
Support for Farmers' Cooperatives

Case Study Report **Structure and strategy of fruit and vegetables cooperatives in Almería and Valencia, Spain**

Cynthia Giagnocavo
Silvia Gerez
Carlos Vargas Vasserot
Vanessa Campos i Climent



The 2011-2012 project „Support for Farmers’ Cooperatives (SFC)“ has been commissioned and funded by the European Commission, DG Agriculture and Rural Development.

Contract Number: 30-CE-0395921/00-42.

The SFC project is managed by Wageningen UR’s Agricultural Economics Research Institute LEI and Wageningen University. Project managers: Krijn J. Poppe and Jos Bijman.

Other members of the consortium are:

- Pellervo Economic Research PTT, Finland: Perttu Pyykkönen
- University of Helsinki, Finland: Petri Ollila
- Agricultural Economics Research Institute, Greece: Constantine Iliopoulos
- Justus Liebig University Giessen, Germany: Rainer Kühl
- Humboldt University Berlin, Germany: Konrad Hagedorn, Markus Hanisch and Renate Judis
- HIVA Katholieke Universiteit Leuven, Belgium: Caroline Gijssels
- Rotterdam School of Management, Erasmus University, The Netherlands: George Hendrikse and Tony Hak

How to cite this report:

Giagnocavo, C., S. Gerez, C. Vargas Vasserot and V. Campos i Climent (2012). Support for Farmers’ Cooperatives; Case Study Report Structure and strategy of fruit and vegetables cooperatives in Almería and Valencia, Spain. Wageningen: Wageningen UR.

Disclaimer:

This study, financed by the European Commission, was carried out by a consortium under the management of LEI Wageningen UR. The conclusions and recommendations presented in this report are the sole responsibility of the research consortium and do not necessarily reflect the opinion of the Commission or anticipate its future policies.

Support for Farmers' Cooperatives;
Case Study Report
**Structure and strategy of fruit and
vegetables cooperatives in Almería
and Valencia, Spain**

Cynthia Giagnocavo
University of Almería, Spain

Silvia Gerez
University of Almería, Spain

Carlos Vargas Vasserot
University of Almería, Spain

Vanessa Campos i Climent
University of Valencia, Spain

November 2012

Corresponding author:

Cynthia Giagnocavo
University of Almería
Department of Management and Business Administration
Ctra. Sacramento s/n
La Cañada de San Urbano
Almería, Spain 04120
E-mail: cgiagnocavo@ual.es

Preface and acknowledgements

In order to foster the competitiveness of the food supply chain, the European Commission is committed to promote and facilitate the restructuring and consolidation of the agricultural sector by encouraging the creation of voluntary agricultural producer organisations. To support the policy making process DG Agriculture and Rural Development has launched a large study, “Support for Farmers’ Cooperatives (SFC)”, in order to provide insights on successful cooperatives and producer organisations as well as on effective support measures for these organisations. These insights can be used by farmers themselves, in setting up and strengthening their collective organisation, by the European Commission, and by national and regional authorities in their effort to encourage and support the creation of agricultural producer organisations in the EU.

Within the framework of the SFC project, this case study report on Comparing structure and strategy of fruit and vegetable cooperatives in Almería and Valencia, Spain, has been written.

Data collection for this report has been done in the spring of 2012.

In addition to this report, the SFC project has delivered 32 other case study reports, 27 country reports, 8 sector reports, 6 EU synthesis and comparative analysis reports, a report on cluster analysis, a report on the development of agricultural cooperatives in other OECD countries, and a final report.

The authors would like to thank the directors and managers of various F&V agricultural cooperatives in both Almería and Valencia for their willingness to collaborate in this project and to share information on structure and strategy of their cooperatives. As well, we would like to thank Coexphal, the association of producer organisations in Almería and the Fundación Cajamar for access to various sources of information.

Table of contents

| | |
|--|-----------|
| 1. Introduction | 1 |
| 1.1 Objective, research questions and hypotheses..... | 1 |
| 1.2 Methodology | 2 |
| 1.3 Brief review of the literature on Spanish Agricultural Cooperatives..... | 3 |
| 2. Description of the F&V cooperatives Almería..... | 6 |
| 2.1 Facts and figures on sector and cooperatives | 6 |
| 2.2 Strategy and structure of main cooperatives | 15 |
| 2.3 Relevant support measures affecting structure and strategy | 20 |
| 3. Description of the F&V cooperatives Valencia..... | 23 |
| 3.1 Facts and figures on sector and Valencia cooperatives | 23 |
| 3.2 Strategy and structure of main cooperatives | 30 |
| 4. Analysis by comparison | 36 |
| 5. Research Questions, Hypotheses, and Policy Questions | 41 |
| 6. Conclusions..... | 46 |
| Appendix 1- Hypotheses and Dependent and Independent Variables..... | 54 |
| Appendix 2 – Ratios..... | 55 |
| Appendix 4 Policy Measures Relevant to Almeria and Valencia Agricultural Cooperatives | 60 |

List of abbreviations

| | |
|----------------|---|
| APECA | Associació Professional d'Empreses Cooperatives Agràries (Professional Association of Agricultural Cooperative Company) |
| APO | Association of Producer Organisations |
| CAP | Common Agricultural Policy |
| CAPA | Consejería de Agricultura, Pesca y Alimentación Valenciana (Valencia Regional Ministry of Agriculture, Fishing and Food) |
| CMO | Common Market Organisation |
| F&V | Fruit and Vegetable |
| FAECA | Federación Andaluza de Empresas Cooperativas Agrarias (Andalusia Federation of Agricultural Cooperative Companies) |
| FEAGA | Fondos Europeos Agrícolas de Garantía (European Agricultural Guarantee Fund) |
| FECOAV | Federació de Cooperatives Agràries de la Comunitat Valenciana (Community of Valencia Federation of Agricultural Cooperatives) |
| FEGA | Fondo Español de Garantía Agraria (Spanish Agricultural Guarantee Fund) |
| FEOGA | Fondo Europeo de Orientación y Garantía Agrícola (European Orientation and Guarantee Fund) |
| FEPEX | Federación Española de Asociaciones de Productores Exportadores de Frutas, Hortalizas, Flores y Plantas Vivas (Spanish Federation of Export Producers Associations for Fruit, Vegetables, Flowers and Live Plants) |
| IOF | Investor Owned Firm |
| MARM | Ministerio de Agricultura, Alimentación y Medio Ambiente (Ministry of Agriculture, Food and Environment) |
| OP | Operational Programme |
| OSCAE | Observatorio Socioeconómico del Cooperativismo Agrario Español (Socio-economic Observatory for Spanish Agricultural Cooperativism) |
| PO | (recognized) Producer Organisation |
| SA | Sociedad Anónima (Anonymous Company) |
| SAT | Sociedad Agraria de Transformación (Agricultural Company of Transformation) |
| SCA | Sociedad Cooperativa Andaluza (Andalusia Cooperative Company) |
| SL | Sociedad Limitada (Limited Company) |
| SME | Small and Medium Enterprise |
| UTECO | Unión Territorial de Cooperativas Agrarias (Territorial Union of Agricultural Cooperatives) |

1. Introduction

1.1 Objective, research questions and hypotheses

This case study will focus on the comparison between the development of structure and strategy in the Spanish fruit and vegetable producing areas of Almería and Valencia. These two regions are assumed to have gone through different developments in term of the structure and strategy that fruit and vegetables cooperatives have adopted. These differences may be due to differences in regulations, in available policy measures, in historical situation (and thus path dependencies), in type of products, or in international exposure.

The central issue to be addressed by this case study is whether structure (e.g., size, internal governance, first versus second tier cooperatives, collaboration among cooperatives or between cooperatives and IOFs, internationalization, etc.) has had a significant impact on the strategy adopted by the F&V cooperatives in the two regions, and, consequently, on their success or failure.

The case study has the following objectives:

- To identify the degree of success of cooperatives in the F&V sector in two Spanish regions: Almería and Valencia.
- To analyse which support measures have been effective and efficient for the promotion and development of the F&V cooperatives in those regions.
- To provide a comprehensive insight on the competitive position of F&V cooperatives in the food chain and the internal and external governance of those cooperatives in Almería and Valencia.
- To draw qualitative inferences on the interaction between institutional environment, structure and strategy, and cooperative success.

In carrying out this case study the following aspects have been considered:

- The specificities of the product concerned.
- Economic incentives, fiscal incentives or disincentives, and public policies.
- Legal aspects, including those related to competition law and the definition of the “reference market” for the evaluation of the dominant position and its possible abuse.
- Historical, cultural and sociologically relevant aspects.
- The relationship between cooperatives and the other actors of the food chain.

The following research questions will be answered in this case study:

1. How are the strategies of the F&V cooperatives in Almería and Valencia affected by the structure of their respective cooperatives?
2. How has the historical development of F&V cooperatives in Almería and Valencia affected the strategies and structures of their respective cooperatives?
3. What are the main differences between structure and strategy of F&V cooperatives in Almería and Valencia, and to what extent can these differences be attributed to differences in regulation and policy measures?

Hypotheses

A number of hypotheses are used to draw more general conclusions on the case studies that are being carried out under Theme 7 of the Support for Farmers' Cooperatives project. For this particular case study on F&V cooperatives in Almería and Valencia, the following hypotheses are used to guide data collection and analysis. A chart with the hypotheses and the dependent and independent variables taken into consideration are included in Appendix 1.

H8a A higher degree of vertical integration of cooperatives in a sector is positively associated with higher producer income.

H10 Agricultural cooperatives that are successfully involved in selling final, consumer products, have a higher chance of adopting innovative ownership, governance, and capital acquisition methods.

H15 Agricultural cooperatives which focus primarily on achieving social goals do worse, in terms of economic performance, than cooperatives which focus primarily on achieving economic goals.

H17 The federated cooperative structure (more than one tier) is less efficient than the centralized one (one tier structure; farmers are directly members to the cooperative).

H 18 Agricultural cooperatives which collaborate with other cooperatives or IOFs do better, in terms of economic performance and services provided to their members.

Policy issues that affect cooperative development

The development of agricultural cooperatives is affected by several public policies. In designing and implementing policies toward agricultural cooperatives at the regional, national, or EU level, a number of issues arise. This particular case study will take the following questions into account when studying the policies that apply to the F&V cooperatives in Almería and Valencia:

- Should public policies treat different types of cooperatives differently based on their ability to increase/stabilise farmers' income?
- Should public policies facilitate cooperatives in achieving a balance between economic and social goals and, if yes, in which ways?
- Which public support measures (local, regional, national and/or European) have an impact on the development and success/failure of the case cooperatives?

1.2 Methodology

The case study will be based primarily on currently available secondary data and data available from the Ministry of Agriculture, Food and Environment, SABI, the regional governments of Andalusia and Valencia, the agricultural census and other source noted herein. Academic literature, popular press and electronic media, various archives and other sources of information will be fully utilised. Triangulation of sources and methods will be applied.

Additional information will be collected through interviews with various experts and cooperative stakeholders. The information will be used to address the aforementioned research issues. Standard techniques and approaches used in case study research will be applied in order to maximise reliability and avoid biases.

1.3 Brief review of the literature on Spanish Agricultural Cooperatives

In the Country Report of “Support for Farmer’s Cooperatives in Spain” (Giagnocavo and Vargas Vasserot, 2011) general characteristics and challenges in relation to agricultural cooperatives were described as well as the effect of certain policy measures on cooperative success. This report noted that one of the main concerns of Spain’s agricultural cooperatives is their small size. Consequently this characteristic has often been blamed for the lack of success and the inability of cooperatives to obtain more value for their members. It is argued that atomization creates difficulties for Spanish agricultural cooperatives in relation to the concentration of offer, investment needs for new projects, achieving economies of scale and wielding market power. Many studies have pointed to excessive “atomization” of cooperatives (Caballer, 1995; Juliá and Server, 1999; Juliá and Meliá, 2003; Meliá, 2004; Montero and Montero, 2005; Vargas, 2007).

Spain’s agricultural cooperatives are generally small and numerous relative to the European average cooperative size and number (i.e. the persistence of the “Mediterranean model”) (COGECA, 2005). In spite of the fact that the average turnover increased from 2.7 million Euros in 2000 to 4.4 million Euros in 2007, they are still behind the European average turnover of above 10 million. Only 39% have more than 1,000 members and only 1.7% of these cooperatives have a turnover above 30 million Euros (Cooperativas Agro-alimentarias, 2010; COGECA, 2005; OSCAE 2007; 2009). 77% have less than 5 million Euros and 39% less than a million (OSCAE, 2009). Although the number of cooperatives is declining, in 2011 there were still 3,918 agricultural cooperatives (3,659 in 2005 and 4,118 in 2000). In 2011 total turnover increased to 17,405 million Euros, with 1,160,337 members and 93,733 employees. This demonstrates a 6.63% increase from 2005, in which year turnover was 16,323 million Euros (OSCAE, 2011).

However, it is important to keep in mind that within this generalization of “atomised” Spanish cooperatives, there is a diversity of models and size: from local cooperatives which focus on supplying services to their members to others whose major goal is to channel supply for commercialisation to industry or intermediates, to very large cooperatives that process the products of their members and market them directly to retail distributors. Sixteen percent of Spanish cooperatives represent 75% of total turnover by cooperatives. Some cooperatives are organized as first-tier and others as second-tier. The top-10 first-tier cooperatives have a total turnover of 1,381 million Euros and employ 1,379 people and the top-10 second-tier cooperatives have a turnover of 2,427 million Euros and have 4,378 permanent workers (Baamonde, 2009; OSCAE, 2009).

Spanish agricultural cooperatives have significant differences, with distinct social, political and legislative histories and characteristics as well as strategies. The majority are constituted under regional and not national legislation and as a result Spain has 15 different autonomous laws with varying levels of jurisdictional competences and one national law.

In light of the above, it is a complex task to study the factors which are responsible for the successes or failures of Spanish agricultural cooperative sectors. The “common wisdom”, reflected in both academia and government policies in Spain tends to be that “bigger” will mean more successful cooperatives, perhaps following the conventional paths of investor owned companies. Cooperativas Agroalimentarias (the national confederation) in their strategic plan for Spanish agricultural cooperatives called for addressing this issue in order to achieve a competitive dimension (OSCAE, 2007) and continues to do so on a recurring continuous basis. As a general rule in all sectors of the Spanish market there has been pressure to consolidate and agricultural cooperatives have experienced the same pressures, with the resulting mergers and acquisitions, group formation, integration of cooperatives into second

tier cooperatives (or integrated groups in the event that some of the members are SATs or non-cooperative), etc. (Meliá and Martínez, 2011).

