive oil through all production-pressing-standardization-marketing stages. 3. Manage scattered olive groves or those that have been neglected by residents of urban centers, through producers' organizations or private businesses, based on multiannual contracts.
Olive presses	4. Examine the possibility of bringing together olive presses or using joint pressing to achieve economies of scale. 5. Utilize certifications and assurance systems for quality, safety, hygiene, as well as environmental management, and management of waste. 6. Create network of olive presses and other agricultural units that can be visited.
Processing/Standardization	7. Examine the prospect of bringing together

	standardization units, in order to achieve economies of scale, and for the better commercial use of products. 8. Place emphasis on certification, quality assurance, and networking with other sectors. 9. Grade olive oil according to its features (chemical analyses, panel tests). 10. Differentiate quality across more dimensions (flavor combinations, packaging, organic-functional foods, climate-neutral olive oil). 11. Develop sector of edible olive processing, and produce new types of products. 12. Expand the share of standardized olive oil within the regional unit (eg. through support from local authorities, municipal tax deductions for catering businesses/hotels that use the area's standardized olive oil).

Table 0.1: Aims and actions for the development of the agricultural sector in Messinia

Strategic aim	Some indicative aims and actions	Priority Difficulty level
	1 Support collective forms of production organization (producer groups, cooperatives), in order to increase production scale and improve productivity and market access. Record and present good cooperative practices to create a positive atmosphere for collective action - Highlight benefits of participating in collective forms of production organization - Conduct a workshop. Create a record of producer organizations - financial results - activity fields by municipal unit. Monitor performance systematically. Conduct field research and/or public consultation in each municipality in Messinia: Producer organizations and individual producers are the target group, and the aim is to record and assess support needs and appropriate actions for the future. Introduce land reallocation program in order to optimize crop efficiency. Encourage the joint exploitation of land.	

	Provide financial support for the purchase of agricultural land, as part of business planning (purchase or interest subsidy). Invest in the creation and improvement of infrastructure for sorting, standardization, packaging and processing. Construction or modernization of refrigeration chambers/storage areas. Certification of procedures and implementation of quality standards. Support product promotion actions. Conduct market studies for the major Messinian agricultural products. Provide financial support for the participation in trade fairs. Create a corporate identity and brand name of agricultural products. Assess energy savings potential on farms.	
Improve competitiveness in the agricultural sector	2 Disseminate best practices and innovations that reduce costs, increase efficiency and/or improve crop quality, in collaboration with experts. Reduce the gap in the implementation of applied research results. Record best practices on the main crops of the regional unit of Messinia - Create information material. Reorganize the system for providing consultation services to producers, in order to optimize its efficiency. Organize seminars in collaboration with scientific bodies, to disseminate basic results of applied research - Establish cooperation with the Agricultural University and other higher education institutions. Specialization of useful technological applications per crop, and gradual adoption of new technologies. Record domestic genetic material in Messinia - Collaborate with research centers to achieve improvement and better utilization.	

	Collaborate with CRES to develop an action plan for the utilization of biomass. Create an electronic hub with the participation of a network of producers and research centers for the transmission of information and knowledge. Organize a crop network to connect with the educational process. The purpose is to show good practices and transfer know-how. 3 Emphasize product quality during all stages of production, standardization-processing, and marketing (quality labels, hygiene and safety certification, standardization). Create good practice manuals to establish quality assurance regulations. Provide funding for certification and quality label systems. 4 Schedule key infrastructure projects in collaboration with local agencies, to reduce the cost of handling agricultural products. 5 Reinforce connections with downstream sectors (contract farming, clusters, forward integration, connection with the food/tourism industry) – Partnerships.	
Sustainable management of natural resources	6 Environmentally friendly cultivation methods. Expansion of integrated management systems. Expansion of organic farming. Emphasis on the rational use of inputs and precision agriculture.	

Table 0.2: Aims and actions for the development of the food processing sector in Messinia

Strategic aim	Some indicative aims and actions	Priority Difficulty level
Development of the food processing sector in Messinia	1 Create stronger corporate or collective schemes in the food industry with a portfolio of diversified traditional Messinian products, focusing on the following: Develop contract farming. Improve logistics (eg. by concentrating trade flows) to reduce transport and distribution costs. Focus on the best use of the area's PDO products (exclusively standardized in Messinia). Introduce innovations in products, provide combined services-products. Reinforce position in the domestic market, and substitute imports. Keep track of market developments, determine target markets, proceed with market segmentation, determine product line and pricing policy per market segment, analyze distribution channels, and create a market presence development plan. Examine all possible sources of public funding, prepare investment proposals and participate in outreach programs.	
Reinforce openness and market presence	2 Integration of trade opportunities, with the collaboration of export businesses in the region. 3 Partnerships with established companies and distribution networks in Greece and abroad - Review partnerships. 4 Joint presence of Messinian products in international exhibitions, and steady presence in competitions and product reviews. 5 Quality agreement with the catering/hotels	

	industry. Organize seminars for local catering and tourism professionals, for the proper promotion of the Messinian cuisine and local products. Create a stand for the promotion of Messinian products in restaurants and areas that attract tourists. Commit to the use and promotion of local products in the catering and tourism industries. Organize seminars in collaboration with recognized chefs, in order to develop the trainees' skills and make better use of the elements of the Messinian cuisine. 6 Create a standard e-shop for Messinian products. 7 Establish international business meetings in Messinia. 8 Use special forms of promotion (eg. build relationships with influence groups, optimize the use of social networking tools).	

Key:

Significance	Level of difficulty
1 - Priority	1- Relatively low cost
2 – At a later stage	2 – Medium cost
	3 – Higher cost

Table 0.3: Aims and actions for the development of the olive oil sector in Messinia

Sector	Some indicative aims and actions	Priority Level of difficulty
Olive growing	1 Commit to the implementation of good agricultural practices and expand the production of integrated management and organic farming products, combined with the use of PDO/PGI labels and certification with recognized brands in Greece and abroad. 2 Integrate traceability systems into table olives and olive oil at all stages of production - pressing - standardization – marketing. 3 Manage scattered olive groves or those that have been neglected by residents of urban centers, through producers' organizations or private businesses, under multiannual contracts.	
Olive presses	4 Examine the possibility of bringing together olive presses or using joint pressing to achieve economies of scale. 5 Utilize certifications and systems for quality, safety, and hygiene assurance and environmental management, as well as waste management. 6 Create network of olive presses and other agricultural units that can be visited.	
Processing/Standardization	7 Examine the possibility of bringing together	

	standardization units, to achieve economies of scale and better commercialization of products. 8 Emphasize certification, quality assurance and networking with other sectors. 9 Grade olive oil according to its features (chemical analyses, panel tests). 10 Differentiate quality across more dimensions (flavor combinations, packaging, organic-functional foods, climate-neutral olive oil). 11 Develop edible olives processing sector and produce new types of products. 12 Expand the share of standardized olive oil within the regional unit (eg. through support from local authorities, municipal tax deductions for catering businesses/hotels that use the area's standardized olive oil).	

Key:

Significance	Level of difficulty
1 - Priority	1- Relatively low cost
2 – At a later stage	2 – Medium cost
	3 – Higher cost