During the period 1995-2005 a total of 147 mergers have taken place in which 374 cooperatives have participated. Sixty six percent of such processes have occurred in the autonomous communities of Valencia, Andalusia, Catalonia and Castilla La Mancha (in descending order.) It should be noted that empirical evidence as to whether these mergers have actually achieved their objectives (i.e. improvement of economic-financial situation, reduction of costs, increase in cooperative and member profits, etc.) is scarce in Spain. As a result, currently it is difficult to empirically back up the assumptions that mergers will be the “cure” for the problems of Spanish agricultural cooperatives (Meliá and Martínez, 2011; Encinas Duval et al, 2011; Campos i Climent, 2011).

Discussion of agricultural cooperatives in Spain continue to be often locked into a paradigm of economies of scale and concentration. While size may be an important consideration, without taking into consideration other factors, the picture will be incomplete. We note two observations made in the Spain Country Report (Giagnocavo and Vargas Vasserot, 2011) on the F&V sector:

- *The concentration of capital is easier than the concentration of people and thus cooperative concentration processes need to take into account the cooperative business form, culture and environment.*
- *The concentration of offer must be viewed not only as a commercial concentration, but also a concentration from an organizational point of view.*

The study of regional agricultural cooperative models is useful so that legislative, institutional, governance, and other factors may be more coherently considered and linked. From a theoretical perspective, path dependency is one method by which to analysis the strategy and structure of F&V cooperatives. Agro alimentary systems, exhibit an important inertia or path dependency on old forms or organizational logic. That is, they persist even when underlying conditions which dictated the function, have disappeared (Gallego Bono and Lamanthe, 2011). Path dependency can also make difficult certain necessary adaptations to changing market conditions. However, it may also be a source of relationships, capacities and activities which can be reactivated creatively given existing diversity (i.e. not all entities have progressed in the same manner and in the same way) and allow creative solutions in times of crises (Grabher, 1993; Martin and Sunley, 2006; Gallego, et al, 2008).

Path dependency also fits within “neo-endogenous” thinking which draws on institutional theory. In such case we look to local institutional capacity that is able to both mobilize internal resources and to cope with the external forces acting on a region. “This perspective emphasizes not only that economic or business development needs to be embedded in the region, but that the means of achieving this objective is through the participation of local actors in internal and external development processes” (Galdeano Gomez, et al, 2011).

In this case study we look to two important cooperative F&V regions: Valencia is the historical leader with an established tradition of agricultural cooperatives and internationalization, given its fertile lands, entrenched commercialization, extensive infrastructure and relative wealth in Spain. It is home to Anecoop, the benchmark second-tier cooperative in Spain. The poorer province of Almería began its F&V production at a much later stage, in a drought ridden and isolated corner of south-east Spain. Although it had in the late 1800s - mid 1900s a successful table grape trade in the interior, the coastal region where the greenhouses now stand was a relative “blank slate” of infertile land. Currently both are important cooperative F&V intensive producers. Valencia is dominated by a second-tier structure and Almería largely by medium to

small size first-tier cooperatives. It should be noted that Valencia is an autonomous community and that Almería is a single province within the autonomous community of Andalusia. However, the second-tier cooperatives of Valencia, particularly Anecoop, were organized on an autonomous community level and the first-tier cooperatives of Almeria, on a provincial level.



2. Description of the F&V cooperatives Almería

2.1 Facts and figures on sector and cooperatives

The Almería cooperative model, in the province of Almería (South-east Spain) located in the autonomous community of Andalusia, is a particularly unique case within the Spanish cooperative landscape. It is an example of an agricultural “industrial district” or cluster for successful sustainable, agricultural development due to the expansion of intensive agriculture (Ferraro García and Aznar Sánchez, 2008). Almería is the top fruit and vegetable-growing province in Spain, representing over 50% of the national total (Galdeano-Gomez, et al 2011) and the largest cooperative vegetable growing area in Europe. As a percentage of total value added in 2008, agriculture represented 10.7% in contrast to 2.8% for Spain and 1.8% for Europe (Aznar Sanchez, 2011). It is also home to the largest credit cooperative in Spain, Cajamar, which is the 15th largest bank in the country. Coexphal, the association of producer organisations (APO), which represents over 70% of the growers and 100% of agricultural cooperatives, is instrumental in the commercialization and marketing of product and the organization of the cooperative sector.

In spite of such subsector dimensions, the average landholding is 1.5 hectares, most held by small scale or family farmers (13,500 in number) who are members of agricultural cooperatives. The sector provides direct employment to more than 40,000 workers annually. In 2010, agricultural production increased to 2.5 million tons with a turnover of 1,866 million Euros. Over half the produce is exported, resulting in trade surpluses. All of this is produced in an area of 26,200 hectares. More than 250 complementary or auxiliary businesses, both cooperative and investor owned have been created with a turnover of more than 1,000 million Euros (Aznar Sánchez, 2010). Equally important is the equitable distribution of wealth generated in the region (Downward and Taylor, 2007).

What is unusual about the Almería model is its growth into a specialized agricultural based sector (i.e. a primary sector), which is heavily invested in technological advances all the while maintaining its “atomized” small growers and its cooperative business form. Much of the sector’s research and development, which is crucial for such specialization, is based on sustainable technologies and practices and is financed by cooperative sources. For example, it is Europe’s leader in “biological”, as opposed to chemical, crop control. In observing the cluster we can see that the cooperative sector also has important institutional relationships with IOFs, regional governments, the university and other research centers which have resulted in important innovations. For example, the patents related to the Almería cluster account for 31% of all Andalusian agrarian industry patents (Fundación Tecnova, 2009).

With respect to financing the cluster, the Almería agricultural and credit cooperatives are intricately intertwined. This in and of itself is not particularly unique, as many agricultural cooperatives areas have a close relationship with a local credit cooperative. However, the growth strategies of the local cooperative bank have resulted in it having a wide national presence, outgrowing its local geographical scope in order to feed the capital needs not only of its agricultural cooperatives but also of the growing auxiliary businesses. The cooperatives are interlinked with many SMEs and larger companies as well, resulting in diversity of business forms, but with the cooperative agricultural and credit sector as the main economic and social driver.

Regarding commercialization, the association of producer organizations, Coexphal was created in 1977 in order to directly market products. Until such time, product from Almería was purchased by other areas in Spain, for example companies in Valencia and Murcia would buy Almería product and then market it as their own. Almería farmers were unable to obtain fair

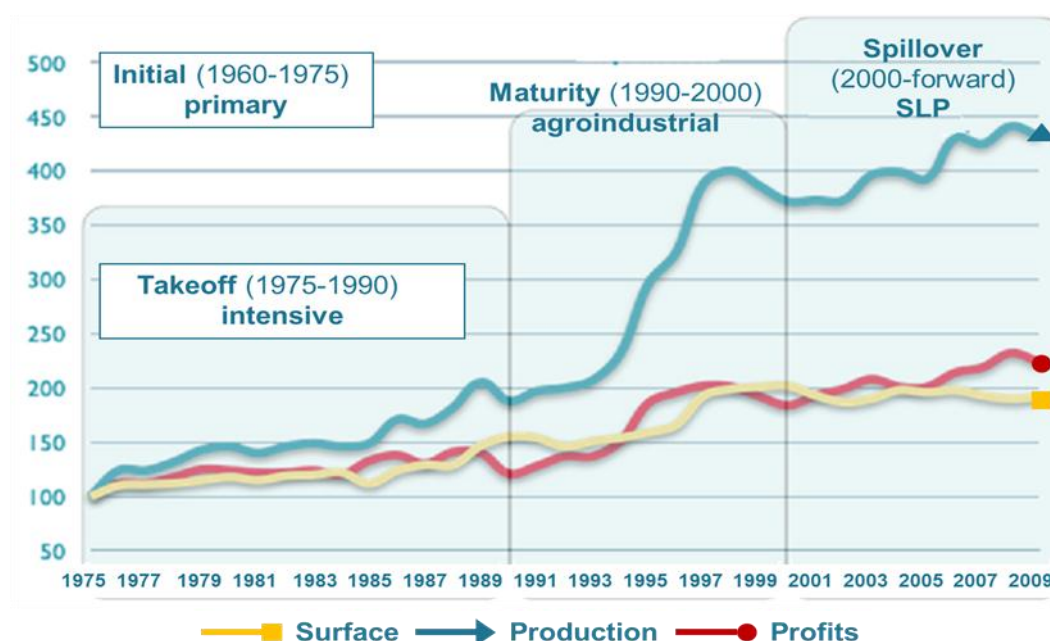
prices for their product and had little market power until Coexphal gave them a unified presence.

History

Immediately prior to cooperative agricultural activity, within an already poor Spain, the province of Almería was last, with a level of income 50% lower than the national average (Sánchez-Picón, 2005, p. 76). It was isolated in terms of infrastructure and abandoned by its emigrating population, rendering it an economic, social and cultural “wasteland”. Almería’s “true” cooperative movement (as opposed to cooperatives set up and controlled by the Regime)¹ was organized “under the radar” in the 1960s. Between 1994 and 2005 Almería’s growth in GDP quadrupled relative to regional and national averages in large part due to its agricultural development. The agricultural cooperative sector is currently the only sector in the region which is generating employment.

The cooperative F&V agricultural sector activity of Almería had been divided by local economists into four stages as set out in Figure 1: Initial activity (1960-1975); The “Take-off” period (1975-1990); Maturity (1990-2000); and Spillover (2000—onwards)(Molina-Herrera, 2005).² Here we briefly outline the stages to demonstrate the transformation of mainly marketing cooperatives (and their members and communities) from “peasant” farmers and organizations to complex businesses, their activities and roles changing over time and the role of policy and regulation. Figure 1 below provides a thumbnail sketch of agricultural surface, production and profits during such time.

Figure 1. Development Stages of Almeria Agriculture-Index 1975=100 (source Cajamar Foundation)



¹ It should be acknowledged that a “top down” cooperative model from 1910 to 1920 did not function in attempts in relation to the table grape business. During the second Republic there was an attempt to resuscitate the traditions but this was swiftly cut off. State sponsored “cooperatives” operated during the Franco years, but functioned more as workplace associations, their purpose being to monitor and control. In 1942 through its Law of Cooperatives, the Regime recognized the importance of having “a” cooperative movement which was structured to be consistent with the Regime.

² See Giagnocavo (2010, 2012) generally for an in-depth study of the role of credit cooperatives in the agricultural development of Almería.

1960-1975-the setting up of cooperatives and associations of producers

In the late 1950s, Franco's development plan had declared some 30,000 hectares in the province of Almería, as a zone of national interest and outfitted the land with wells and basic pumps in an attempt to increase agricultural production. Newly settled farmers in an attempt to survive in this unlikely agricultural area and in response to the dry soil, saline water and vicious winds created a "technological innovation" which consisted of putting down a layer of fertilizer, then covering this with a layer of sand, in order to keep the roots moist and filter the salt. With the arrival of plastic, a clear plastic sheet was put overhead. These structures served as the first rudimentary greenhouses. As uneventful as it may seem now, this simple "innovation" radically transformed the region.

In 1961 the government introduced an electrification plan, allowing more efficient water pumps, and thus a model of unsustainable development based on using subterranean waters was put into motion. Families were allowed to buy up to 3.5 hectares of land. With increased production underway by use of irrigation and basic greenhouses, families needed to sell their production. However, there were few organized marketing efforts and farmers would attempt to sell their goods, often completely unaware of what others were selling for. Local Almería firms were denied permits to market their products by the government and commercialisation was thus controlled by larger companies from Murcia, Alicante and Valencia, who would buy Almería product and re-export it under their own labels (Cazorla Sánchez, 1999). Roads and railway lines were also underdeveloped. What little financial intermediation existed was largely through private auction houses. In 1963 the credit cooperative "Caja Rural Provincial de Almería" (now Cajamar) activity commenced on the initiative of a few local people and was the impetus for farmers to organize. It encouraged the farmers to set up their own local cooperatives or associations and provided financing for the same. Even though "cooperatives" were still cooperatives under a dictatorship, the fact that they were small enterprises with the support of independent financing was the start of a new paradigm in the region.

1975-1990-technical and political/economic challenges and setting up the cooperative institutions

Spain began the transition to democracy in 1975. Unemployment was high, there was little culture of investing, Spain was isolated and there was a muddled vision of the way forward with the loss of the paternalistic state and little sense of external international competitiveness. In this sense, Almería was at a clear disadvantage to regions such as commercially savvy Valencia, which had not only agriculture but a textile and wood industry. The growing agricultural model began to show signs of stress as land prices soared and overexploitation of underground water led to the intrusion of seawater. Mineralization of the soil increased, pesticides started to accumulate, erosion was a problem as was waste disposal. Production started to decrease and energy prices started to rise. Supply overtook demand as other areas of Spain (Murcia, Valencia, etc.) also had increased production. Countries which had a favoured status within the European Common Market and countries which had agreements which gave them preference (Holland, Morocco, Israel) were serious competitors. In turn this weakening position gave more market power to large agro-food companies (Cazorla Sánchez, 1999). When CAP payments became available, it should be noted that Almería received only 1% of subsidies destined for Andalusia.

The challenges for the cooperative farmers in this stage of development not only were the adjustments to be made in the transition to a market economy and to a democracy, but there was also a need for innovation, on a social, economic, strategic and institutional level. The cooperative bank was a partner, perhaps the instigator, for the farmers in such process (Giagnocavo, et al, 2010, 2012) funding R+D+i and supervising implementation, arguably supplanting the organizational "need" for a second-tier cooperative function.

Many cooperatives, some of which exist to this day, were set up in the late 1970s. The association of producer organizations and exporters, Coexphal, was established in 1978. In 1982 the Regional government of Andalusia brought into force cooperative legislation which encouraged the setting up of cooperatives (three years later, the Regional government of Valencia would bring in their own legislation). The SAT (Sociedad Agraria de Transformación) form, which was a hybrid type enterprise which mixed characteristics of cooperatives with a company form, was also brought into being (described below) and the first one founded in Almería in 1982. In the early 1980s second-tier cooperatives attempted to enter (UTECA from the north of Spain) Almería with little success. Large shareholder companies were founded as well in areas of auctions, re-sellers and producer-marketing in the style of the cooperatives. However, companies that had to pay salaried workers found it difficult to compete, at that time, with cheaper family labour. In 1987 FEPEX and FAECA were founded.

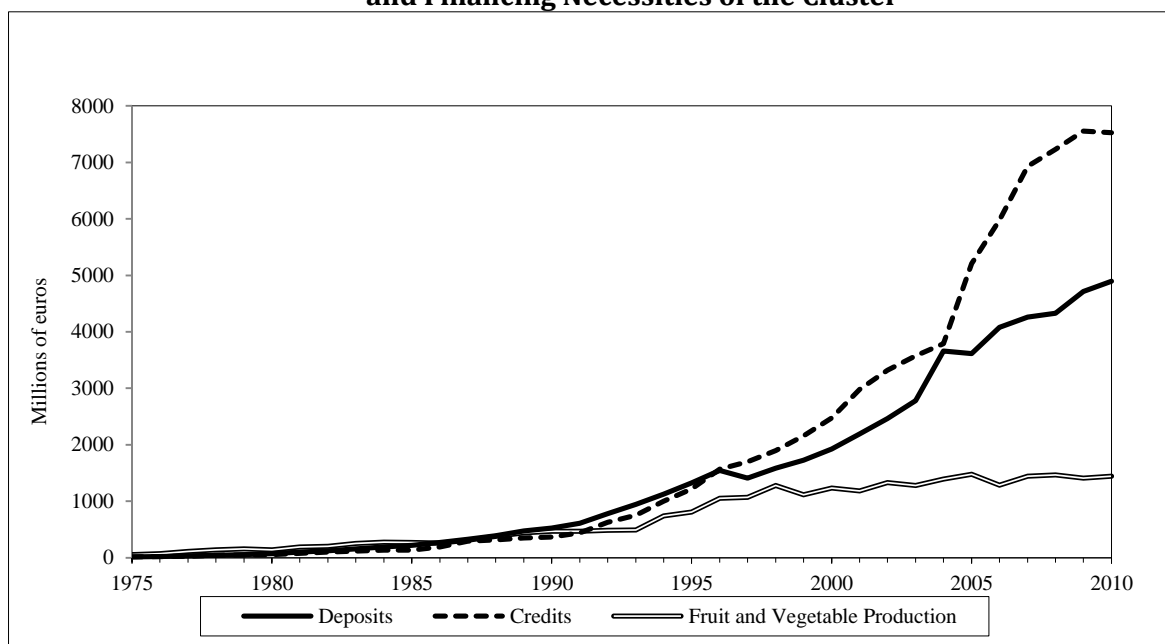
With the foundations of marketing cooperatives, cooperative finance and technological investigation put in place by the cooperative sector, as well as the institutional structure for marketing and export, the process of growth began in the new intensive agricultural sector ("new" meaning for the most part drip irrigated greenhouses). New markets opened, particularly that of the EU. Innovations not only significantly increased production but also allowed Almería's product to enter the market two months earlier, something that was key when faced with competition from other countries.

1990-2000

Entrance into the EU, coupled with the impending globalization after the Marrakech Agreement of 1995 (replacing GATT and liberalizing world trade) brought again new challenges to the Almería agricultural sector. Such conditions required larger infusions of capital than had ever been the case to meet increased demand and to enable the farmers to compete internationally. Until the early 1990s Almería's F&V sector and cooperative bank created a self sustaining financial system so to speak, as demonstrated in Figure 2. Beyond such time the Almería economy required credit beyond the deposit amount that fruit and vegetable production alone could generate in order to finance research and development and other auxiliary and cluster activity such as construction and infrastructure investment. The cooperative bank met these challenges in several ways: it pursued an expansion strategy in a neighboring province with an intensive agricultural sector, prompted by the failure of such province's credit cooperative. It also continued to invest in research and technology.

An important issue in the development of intensive F&V agricultural cooperatives was the availability of finance. While the credit section of Valencia cooperatives were also instrumental in their growth, the particular role of Cajamar made Almería agricultural cooperative credit sections, for the most part, redundant.

Figure 2. Banking Resources of Cooperative Credit and Cooperative Agriculture Production and Financing Necessities of the Cluster



Source: Cajamar Foundation, Based on data from Bank of Spain and Cabrera et al. (2010).

During this period there was a widespread incorporation of production technology, business management applied to farms, and the conversion of the “peasant” into an “agricultural entrepreneur”. The cooperative sector provided management training courses for the agricultural cooperative boards, technical sessions for field technicians, specialist agricultural courses and assistance with grant applications. The APO created information systems to communicate with cooperative member farms, allowing for immediate dissemination and implementation of crucial information and practices. The assumption of experimental risk and information and organizational tasks by the cooperative sector became an even greater contribution.

Throughout the 1990s there was a merging of cooperatives into larger first-tier entities in order to create efficiencies (Flores Jiménez, F., 2005). Cooperative institutions contributed to the creation of new lines of businesses in the cooperatives, supporting business associations related to agriculture not only financially but also utilizing its network of institutional contacts for the development of their projects. Services and infrastructure become similar to that of industrial districts. The infrastructure for cooperative direct commercialization was put in place.

2000 onwards

Since 2000, the development and maturity of the agricultural support and services industry gave way to sector diversification and the creation of a Local Production System or “cluster”. Agricultural production has increased, optimizing costs and the implementation of quality control systems have taken on a more significant protagonism. As well there is a consolidation in the commercialization phase, particularly in exports. In Figure 3 (below in 1.5 “Economic data”) we can see the rise of cooperatives in commercialization market share.

Going forward, following the financial crisis and the implosion of the construction sector, it is expected that there will be a new focus on agro-food business. In addition, Almería and other regions such as Valencia and Murcia, will have to deal with ever increasing opening of markets

and competition from countries where labour is cheaper such as Morocco. Neither fair labour nor environmental standards, much less the equality benefits of a cooperative business model, are a priority for such competition.

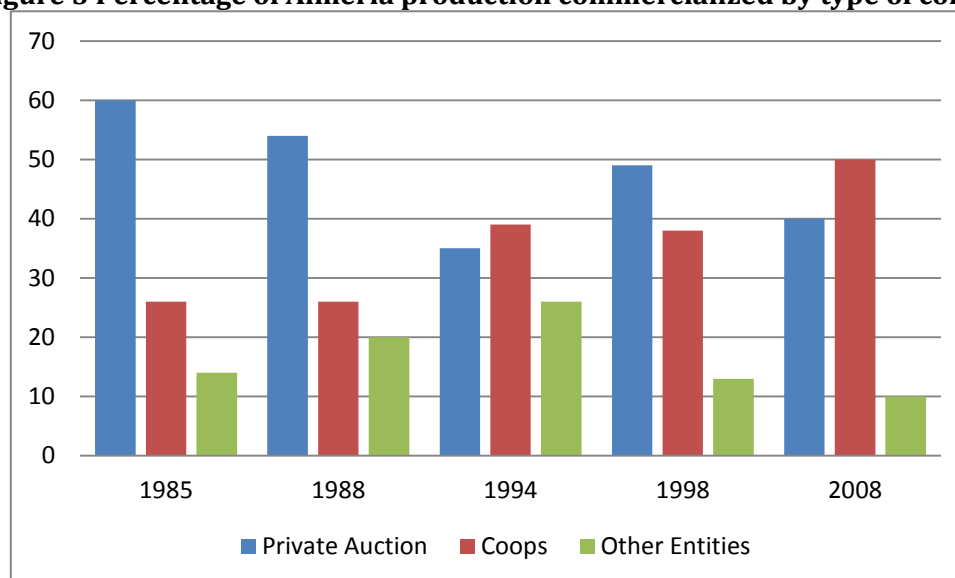
Almería's first-tier cooperatives dominate the market (e.g. CASI, MurgiVerde, Vicasol) and are increasing in size and influence. Collaborations, increased efforts in terms of exports and internationalization and mergers amongst first-tier cooperatives and SATs have characterized the response of Almería's cooperative sector to increasing competition. For example, in 2003 Vicasol merged with Almerisol, which permitted the increase of capacity by 40%³. In 2010, Ramafrut SAT and Frucamp merged⁴. In 2011 Agroiris SAT and Mayba SAT merged⁵.

Differentiation in terms of "biological" or "integrated" and ecological product is being vigorously pursued. See section 2.2 for more information on mergers, collaborations and strategy. As well, it appears that efforts in the IV and V range (of processed, ready to eat foods) are gaining ground.

Economic data

In 2011 the Almería F&V sector represented 31.84% of Spanish agrarian production and 56% in Andalusia (MARM, 2011). In Almería in 2009, F&V production represented 90% of agricultural production (CAP, 2011a). Cooperatives are responsible for 50% of commercialised production, a growing percentage as set out in Figure 3.

Figure 3 Percentage of Almería production commercialized by type of company



Source: Coexphal

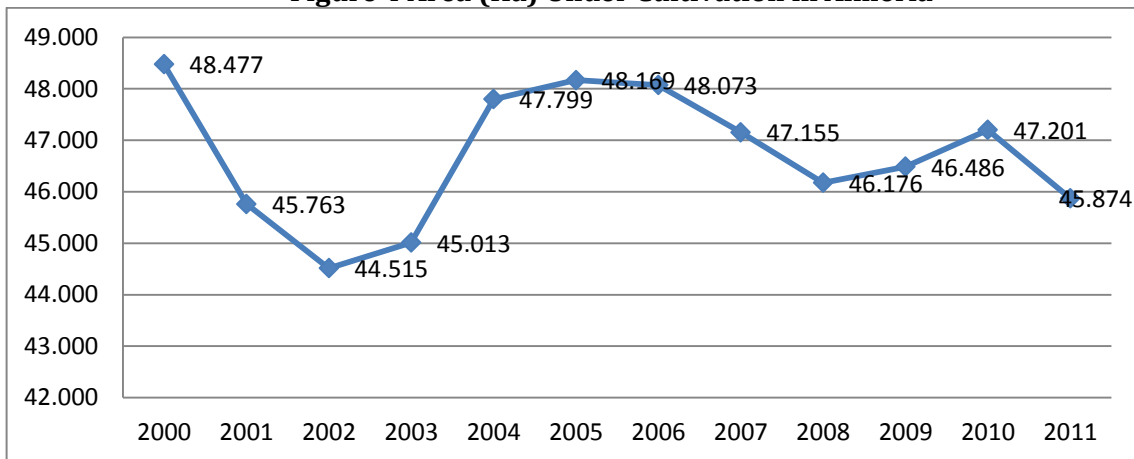
Cultivated area in 2011 decreased to 46,000 ha, the decline being due to production moving to other countries such as Kenya and Morocco which have cheaper labour costs. However, in terms of ecological production, in 2010 area increased to 1,592 ha in vegetables, 1,133 ha in citrus and 520 ha in fruit (CAP, 2010).

³Information from Vicasol's webpage: <http://vicasolproduce.com/>

⁴ BOJA nº236, December 2, 2010. Retrieved from: <http://www.juntadeandalucia.es/boja/boletines/2010/236/d/updf/d101.pdf>

⁵ Ruiz, J.E. (2011, January 25). "Mayba se convierte en Agroiris". El Ideal. Retrieved April 15, 2012, from: <http://www.ideal.es/almeria/v/20110125/agricultura/mayba-convierte-agroiris-20110125.html>

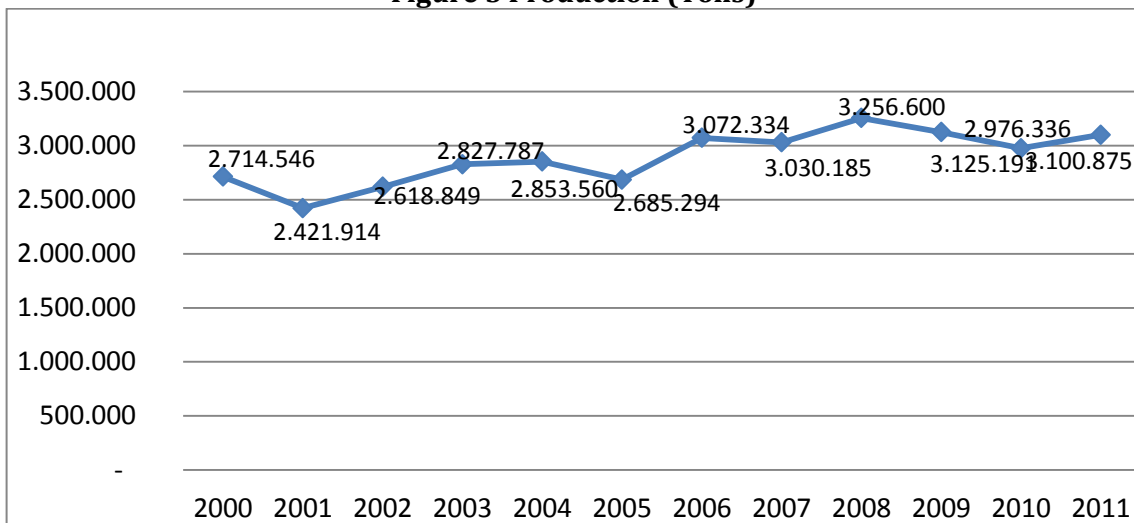
Figure 4 Area (Ha) Under Cultivation in Almería



Data source: CAP (2011b)

Even though area has decreased, production has increased over the last decade. In 2011 it reached 3,100,875 tons, of which 92.25% corresponded to vegetables, 7.4% to citrus and 0.34% fruit. This production represented 43% of the total production of Andalucía. The main Almería products include tomato (29%), pepper (15%), courgette (13%), cucumber (10%), watermelon (10%), lettuce (5%), melon (5%) and aubergine (5%) (CAP, 2011b).

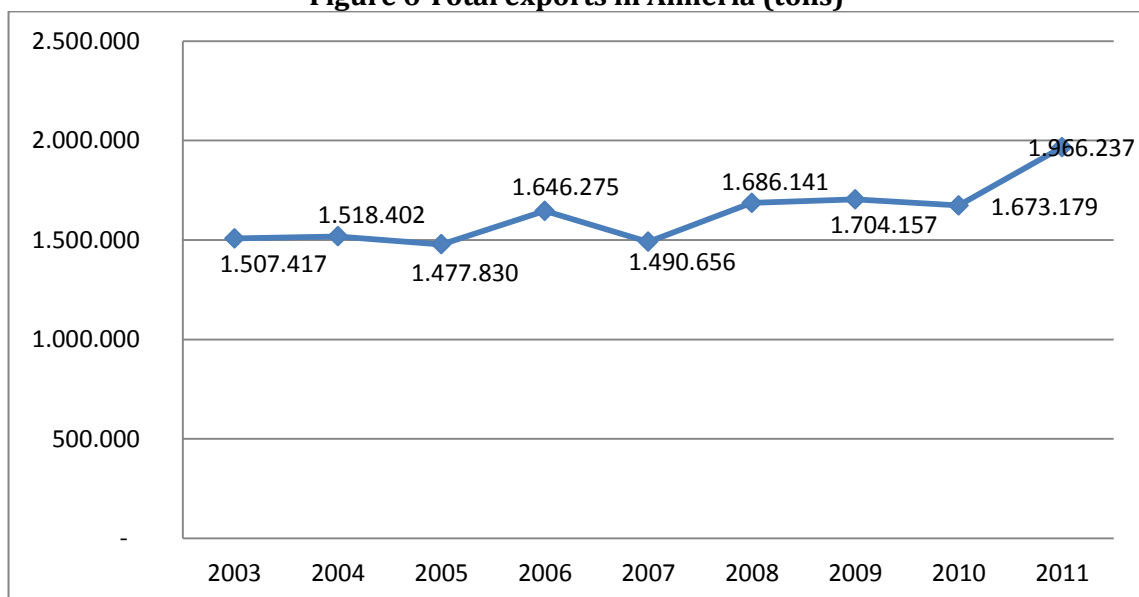
Figure 5 Production (Tons)



Data source: CAP (2011b)

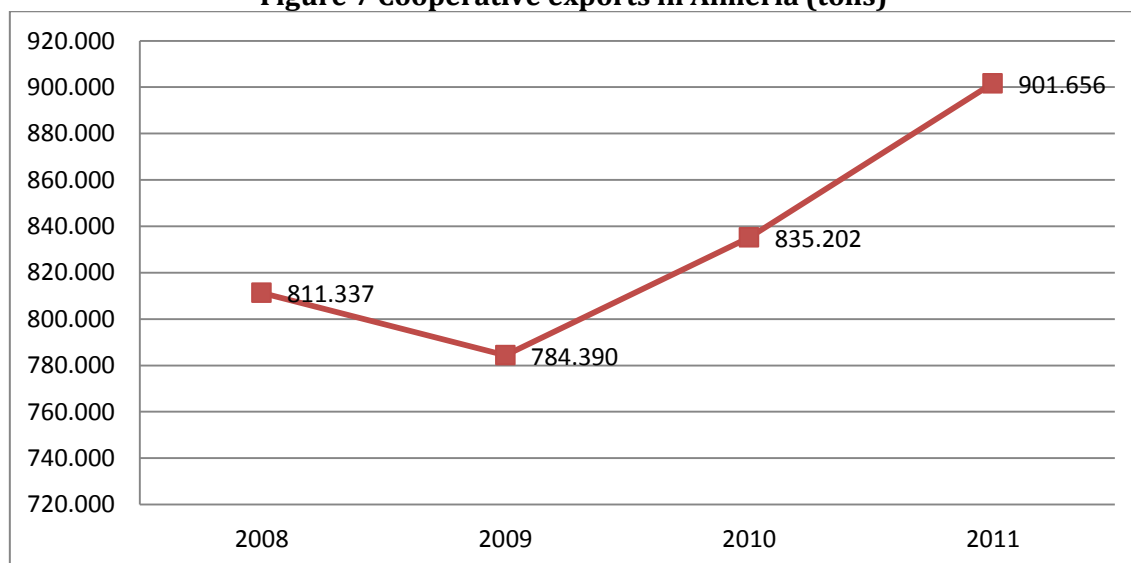
Currently 60% of Almería vegetable production is destined for export, which represents Euro 1,663 million. Of this total, a large part of exports are carried out by cooperatives (see Figure 7). Export destinations are Germany (36%), France (19%), The Netherlands (14%) and the United Kingdom (12%). Major exports are tomato (25%), cucumber (18%) and pepper (17%).

Figure 6 Total exports in Almería (tons)



Data source: ICEX

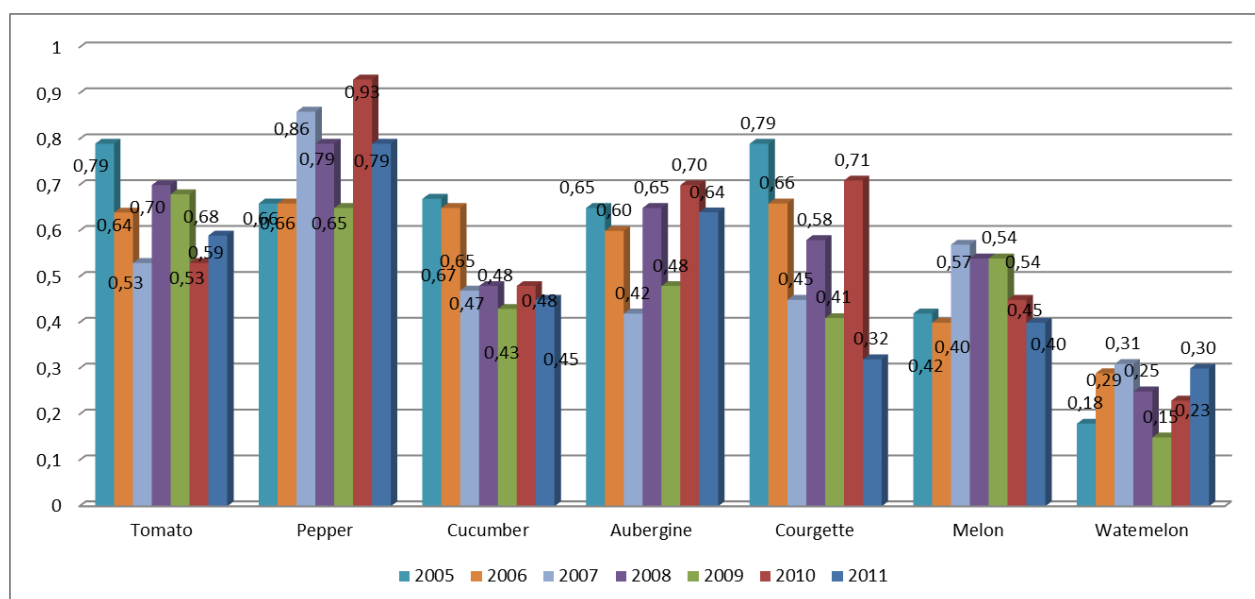
Figure 7 Cooperative exports in Almería (tons)



Data source: Coexphal, elaborated by Giagnocavo and Gerez

Prices of principle products have fallen in recent years due to increased production, lack of negotiating power and the necessity to compete in markets dictated by wholesalers and distributors.

Figure 8 Evolution of Main F&V prices in Almería (€/kg)



Data source: Instituto de Estadística y Cartografía de Andalucía, elaborated by Giagnocavo and Gerez

Table 1 gives an idea of the size of Almería's cooperatives. In contrast, the turnover for Anecoop, the largest second-tier cooperative in Valencia, was 482,000,000 Euros for 2011.

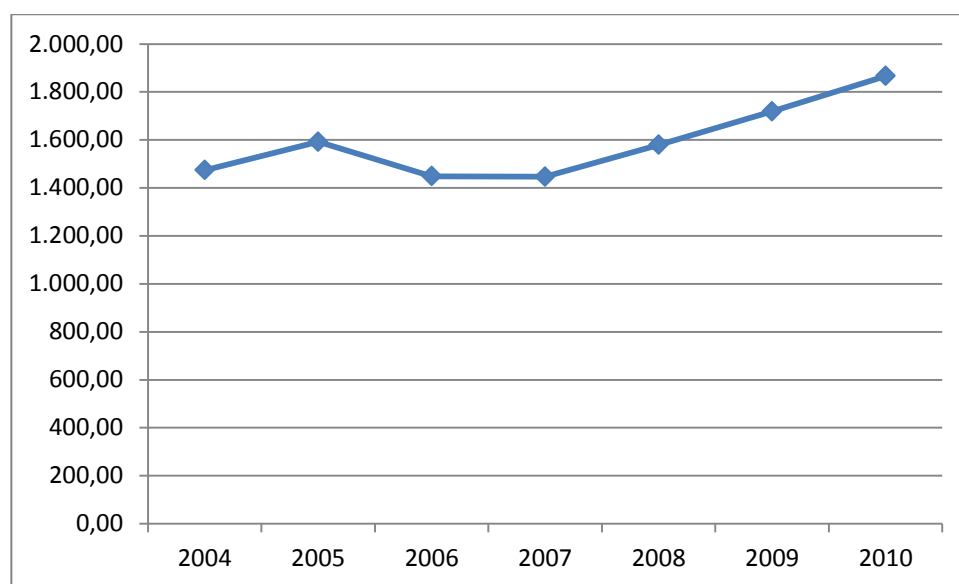
Table 1 Economic turnover of selected Almería agriculture cooperatives (S.C.A.), S.A.T.S and non-cooperatives (S.L. and S.A.) (mill €) (2011)

| COMPANY | TURNOVER | COMPANY | TURNOVER |
|--------------------------------------|-------------|-------------------------------|------------|
| Casi S.C.A | 196,700,000 | Agrupapulpi S.A.T. | 51,000,000 |
| Alhóndiga la Unión S.A. | 195,000,000 | E.H. Femago S.A.T. | 49,700,000 |
| Agrupaejido S.A. | 120,000,000 | Primaflor S.A.T. | 41,600,000 |
| Unica Group | 120,000,000 | Nature Choice S.A.T. | 41,000,000 |
| Cabasc S.C.A. | 20,900,000 | Indasol S.A.T. | 40,000,000 |
| Casur S.C.A. | 30,500,000 | Hortamar S.C.A. | 36,300,000 |
| Ferva S.A.T | 31,600,000 | Acrena S.A.T. | 36,000,000 |
| El Grupo S.C.A. | 50,000,000 | Ejidomar S.C.A. | 30,500,000 |
| Agrieco S.A.T. | 13,000,000 | Frutas Escobi S.L. | 29,300,000 |
| +Cohorsan S.C.A. | | Cualin Quality S.L. | 20,900,000 |
| Murgiverde S.C.A. | 113,000,000 | Ejidoluz S.C.A. | 29,059,000 |
| Vicasol S.C.A. | 100,000,000 | Uniagro S.A. | 16,000,000 |
| Bonnysa S.A.T. | 108,319,000 | Cítricos del Andarax S.A.T. | 9,526,000 |
| Agroiris S.A.T. | 100,000,000 | Agrícola Navarro de Haro S.L. | 14,400,000 |
| Hortofrutícola Costa de Almería S.L. | 95,000,000 | Agromullor S.L. | 10,400,000 |
| Agroponente Natural Produce S.L. | 82,000,000 | Fruejido S.L. | 5,500,000 |

| | | | |
|--------------------|------------|---|-----------|
| Agroponiente S.A | 67,000,000 | Explotaciones Agrícolas Frulape S.A. | 2,260,000 |
| Agrupalmería S.A.T | 55,300,000 | Horfrasol S.A.T | 1,240,000 |
| Canalex S.A.T | 55,000,000 | | |

Note: Anecoop in has 5 Almeria cooperatives which are not included in this Table (see under Table 3)

Figure 9: Turnover of Almeria Agricultural Cooperatives (Coexphal (APO) members) (mill €)*



Source: Coexphal

*The years 2006, 2007 and 2008 do not include Primaflor SAT or Caparrós, two entities whose combined turnover is approximately 125 million € and who left and then rejoined the APO.

2.2 Strategy and structure of main cooperatives

Position in the Food Chain

The cooperatives of Almería commercialise the agricultural production of their members and are predominantly in the initial phases of the supply chain. Thereafter, they are involved packaging, warehousing, transport, logistics, and distribution to wholesalers and also some retailers. Diversification into alternative energy activities or related businesses is also noted in larger cooperatives.

Research and institutional partnerships

Intensive agriculture is very dependent on R+D+I. In order to carry out their activities the cooperatives require support from other types of businesses and institutions. The experimental farm Las Palmerillas of the cooperative bank is a central player. The University of Almería (a campus of excellence for agricultural research), both from a business administration and scientific and point of view, as well as IFAPA (Agricultural and Fisheries Research/Instituto de Investigación y Formación Agraria y Pesquera) are important partners in research. In order to address safety, Fruit Audit, an independent company assures quality and controls fraud. Other entities which are dedicated to the development of the agricultural cooperatives of Almería are: Coexphal (local association of producer organisations); Hortyfruta

(provincial inter-professional entity); FAECA (Andalusia federation) and FEPEX (national federation for fruit and vegetable exporters).

Organization, Human Resources and Member Services

The APO, Coexphal, in order to support the producer organizations of Almería have an active HR department who provide advice and services to their members, including the service of contracting workers in the country of origin to avoid exploitation of immigrants. As well Coexphal has departments to help with subsidies; risk prevention; HR and immigration; production techniques and control of plagues; quality control, laboratory analysis and investigation, administration, training, marketing and foreign promotion, research and statistics, communication, insurance and travel. Larger cooperatives may have their own administrative, commercialization, marketing, technology, warehousing, training, quality and HR departments. The fact that smaller cooperatives have access to the same expertise and sophisticated services through the APO allows flexibility, autonomy and equality in the business sector. It also encourages “new players” to enter the market. By virtue of being a cooperative member, most farmers have access to a sophisticated and wide array of business, human resource, research, financial, communications and technological resources that would be impossible on a non-associated small farmer scale.

Institutional/governance structure and Legal Form

Agricultural producers are based on different legal structures and tax regimes and thus different internal governance requirements and practices. Amongst them the most common are:

- Sociedad Cooperativa Agraria/Agricultural Cooperative Company (S.C.A).
- Sociedad agraria de transformación/Agricultural Company of Transformation (S.A.T).
- Sociedad Anónima/Anonymous Company (S.A).
- Sociedad Limitada/Limited Company (S.L).

Aside from cooperatives, in Almería SATs are the most popular form of collective entrepreneurship in agriculture. SATs are somewhat like general partnerships and capitalistic companies at the same time. Their membership is limited to farmers, farm workers or those with farm related purposes, but their statutes and bylaws allow voting in proportion to share capital when decisions that need to be taken are financial in nature.

The producer entities most important in the province of Almería are included below in Table 2, with an indication of their legal form. The high presence of S.A.T.s is notable. Groups are set out in Table 3.

Table 2: Almería Agricultural Entities according to Legal Form

| S.C.A | S.A.T | | S.L | S.A |
|----------------|----------------|-------------------------|---------------------------------|--------------------|
| Cabasc* | Acrena | Ferva* | Agrícola Navarro de Haro | Agupoejido |
| Camposol* | Agrieco* | Hortasol | Agromullor | Agroponiente* |
| Campovicar | Agroiris | Hortofrutícola | Agroponiente | Agrupalmería* |
| Casi | Almerifresh | Mabe | Natural Produce* | Agrupapulpi |
| Casur* | Biosabor | Indasol | Cualin Quality | Explotaciones |
| Cohorsan* | Bonnysa | Inver | Francisco Oliva | Agrícolas Frulape |
| Coprohñjar* | Canalex | Las | Fruejido | Uniagro |
| Ejidoluz* | Cirera | Hortichuelas | Frotas Escobi | Vega Cañada |
| Ejidomar | Cítricos del | Las Marinas | Horfrasol | Alhóndiga la Unión |
| Geosur | Andarax | Nature Choice | Hortalizas Indasur | |
| Hortamar* | Costa de Níjar | Níjar Sol | Hortofrutícola Costa de Almería | |
| Murgiverde | Costadulce | Nuestra Señora de Gádor | | |
| Parque Natural | Costa Ejido | Parafruts | | |
| San Isidro | Dunamar | Primaflor | | |
| Labrador | Duniagro | Ramafrut | | |
| Unica Group* | E.H. Femago* | Romelina | | |
| Vicasol | Eurosol | Tomasol | | |
| 16 | 32 | 11 | 8 | |

*Included in second-tier group

Very few cooperatives or SATs are part of a second-tier cooperative. Below we can see that Anecoop, the second-tier cooperative from Valencia has 5 Almería cooperatives. Unica Group has both cooperatives and SAT members and Grupo Agroponiente is an IOF with all IOF members. Finally, Uniagro is a mix of IOF and a SAT.

Table 3: Almería Cooperatives/groups of second level

| COOPERATIVES/GROUPS of SECOND LEVEL | |
|--|---|
| Anecoop S.C.A. (Valencian cooperative with Almería members) | Camposol SCA Coprohñjar SCA Hortamar SCA Ejidoluz SCA Albentillas SCA |
| Unica Group | Cabasc SCA Casur SCA Cohorsan SCA Ferva SAT El Grupo SCA Agrieco SAT |
| Grupo Agroponiente S.L. | Agroponiente SA Agroponiente Natural Produce SL Vega Cañada SA |
| Uniagro S.A. | Agrupalmería SA Agrocastell SA E.H. Femago SAT |

Most important Almeria Cooperatives

CASI is a first-tier cooperative founded in 1944 (originally in livestock and F&V) which has 1700 members, who are owners of 2,450 ha of cultivated land, and 350 employees. Production in 2010 reached 213,556 tons, which resulted in turnover of 190 million Euros⁶. Originally this production was destined for the local market of Almería, but currently it markets around the world, principally to the U.K. and Germany⁷. CASI participates in the container company Poniente Plast, S.A. (13,28%) and in Andalucía Cargo, S.A. (30%), the operator of land transport for its members. It controls 36% of Hortofrutícola Ciudad Luminosa, S.L. and as well participate in Níjar Natura, S.L., which manages agricultural waste material.

MurgiVerde is a first tier cooperative created in 2005 as a result of the merger of two large cooperatives Agromurgi and Ejidoverde. Its latest incorporations have been the cooperatives Geosur and Campovícar in 2009, which has allowed it to increase production. With a total of 1000 ha of greenhouses, its annual production has reached 125,000 tons. The turnover of this cooperative was 120 million Euros in 2011 and it has about 700 workers⁸. Murgiverde markets part of its production in Germany, the U.K., Scandinavia, Eastern European countries, the U.S.A. and Canada. It participates in the Almería company Ecovida, S.L. (fruit stores), in the commercial exporter Consofrut, S.L. with a 20% interest and in Alcoex Mediterráneo, S.L. with 12,41%⁹.

Vicasol is a first-tier cooperative created in 1979. It has more than 400 members who farm about 1000 ha. In 2011 its production reached 120,000 tons, with a turnover of 115 million Euros, of which 90 million corresponded to exports. It is integrated into the central buyer for agricultural supplies, Coop Suca. It controls 100% of Vicasol Produce Ltd., dedicated to the sale of F&V to the U.K. It participates with 16.66% in Plattform Spanien, S.A., which commercialises the production of its members in Switzerland. It has a 12.41% interest in the 5th range (prepared and ready to eat) food products producer Alcoex Mediterráneo, S.L. and along with other Almería entities in the network of fruit stores, Ecovida, S.L.

UNICA Group is a second-level integrated group created in 2009 by cooperatives and SATs Agrieco, Cabasc, Casur, Cohorsan and Ferva. In 2011 the El Grupo from Granada joined. UNICA Group exceeds 160,000 tons of commercialised production with a turnover in 2010 of 110 million Euros. It has 1,400 farmers¹⁰. At the operating level, each of the members is specialised in one or a number of products, and there is a substantial ecological production. UNICA Group has important commercial agreements such as that with ZON, the Dutch cooperative, the commercial agreement with the North American multi-national General Mills, for the commercialisation of their product under the brand "Gigante Verde" (Green Giant) and with the Valencian citrus marketing company Cofrumark Quality Distribution Fruits. With respect to the 5th range products it has an agreement with the company Alimentaria Andarax and participates through its member cooperatives in Alcoex¹¹. Of the total volume marketed by Unica Group, only 10% is distributed in the national market, with exports reaching 93 million Euros in 2010.¹² They sell to Germany, France, the U.K., The Netherlands, Italy and Scandinavian countries.

⁶ Data from Alimarket.

⁷ Information from CASI's webpage: <http://www.casi.es/>

⁸ Data from Alimarket.

⁹ Information from Agromurgi's webpage: <http://www.agromurgi.com/>

¹⁰ Information from Unica Group's webpage: <http://www.unicagroup.es/>

¹¹ Durán, E. (2010, March 4): "Solfrío prevé duplicar ventas tras su integración en Única Group". Alimarket. Retrieved March 20, 2012, from <http://www.alimarket.es/noticia/29318/Solfrío-preve-duplicar-ventas-tras-su-integracion-en-Unica-Group>

¹² Data from Alimarket.

It is important to note that Unica Group has entered into certain contractual “lock up” agreements with its members such that their commitment to the second-tier cooperative is rather stronger than that provided under the relevant cooperative legislation.

Collaborations

Since 2006 the SATs Agroiris, Mayba y Ejidoluz, have advanced a commercial union and have initiated the restructuring of infrastructures to lower costs and improve results. These three SATs combined have 618 members and 243 collaborators, with a total of 1,289 ha.¹³

The cooperatives Camposol, Coprohnijar y Hortamar, members of the Valencia second-tier Anecoop, have established a new vegetable platform with the aim of unifying production systems to obtain better results. These three cooperatives have opted to use the business structure with subsidies in their principle markets, thus taking a step further in consolidating their commitment in their relationship with Anecoop.¹⁴ The two SATs Acrena and Nature Choice reached an agreement in 2012 with the seed company Rijk Zwaan for the joint production and commercialization of mini cucumbers. This agreement was initiated by the seed company.¹⁵

As well agreements have been entered into for the exportation of technology and cultivation techniques employed by entities such as the SAT Primaflor which, with a series of companies, entered into an agreement in 2011 with the Qatari Hassad Food Company to build a pilot greenhouse project of 2500 m2 and to provide the base for the subsequent commercialization and provision of support services.¹⁶

Ecovida S. L. is a network of fruit stores at the national level, set up by a diverse range of cooperatives and SATs such as Cabasc, Casur, Ferva, Vicasol, Murgiverde and Costa de Níjar, to directly market their F&V product. The objective is to open 200 stores over the next five years.¹⁷ In a similar manner the cooperative Vicasol, the SAT Eurosol and Frutas Escobi SL of Almería, together with other companies from Murcia and Granada entered into an agreement with Plattform Spainien, SA, to sell directly, without intermediaries to Switzerland.¹⁸

A denomination of origin project concerning the “La Cañada Níjar Tomato” was founded by a diverse group of cooperatives, SATs and S.C.A.s

¹³ El Economista (2009, March 31): “Agroiris, Mayba y Ejidoluz acuerdan concentrar su oferta hortícola, que asciende a 180 millones de kilos”. El economista. Retrieved April 10, 2012, from <http://ecodiario.eleconomista.es/espana/noticias/1135548/03/09/AgroAgroiris-Mayba-y-Ejidoluz-acuerdan-concentrar-su-oferta-horticola-que-asciende-a-189-millones-de-kilos.html>

¹⁴ Information from Hortamar’s webpage: <http://www.hortamar.es/>

¹⁵ Arcos, J.A (2012, March 16): “Rijz Zwaan crea un consorcio de empresas para vender pepino mini”. La Voz de Almería. Retrieved April 10, 2012, from <http://www.lavozdealmeria.es/vernoticia.asp?IdNoticia=24281&IdSeccion=0>

¹⁶ EASYPRESS (2011, May 17): “Aratech Group, en un consorcio privado liderado por Primaflor”. Easyppress. Retrieved April 10, 2012, from http://www.easypress.es/es/notices/2011/05/aratech_group_en_un_consortio_privado_liderado_por_primaflor_firma_un_acuerdo_de_entendimiento_con_894.php

¹⁷ Fresh Plaza (2009, May 8): “Seis cooperativas de Almería y una de Granada fundan Ecovida, una red de fruterías a nivel nacional”. Fresh Plaza. Retrieved April 10, 2012, from http://www.freshplaza.es/news_detail.asp?id=21543

¹⁸ La voz de Almería (2009, February 02)

2.3 Relevant support measures affecting structure and strategy

(Appendix 4 sets out the laws and regulations which affect F&V cooperatives in both Almería and Valencia.)

Legislation and Policy

The very basic and sparse regulatory requirements of SATs, dating from 1981, resulted in few limitations and conflicts compared to that of agricultural cooperatives: there are none of the traditional legal limitations of cooperatives (difficulty to transfer the position of member, obligation to allocate funds to collective funds, limits on dealings with third parties, limitations to invest in commercial entities, limits in the distribution of surpluses, etc.) In the case of SATs, competitive advantage in the agricultural sector was enjoyed. However, recently Andalusia has brought into force a new Andalusia Cooperative Law (Law 14/2011, 23 December, Ley de Sociedades Cooperativas Andaluzas) which addressed most of these issues (see Section 2.3 for further explanation).

It is too soon to gauge the potential success or failure of the new cooperative law, although it was seen as favorable by the Regional Andalusian Federation of Agricultural Cooperatives (FAECA). The new law aims to improve competitiveness: the social object of agricultural cooperatives is widened; percentage of contributions to the obligatory fund are reduced; in the case of a member leaving, the former obligation to reimburse the social capital by the cooperative can be substituted by the member receiving the value of his/her contributions through the transfer to third parties who gain the condition of member. New rules apply to non-member investors. As well, post-liquidation amounts returned to the Administration have been reduced from 100% to 30%. A unique concept, in Spain at least, is the notion of a “trial period” for new members.

Multiple votes in proportion to member cooperative activity, allowing qualified non members to be named as directors (*consejeros*) in an amount that does not exceed 1/3 of the total is permitted and the law establishes that the general assembly has the power to determine the new contributions in function of the assets or reasonable value of the company. Finally limitations with third parties have been lifted and the process for mergers has been simplified.

Valencia’s cooperative law was “modernized” in much the same manner in 2003 (See section 3.3).

With respect to POs, two laws are particularly relevant, the first being Royal Decree 1972/2008 28 of November, which recognizes POs of fruits and vegetable and establishes the basic norms of their organisations and associations. The second law is the Royal Decree 1302/2009 regarding funds and operating programs of fruit and vegetable POs, which establishes the basic norms in relation to the agricultural common market organisation (CMO) Council Regulation (EC) n. 1234/2007. This was further developed by Royal Decree 1337/2011, which was passed October 3, 2011, regulating funds and operating programs for fruit and vegetable producers. A recent study found that there was an increase of POF&V in Almería by 21% from 2000 to 2009 (Parra Gómez and Cabrera Sánchez, 2011).

Support for Farmers’ Cooperatives in Spain (Giagnocavo and Vargas Vasserot, 2011) analyses CAP in general and such analysis will not be repeated here in full. However, there are points of disagreement and dissatisfaction. Whilst certain important points have been reflected in the conditions of the OPs as to the eligibility of activities related to product transformation by cooperatives, calculations as to the value of commercialized product or the eligibility of investments in farms and installations of members and their cooperatives, other important weaknesses persist in relation to the Management and Prevention of Crisis and also the reform

of System of Entry Prices. Associations and Inter-professional groups have been given little power to affect any significant change or take important decisions.

Relevance of different sources of income, including public grants and subsidies (Andalusia and EU level)

Currently 9,000 Almeria farmers are integrated in a POF&V and received aid from OPs in the amount of 31 million Euros for the year 2010 and 36 million in 2011. This represents 60% of such funds destined for Andalusia. Farmers are able to invest in various activities for the benefit of the sector. In the period from 2004-2008 they carried out actions worth almost 260 million Euros. With respect to the total amount in relation to agriculture that Andalusia receives from the EU, Almería receives less than 3% (Anuario de la Agricultura, 2010).

For 2011 the amounts (sourced from Coexphal) are:

Table 4. Support received for the F&V sector in Almería

| YEAR 2011 | AMOUNT |
|------------------------------|--------------------|
| Value of Marketed Production | 1.588.273.323,90 € |
| Operating Funds | 131.550.348,71 € |
| Member contribution | 68.497.804,58 € |
| Contribution of FEAGA | 63.052.544,33 € |

Table 5. Destination of Support Received by the F&V Sector in Almería

| ACTIONS | AMOUNT |
|--|-----------------|
| 1.Production planning | 40.288.033,47 € |
| 2.Product quality improvement | 25.450.323,79 € |
| 3.Marketing improvement | 27.467.463,90 € |
| 4.Research and experimental production | 401.777,53 € |
| 5.Training and advice services | 864.658,53 € |
| 6.Prevention and management of risk | 1.246.816,22 € |
| 7.Environmental objectives | 26.263.196,29 € |
| 8.other actions, activities, investments, etc. | 3.668.734,65 € |

The regional government of Andalucía also offers aid and subsidies, although for the most part not specific to cooperatives, which include:

- Aid for improvement of quality systems for ecological production
- Subsidies for carrying out cooperative activities with other parties
- Aid for management groups of agricultural farms
- Aid to contract agricultural insurance
- Subsidies for improving irrigation systems
- Exceptional aid for supporting the F+V sector
- Subsidies to improve and modernise production structures for farms
- Subsidies for the modernization of greenhouses

According to sector experts the three most important areas of support in the past for the consolidation of the Almería model and its success were:

1. Support for improving infrastructure.

-support for modernizing the use of water resources and infrastructures

-as well as infrastructure support for road transport, centers of investigation, training of farmers, and other types of support that has been related to the productive capacity.

2. Support for improving structures

-insertion of young people

-support for modernizing farms installations (given competitive nature of the farming activity, investment in new technologies and structures is important)

-although the CAP structural support is of limited importance therein, it has been one of the fundamental measures used with the highest impact on productivity (in between 1986 and 2003 this line of support was more than 219 million (valued at 2004 rates), such support coming at a time when the sector reached an important economic magnitude.

3. Support for association and processing and commercialisation

-subsidies to develop association efforts, since 1986, has counteracted the traditional reticence of farmers to create associative structures. However, it should be noted that at times it has been too easy and too supportive, encouraging the division of existing cooperatives.

-support for commercialization since 1993 has improved the technology of commercialisation cooperatives and has contributed to the competitiveness of Almeria F&V cooperatives. (García Torrente, 2005)

3. Description of the F&V cooperatives Valencia

3.1 Facts and figures on sector and Valencia cooperatives

Valencian has as well a Mediterranean coastal agriculture based on irrigated crops; mainly fruits (essentially citrus), vegetables and rice. The Community of Valencia (the regional equivalent of Andalusia, of which Almería is province) had a turnover of 1,935.20 million Euros in 2010 which represented 86% of total agricultural turnover. Within such production, 4,213,832 tons of F&V were produced in 2010 representing 83.62% of total Valencia agricultural production. F&V cultivated area in 2010 was 350,102 hectares representing 60% of total cultivated area.

Like Almería, this type of intensive cultivation requires more investment than dry crops, although unlike Almería, the Valencian climate allows open air (non greenhouse) agriculture (greenhouses are used for ornamental plants for the most part). Valencia as well has a large number of farmers with small holdings, and thus cooperatives have also been an important method by which to commercialise their products. Cooperative commercialization represents approximately 50% of total agricultural production (54.6% of citrus, 32.5 of fruit and 12.9% of vegetables) of the sector of the sector, which is also populated by IOFs.

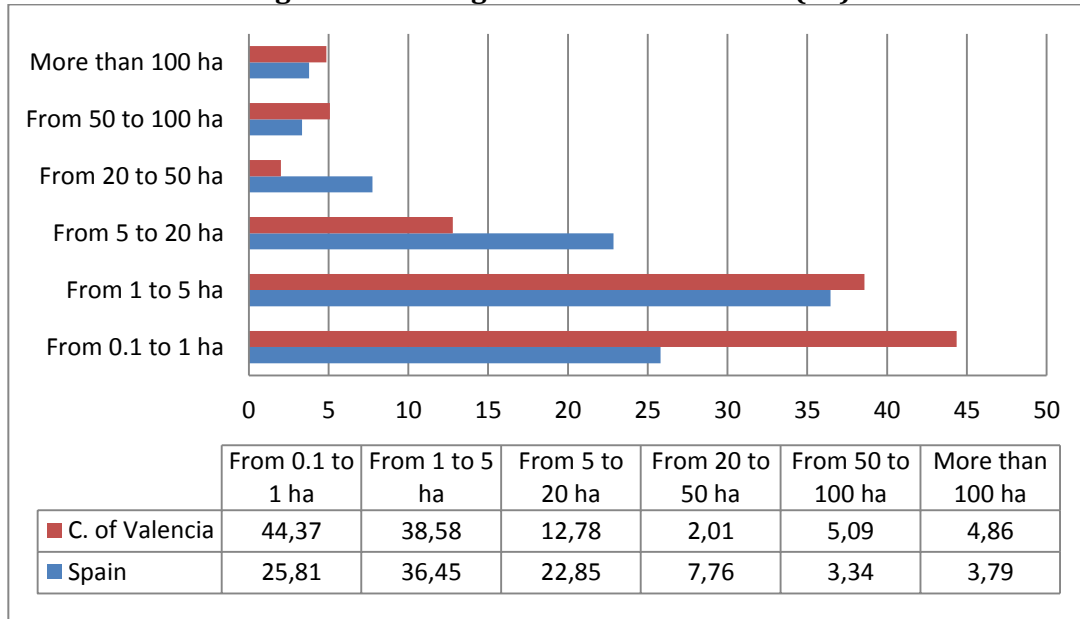
History

While Valencia has a long history of cultivation dating back to the Middle Ages and was able to improve upon the irrigation systems built by the Arabs, extending it territorially and establishing commerce from the 13th C., the important moment in its horticultural sector occurred when citrus crops were introduced in the 19th C. upon which the tradition of exportation of agricultural products is based. During most the 20th C. the orange exports were fundamental to the Spanish trade balance, hence one can ascertain the economic influence it would have had.

The origins of the Valencian cooperative movement in the 19th C. was linked to the agricultural union movement, hence the cooperatives in such region have a history of more than 100 years (in contrast the oldest cooperative in Almería is CASI which was an anomaly and was set up in 1944, the majority being set up in the 1970s and thereafter). The average farm size in Valencia is 5.19 ha, although with respect to the coastal F&V they are as small as .25 ha and, for such reason since the end of the 19th C., small farmers have organized in cooperatives to increase bargaining power.¹⁹

¹⁹ Unlike other regions of Spain, there was never a Community Exploitation of Land Cooperative, where land is held in common, in response to reduced farm size.

Figure 10. Average farm size in Valencia (ha)



There are three main periods of modern Valencia agriculture:

End of 19th to Spanish Civil War

Valencia F&V cooperatives were constituted and began to develop an important export sector linked to the orange trade. Local cooperative banks or credit sections within the cooperatives financed such investments as ordinary banks would not provide adequate financing. As Spain did not take part in WWI the sector continued to thrive and leveraged its ability to continue trade unhindered. With the Spanish Civil War the sector ceased to effectively function which meant the destruction of its main economic activity. As the Spanish Civil War ended in the south east of Spain, the Republican region including the city of Valencia and the southern part of the Community of Valencia (as well as Murcia, Almeria and Granada amongst other areas) such destruction and disruption was prolonged.

End of Spanish Civil War until the 1980s

From the end of the Spanish Civil War the sector was re-animated and commenced its period of growth and maturity. Valencian farmers are able to grow 3 crops per year without the use of greenhouses due to the fertile land and favourable climate. Such natural conditions resulted in high quality F&V (an endogenous feature). Infrastructure in terms of roads and railways (since the mid 19th C.) and also the granting of export permits during the time of the dictatorship allowed Valencia to import product from other areas for resale (Cazorla, 1999). It also had the most important seaports. After WWII family firms carried out commercialization and small family farms were the unit of production. Citrus production extended along the coast in a local regional production system of SMEs (Gallego, 2009) creating a network based on sector and territory. This initiative was supported by founders of the first cooperative bank and politicians, along with Acción Católica which encouraged the setting up of a cooperative in each village as a method of rural development. Territorial connection is inherent in Valencian agricultural cooperatives (Gómez López, 2004). Part-time agriculture was also developed (Gallego and Lamanthe, 2011). Thus, in addition to geographical and climate conditions mentioned above, there was also an organizational-relational character, echoing the structure of Almería's local production system or cluster (although the latter was formed later and in a much smaller land area). However, in the case of Valencia's production system, "commercial

logic dominated over productive logic”—the reverse of what can be said of Almería at such time, and arguably, until recently.

In the 1970s other areas in Spain such as Andalusia and Murcia began to produce F&V, such areas utilizing the commercial channels established by Valencia. Although there was the existence of a cooperative fabric since the beginning of the 1900s, it wasn't until the 1960s that a strong cooperative initiative took hold (Gallego and Lamanthe, 2011) due to the scant cooperative spirit (Abad, 1991). According to Font de Mora (1998) the cooperative initiative occurred when the sector stumbled due to a worsening in the bargaining position. During the 1970s a number of second-tier cooperatives were created out of existing first-tier cooperatives in order to increase bargaining power. Anecoop, the leading second-tier cooperative was constituted in 1975, representing a forward integration process that resulted in an important improvement in cooperative bargaining strength against the large commercial distributors. In 1972 the Spanish government had provided aid for cooperatives through support to agricultural producer groups (Law 29/1972). However, in the opinion of Álvarez (1984) this aid was both insufficient and restrictive, imposing geographical restrictions, although it did advance the cooperation amongst cooperatives and hence the creation of Anecoop (which will be further described below).

End of 1980s to present

In the mid 1980s two important developments occurred: in 1986 the entrance of Spain into the European Common Market, (with the subsequent result that cooperatives and SATs could obtain the status of PO) and in 1985 the creation of the Valencia cooperative law. This law served to provide a social (encouraging the development of cooperatives in agriculture) and economic (a policy of concentration of offer) impetus. The Institute of Valencian Agricultural Cooperation was created allowing representation and influence in agricultural policy and with the Valencian government (Gallego and Lamanthe, 2011, quoting interviews with high level administrators). In this time there was a noted advancement in the volume of cooperative commercialization and inter co-operation between cooperatives was also supported. During the 1980s and 1990s there was a process of mergers in keeping with general trends and political pressures in Spain (Gómez López, 2004).

From the mid 1990s the regional government was not considered to be “pro cooperative”, focusing more on production than on commercialization (Gallego, 2008). Certain agricultural unions in the Community of Valencia did not consider that cooperatives were the solution to small landholdings and rejected the channeling of CAP through the POs (Aguado, 2005). Other unions did so (Brusca, 2005) but this lack of consensus did not favour their creation, nor aid in presenting a united front against falling prices. During the 1980s and the 1990s the large supermarkets imposed their conditions on the market, leading to the closing of small companies and a restructuring of the sector, first private than cooperative (Gallego and Lamanthe, 2011). Faced with low liquidation prices the cooperative members had a lack of confidence in the cooperative form and created problems in the growth of PO (García Álvarez-Coque et al, 2007).

It is in this context that Anecoop provided the impetus for organization and cultural change, both in Valencia and in Spain (Gallego and Lamanthe, 2011). Through the unification of production and with an emphasis on quality, implementing a policy of constituting local cooperatives (Fond de Mora, 1998) it stimulated the modernization of the sector in general.

While we have seen above that this institutional function was carried out to a large measure by the cooperative bank in Almería (and later, with the aid of the APO Coexphall) which provided R+D+I, training and administration services, in Valencia Anecoop provided this support. In Valencia Anecoop was seen as instilling institutional confidence in the cooperative model, that

is, “a belief in cooperative principles, or at least the acceptance of the culture of professionalism within the cooperative paradigm” (Gallego and Lamanthe, 2011, translation Giagnocavo).

Faced with competition, including from other areas of Spain utilizing irrigation methods, the Valencian sector is unstable and in crisis due to the decrease in F&V prices. Currently, as Mediterranean agriculture is not as protected as continental agriculture the application of CAP does not provide a sufficient level of support, particularly in relation to agricultural prices. The preferential trade agreement between Morocco and the EU, as mentioned above in reference to Almería, presents a real and present threat to the sector.

The five largest first first-tier F&V cooperatives in Valencia, based on total assets are: Carlet (66.5 million €), Alginet (29 million €), Benaguasil (22 million €), L'Alcúdia (20 million €) and Castelló de la Ribera (19 million €). From these 5 cooperatives, 4 are located in the historical county called La Ribera del Xúquer and the other is in the county of El Camp del Túria (Benaguasil).

Relevant agricultural institutions that have contributed to the development of the sector include FECOAV (Federació de Cooperatives Agràries de la Comunitat Valenciana) in which are federated about 70% of Valencian F&V cooperatives. Three work groups have been developed to provide sectoral support to F&V cooperatives: citrus, fruits and vegetables. These work groups carry out the following tasks:

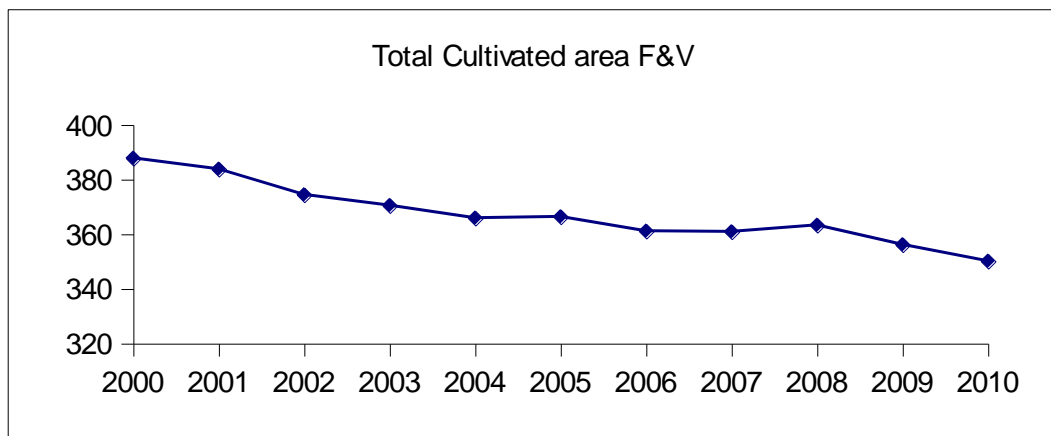
- Advertising on Common Market Organisation (CMO) regulations and negotiations on CMO reform.
- Participation in forums and sector organizations.
- Maintaining an associated cooperatives database.
- Elaboration of sector statistics (annual management report).

Within the F&V section APECA (Associació Professional d'Empreses Cooperatives Agràries) has been created, which is responsible for negotiating the collective agreement on wages and labour conditions for collecting, manipulation and processing workers in Valencian cooperatives. The main Inter-professional groups operating in Valencia are Intercitrus (created in 1993 - orange and mandarin producers) and Ailimpo (created in 1998 - lemon and grapefruit).

Economic data

F&V crops have a cultivated area of 350,102 hectares in Valencia representing 60% of total agricultural cultivated area. In Figure 11 below the evolution of cultivated area in Valencia for the period 2000 – 2010 is shown, evidencing an important decline.

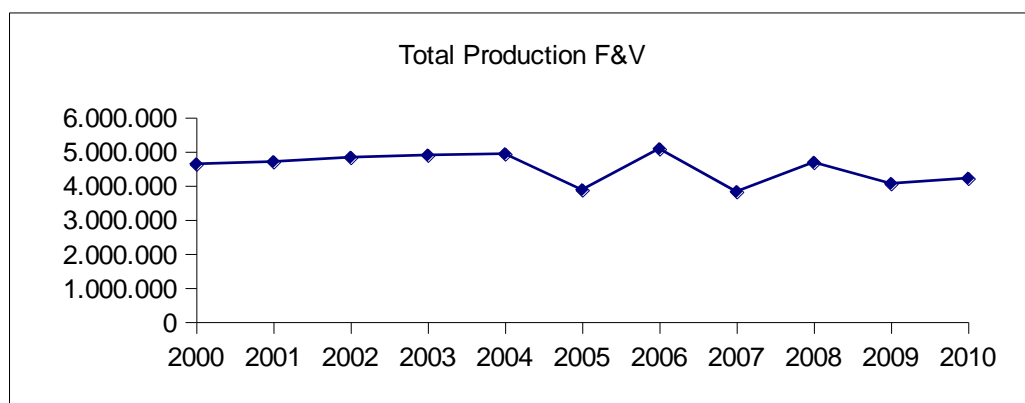
Figure 11: Cultivated area (ha) Valencia 2000-2010



Source: CAPA, elaborated by Campos i Climent, V. (2011)

In terms of production, Figure 12 shows the evolution of F&V production measured in tons for the period 2000 – 2010 in Valencia. In the last 10 years the F&V production in tons has decreased from 97% of total agricultural production in 2000 to 84% in 2010, representing a significant reduction of 13% in a decade.

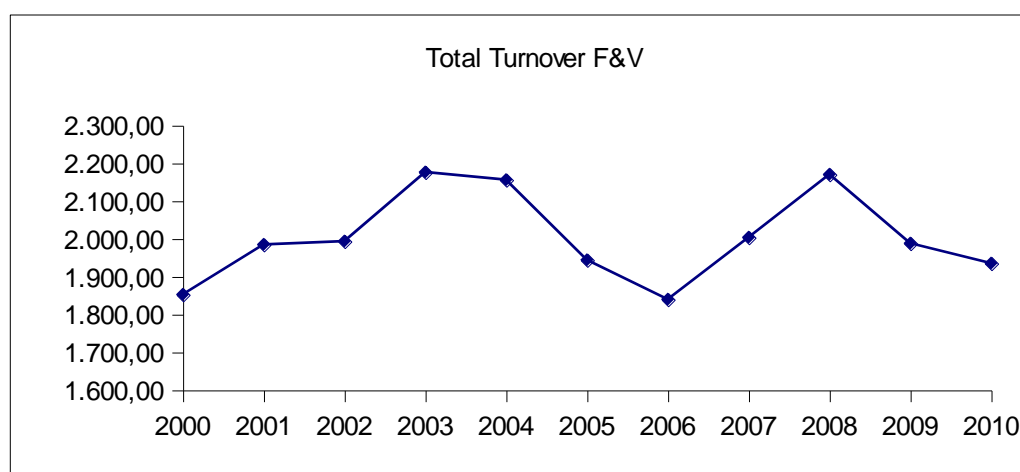
Figure 12: Production (tons) Valencia 2000 – 2010



Source: CAPA, elaborated by Campos i Climent, V. (2011)

From the point of view of the turnover, Figure 13 below shows the turnover evolution (in millions of Euros) of Valencia F&V producers for the period 2000 – 2010. The evolution of turnover is erratic, as is the weight of F&V turnover in relation to the total for the agricultural sector, such variation caused by the fluctuation in prices.

Figure 13: Turnover (millions of Euros) Valencia 2000 – 2010



Source: Campos i Climent, V. (2011)

Turning to an analysis of the F&V cooperatives in Valencia, Table 6 sets out the number of Valencia F&V cooperatives and their weight in relation to total Valencia agricultural cooperatives.

Table 6: Weight of F&V Valencia Cooperatives/Total Agr. Coop 2010 (turnover in millions €)

| | NUM. OF COOPS | TURNOVER | MEMBERS | EMPLOYEES |
|-----------------------|---------------|-----------|---------|-----------|
| Citrus | 96 | 487,286 | N.D. | N.D. |
| Fruits (non citrus) | 36 | 73,391 | N.D. | N.D. |
| Vegetables | 22 | 89,545 | N.D. | N.D. |
| Total F&V | 102 | 650,222 | 139,196 | 13,308 |
| Total Agr. coop. | 542 | 1,830,230 | 331,420 | 35,022 |
| % T F&V /T Agr. Coop. | 18.82% | 35.53% | 41.99% | 37.99% |

Source: FECOAV

Table 7 sets out the Valencia F&V exports for the last 3 years, demonstrating a decrease in the weight that F&V exports represent in relation to total agricultural exports (from 86.77% to 86.41%).

Table 7: Exports (thousands of €) F&V Valencia 2008-2010

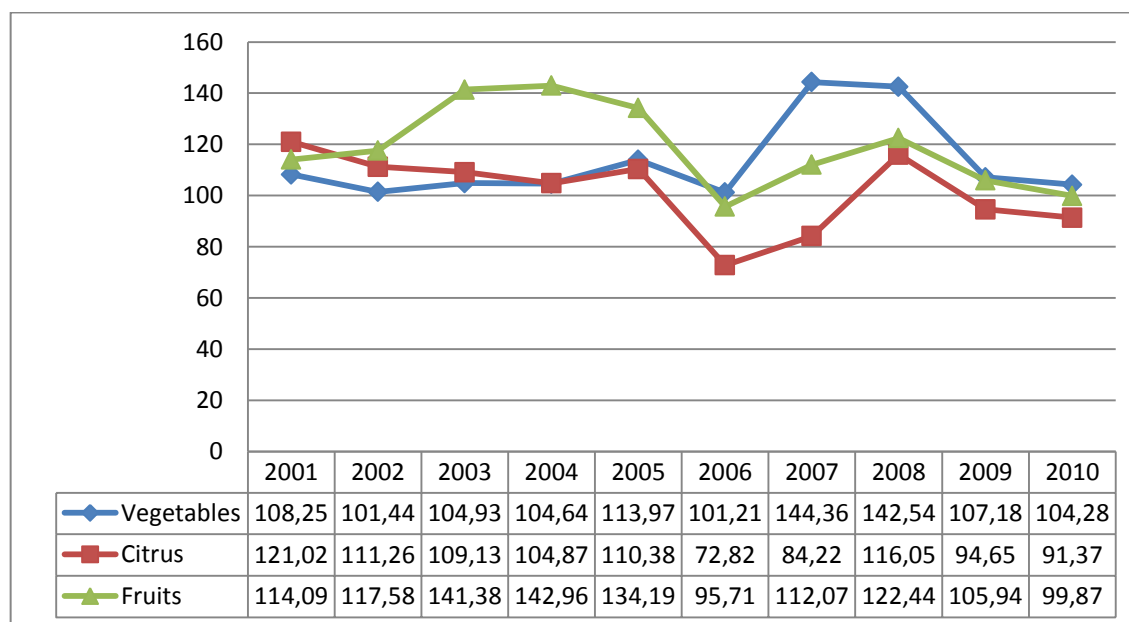
| Year | Rice | | Vegetables | | Fruits | | Citrus | | Total F&V | Total Agr. Sector | F&V / Agr. Sector |
|------|--------|------|------------|-------|---------|-------|-----------|-------|-----------|-------------------|-------------------|
| | Value | % | Value | % | Value | % | Value | % | Value | Value | % |
| 2008 | 32,542 | 0.96 | 649,257 | 19.23 | 401,677 | 11.89 | 1,847,725 | 54.69 | 2,931,201 | 3,378,180 | 86.77 |
| 2009 | 28,153 | 0.84 | 593,343 | 17.72 | 399,621 | 11.94 | 1,876,486 | 56.06 | 2,897,603 | 3,347,538 | 86.56 |
| 2010 | 38,241 | 1.05 | 707,005 | 19.42 | 472,098 | 12.97 | 1,928,499 | 52.97 | 3,145,843 | 3,640,628 | 86.41 |

Source: CAPA (2010)

With respect to market share of cooperatives, F&V cooperatives commercialise approximately 50% of total agricultural production in Valencia (Generalitat Valenciana, 2010). Differentiating by crops, 54.6% of citrus, 32.5% of fruit and 12.9% of vegetables were commercialised by F&V cooperatives in Valencia, indicating that the cooperatives are most specialised in citrus in accordance with the historical roots of Valencia and the least with vegetables.

The evolution of F&V prices has fluctuated during the period 2001–2010 as shown in Figure 14 below, suggesting the variability of prices. In order to facilitate comparisons among different products, the price index (base year 2000 and 2005) has been calculated for each product and compared with the price index evolution for the period 2000-2010.

Figure 14: F&V prices 2001-2010 (€/100kg)



Source: Campos i Climent, V. (2011)

Low and erratic prices clearly affect the performance of F&V cooperatives. In a prior study carried out by one of the authors (Campos i Climent, 2011) an empirical analysis on Valencia F&V cooperatives applied a ratio analysis to the financial statements (balance sheet and profit & loss accounts) obtained directly from Valencia official accounting register for the period 2005-2009. The representative sample contained the 52 largest F&V cooperatives located in Valencia, out of a total of 102. The first analysis concerned financial ratios (liquidity, solvency, indebtedness and debt structures). The Figure 16 which sets out the evolution of these financial ratios alongside the same ratios for a sample of Almería cooperatives is found in Appendix 2.

The analysis observed that the Valencia F&V cooperative financial situation is worsening with declining liquidity and solvency ratios and increasing indebtedness and debt structure ratios, signifying a reduction in the ability of the cooperatives to meet their payment obligations, whilst at the same time their indebtedness is increasing. The increase in indebtedness is worrying as it is based on short term debt.

The analysis also considered the evolution of economic ratios (see Figure 18 “Evolution of economical ratio for F&V Valencian cooperatives” in Appendix 2) and observed that trade margins and the asset turnover ratios, which measures the ability to generate income, and can be considered as a method to evaluate efficiency, were close to zero. Efficiency ratios had negative values, and in the best case scenario (2009) were close to zero, demonstrating the limits of cooperatives for self-funding.

In Figure 19 in Appendix 2, “Mixed ratios evolution for Valencian F&V Cooperatives”, which can be considered as a measure for profitability, the return on asset (ROA) ratio is near to 0 among the period considered and the return on equity (ROE) worsened during the period 2005 to

2009 and was near zero, signifying that profitability is close to 0 due mainly due to the evolution of prices.

3.2 Strategy and structure of main cooperatives

Position in the food chain

In order to obtain a better understanding of which support measures have been and could be effective to support F&V cooperatives, it is important to analyze their position in food chain.

F&V cooperatives in Valencia occupy an intermediate position in food chain. The majority of Valencia F&V cooperatives are joint commercialization cooperatives (usually they don't transform the product) which have large suppliers and customers. This limits their bargaining power to control prices, as the suppliers and customers both have the market power to fix prices. These market structures explain the low level of profitability of Valencia F&V cooperatives and support measures should take into account such market structure. In the context of Valencia F&V producers the preferential trade agreement entered into by Morocco and EU demonstrate an important threat for their F&V producers that, in the opinion of Valencia experts, could cause them to disappear. This agreement treats Moroccan production in the same way as European production, despite the fact that Moroccan production is not produced under equal conditions (i.e. control in the use of pesticides, different labour market regulations), resulting in a "social dumping".

Research and Institutional Partnerships

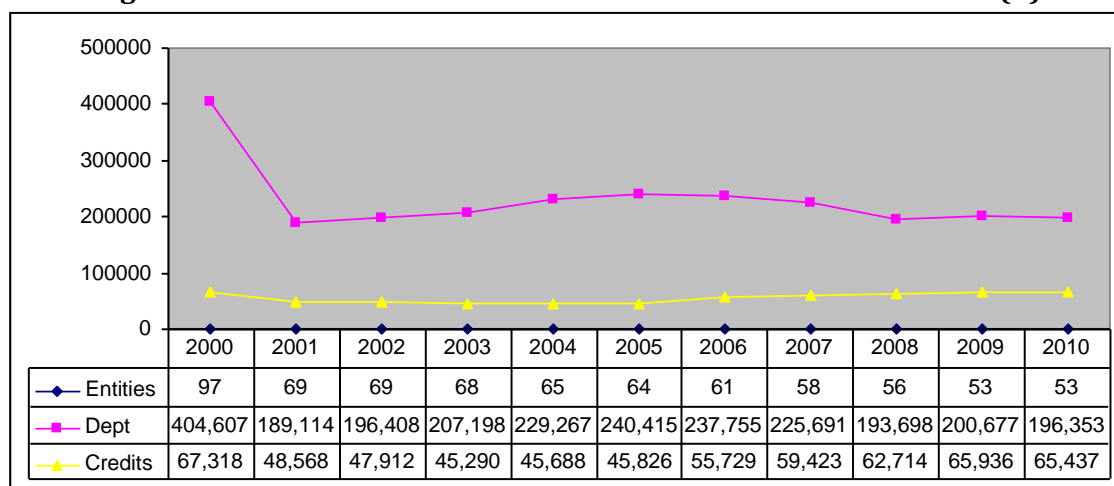
The F&V sector is also dependent on R+D+i and Valencia has a number of universities which collaborate with the sector on an extensive range of projects. Experimental farms by Anecoop are also present.

Organisation/Human Resources and Member Services

Aside from the differences of first-tier and second-tier cooperatives, the organisation of the cooperatives, their human resources and their member services were quite similar to that of Almería referred to above. A notable difference was the more important presence of credit sections within the Valencian cooperatives.

Traditionally Valencian F&V cooperatives have had as strategic partners local cooperative banks and their own credit sections. They were a specific financial tool for Valencian F&V cooperatives and farmers, created by the Valencia cooperatives and farmers in the late 19th C. at a local, not provincial level. Thereafter, these local cooperative banks went through a merger process (from which 3 provincial cooperative banks were created). In 2002 these 3 provincial cooperative banks merged and an autonomous cooperative bank was created (Ruralcaixa / Ruralcaja). Finally, Ruralcaixa and other remaining local cooperative banks and credit sections merged to create the group Cajas Rurales del Mediterráneo (the head office located in Valencia). This has now been integrated into the cooperative bank of Cajamar (which as mentioned above, has its head office in Almería) in the last months. For some Valencian farmers the integration with Cajamar represents the loss of the link between the Valencian financial system and Valencia agriculture. However there are still 53 remaining agricultural cooperative credit sections as set out below. Given recent legislative initiatives over the last 6 years, complicating the existence of credit sections and requiring a cash ratio of 50% of deposits, such entities are likely to disappear.

Figure 15: Main data evolution referred to Valencia Credit Sections (€)



Source: Institut Valencià de Finances

Institutional/governance structure and Legal Form

Like Almería, the cooperatives of Valencia also co-exist with SATs and IOFs, whether they are S.A.s or S.L.s. What is of most importance in terms of Valencia cooperative structure, in contrast to Almería, is the predominance of second-tier cooperatives, representing a vertical integration process, both backward (to improve bargaining power regarding suppliers) and forward (to improve bargaining power regarding customers). Both strategies use a second-tier cooperative as a model of development.

Table 8: Number of Second-tier Valencian cooperatives for 2010 (turnover in million €).

| | Entities | Members | Employees | Turnover |
|------------------------|----------|---------|-----------|----------|
| Valencia | 16 | 96,420 | 6,980 | 2,100 |
| Spain | 160 | 350,000 | 15,121 | 5,250 |
| %Valencia/Spain | 10% | 28% | 46% | 40% |

Source: Cooperativas Agroalimentarias

In 2010 second-tier Valencian cooperatives represented 10% of total second-tier cooperatives in Spain. However they represented 40% of Spanish second-tier total turnover and 46.16% of employees

With respect to internal governance, as an example of second-tier cooperative governance in Valencia, we refer to Anecoop, whose general assembly has a representative from each member cooperative. The voting at the general assembly is done on a multiple basis where voting rights are assigned in proportion to the cooperative activity between members and Anecoop during the most recent accounting period, to which two co-efficients are applied: one for participation and the other for historical factors. The governing board is elected from its members for a period of four years and handles the cooperative management.

In 2003 Valencia's cooperative law (Ley 8/2003) was reformed, providing for more flexibility in cooperative bylaws and statutes. Changes included reduction of set up costs and maintenance, the possibility to capitalize unemployment payments for setting up a

cooperative, support for creation and development of agricultural cooperatives, incentives for members to join, provisions for capital guarantees, and in order to promote further integration, regulation of cooperative groups.

As a result of the challenges faced by Valencia F&V Cooperatives described thus far, it would be appropriate and logical to propose vertical integration processes and strategic alliances to resolve such issues. However, according to Campos i Climent, the main problem of Valencia F&V cooperatives is the way in which they are managed. In order to improve their bargaining power through vertical integration processes they need professional management which is capable of implanting strategic management techniques. This point was found to be important when considering the goals of any support measure which provide tools to enable Valencian F&V cooperatives to compete in markets and be self-sufficient in the long term.

Studies have also looked at whether larger Valencian F&V cooperatives performed better (Vidal, F., Del Campo, F., and Segura, B., 2000; and Climent y Campos, 2011). Climent y Campos (2011)²⁰ concluded that Valencia F&V cooperatives currently have a balanced financial structure, but that it is getting worse due to increasing production costs (mainly in labour and supplies) and falling horticultural product prices. All ratios studied therein showed a tendency to worsen among the period considered, especially from 2008.

It also found that a larger F&V cooperative did not result in a better performance, thus suggesting that a strategy of mergers is not suitable in Valencia. As larger size cooperatives involve a more difficult management structure, Valencian cooperatives were apparently not prepared to adopt such structures given their resources and abilities. Strategic alliances seem more suitable in order to share resources and investments through co-operation among F&V cooperatives. Consequently, the study concluded that the underlying problem of Valencian cooperatives was their management ability.

Given credit restrictions, particularly recently, the presence of the cooperative banks and credit sections is important to Valencian F&V cooperatives. This is even more relevant given the necessary reorganisation of the sector in keeping with F&V production and territorial characteristics.

Turning to the main second-tier cooperatives of Valencia we find:

Anecoop, the largest F&V cooperative in Spain (and the Mediterranean) was founded in Valencia in 1975 as a citrus cooperative. It carries out F&V joint commercialization of the production of 79 first-tier cooperatives located mainly in Valencia (other locations are Andalucía, Murcia, Castilla-León and Navarra). In 2011 its turnover was 482M€ with a commercialisation of 659,281 tons²¹ and it had 180 permanent workers. It is an international company with exports throughout Europe. In 2003 Grupo Empresarial Anecoop (GEA) was created with the goal of integrating the management of associated first-tier cooperatives (currently there are 19 associated). In 1990, it was created Agriconsas which is a company owned by Anecoop, whose purpose is the processing of F&V product. It is a case of forward vertical integration.

²⁰ In the same study a linear regression between a variable that measures profitability (ROA, ROE, as dependent variables) and another variable as a measure of size (Total Asset, as an independent variable) was carried out, such results shown in Appendix 2.

²¹ Information from Anecoop's website: www.anecoop.com

The Anecoop Group is made up of:

- Eight international companies situated in strategic F&V market points: Spain, France, U.K., Holland, Czech Republic, Poland and Russia,
- Four Spanish delegations: Valencia, Sevilla, Murcia and Almería. Logistics and transport companies such as the Centro Logístico Anecoop.
- Two experimental and development farms: Masía del Doctor and the University of Almería-Anecoop.
- Agricons, a non-concentrated fruit juice and fruit and vegetable preserves company created in 1990.

In addition, in 2009 Grupo Persimon was created which united 14 cooperatives in order to standardise the monoproduction of persimon. This initiative is an attempt to find an alternative to orange and mandarin farms of a particular region given the lack of profitability of traditional citrus production for such farmers. As well in 2009 a F&V platform was started in the province of Almería, with the objective of working together in production lines, developing a common commercial policy and increasing its market share.

Anecoop exports to 57 countries. The EU makes up 94% of its exports. During 2011, the first destination of Anecoop was France, with about 137,000 tons sold in F&V and citrus, followed by Germany, with 131,000 tons and Spain, with 82,000 tons. By order of importance, this is followed by Sweden, the U.K. Italy, Poland and Belgium²².

Among the services it provides to its members are a credit section and technical assistance, aiding with the implantation of quality systems and process improvement. The same occurs with the results of their research centres which are transferred to the member cooperatives, who then disseminate the information to their members.

- Coarval, is a second-tier supplies and services cooperative that provides their associated first-tier cooperatives (163 first-tier cooperatives) with supplies and advertising. Its turnover in 2010 was 80 M€ and it had 62 permanent workers. It is a case of backward vertical integration.
- Intercoop, it is a second-tier cooperative located in Castelló (north of València) which carries out joint commercialization of the production from 173 F&V first-tier cooperatives. Its turnover for 2010 was 43 M€.

3.3 Relevant support measures affecting structure and strategy

The Spanish national laws on cooperatives (law 20/1990 and law 19/1995), equally applicable to Almería cooperatives, includes tax benefits mainly related to corporate tax, that is if a cooperative has positive results it can take advantage of a tax benefit. However, given the majority of cooperatives have levels of profitability near zero such measures are not particularly useful. Valencian F&V cooperatives are also regulated by autonomous community laws on cooperatives (law 8/2003 on Valencian Cooperatives and law 8/1985 on Agricultural Cooperatives with Credit Section). Law 8/1985 from Generalitat Valenciana made available a specific financial tool for Valencian agricultural cooperatives through the creation of credit

²² Observatorio Español de la Economía Social (2012, March 22): "Anecoop aumenta su volumen comercializado y mantiene la cifra de negocio en un contexto de crisis de precios". Observatorio Español de Economía social. Retrieved April 26, 2012, from <http://www.observatorioeconomiasocial.es/actualidad-observatorio.php?id=1940>

sections within agricultural cooperatives, although this law has been modified to restrict credit section activities, limiting cooperative access to such funding.

With respect to CAP, prices of F&V products are not guaranteed by the European Agricultural Guarantee Fund in the same way as continental agricultural products. For example, the use of withdrawal prices provided in CMO is limited because they are lower than in the continental case with regard to the production cost. This fact combined with the new agreements between Morocco and Mercosur will make F&V prices decline, becoming an important threat for Valencia F&V producers. The use of product withdrawals and amounts raises several issues when marketing of other agricultural products are permitted and yet not subject to the same requirements for food safety, traceability and labour and environmental guarantees. The lower prices of such products are not due to the use of better technology or a higher level of productivity. This results in products of higher quality and safety (in terms of traceability and food safety) being withdrawn, thus promoting inefficiencies and resulting in inequitable treatment for European producers.²³

Given that there is a fundamental need to restructure the Valencia F&V sector with the aim of improving and promoting the professionalization of cooperative management, it is necessary that cooperatives incorporate strategies and strategic management in order to improve their competitiveness. These actions supported by EU through CAP (FEADER) are seen to be crucial to Valencia cooperatives. In Table 10 below there is a summary of main aid and subsidies received by Valencia F&V producers in 2010 from EU (amounts in thousands €).

Table 9: Support received by the F&V Sector in Valencia in 2010 (th €)

| Year 2010 | Amount |
|-----------------------|---------------|
| Operating Funds | 32,509.5 |
| Contribution of FEAGA | 50,199.6 |

Source: CAPA

Table 10: Support received by FEOGA by the F&V sector in Valencia (€)

| Type of Support | AMOUNT | Nº BENEFICIARIES |
|--|---------------|-------------------------|
| Support for processing of citrus | 110,248.11 | 6 |
| Support per area for stone fruit | 9,063,468.06 | 14.064 |
| Operating Funds for POs | 35,915,775.39 | 123 |
| Exceptional measures for aid to Spanish Vegetables | 4,613,622.48 | 59 |
| Transitory payment-other fruits and vegetables | 435,709.08 | 173 |
| Plan for fruit consumption in schools | 557,676.17 | 2 |
| Total | 50,696,499.29 | 14.42 |

Source: Elaboration by Giagnocavo and Gerez from FEAGA

Other significant subsidies from Conselleria d'Agricultura, Pesca i Alimentació (CAPA, Generalitat Valenciana) and Spanish Ministry (MARM, Spanish Government) in 2010 (amounts in thousands of €) were:

²³ More adequate measures would be to maintain tariffs and import quotas, allowing European producers to supply European markets and other countries to supply markets not covered by European producers where such other countries competitive advantage is not due to efficiencies in production processes.

Table 11: Support Received by the Valencia Regional Ministry of Agricultural and the Spanish Ministry (MARM) (th €)

| | CAPA | MARM |
|--|----------|---------|
| Aid to contract Agricultural Insurance | 16,310 | 25,488 |
| Agricultural infrastructure improvement | 6,734.8 | 0 |
| Improvement of irrigation systems | 14,534.1 | 0 |
| Citrus | 93.8 | 0 |
| Reconversion fruit | 19.4 | 19.4 |
| Stone Fruit | 2,747.5 | 2,747.5 |
| Association of producers of F&V | 0 | 105.5 |
| Constitution and integration of cooperatives | 3,306.3 | 0 |
| Cooperative Reconversion | 714.4 | 0 |

Source: CAPA (2010)

4. Analysis by comparison

General F&V Agricultural Data

The importance of cooperatives in the F&V sector is very high in Almería and Valencia, reaching in both cases around 50% of the commercialization of the sector. In the case of Valencia, this is more pronounced in citrus than in fruits (32.5%) and vegetables (12.9%). The number of cooperatives is as well similar, being 102 in Valencia and 154 in Almería (Registry of Andalucía). It should be taken into account that the province of Almería is of a smaller size than the autonomous community of Valencia, which is composed of three provinces.

The turnover of the cooperatives in the Community of Valencia has fluctuated over the last decade, although, over the long run it has increased 4.26%, going from 1,841 in 2000 to 1,920 in 2010 (both in millions of Euros). The turnover of Almería cooperatives has gone from 1,474 million in 2004 to 1,866 million Euros in 2010, representing an increase of 26%. Taking into account all of the producers of Almería, the turnover estimates are 2,371 million in 2009 to 2,693 million in 2010 (information provided by Coexphal).

The area cultivated in Valencia has decreased progressively in the last 10 years, going from 373,040 ha to 334,887 ha in 2010, representing a decrease of 10%. The main decrease has been in F&V, although there has been a decline in citrus as well. Cultivated area in the province of Almería, has been more erratic during the last decade going from 48,477 ha in 2000 to 45,874 ha in 2011, representing a decrease of 6%. In terms of the size of farms, in Almería the average farm size is 1.5 ha and in Valencia 5.19 ha., although many F&V farms are as small as .25 ha.

The production of F&V in Valencia reached 4,096,461 tons, which represented a decrease of 9.4% since 2000. Almería, in the last decade has had a positive evolution from 2,714,546 tons in 2000 to 3,100,875 tons, with a growth of 14.2%. While area declined in both regions, production has increased in Almería and decreased in Valencia, although it should be kept in mind that Almería's production is predominantly greenhouse and Valencia predominantly open air.

Exports in F&V in Almería have grown significantly, being 1,966,237 in 2010, which is an increase of 15.4% from 2008 and 30.4% in the last 10 years. Exports in Valencia in 2010 were also positive, being 3,107,602 in 2010, having grown 7.1% since 2008. This fact illustrates the strategic importance of increasing exports for both regions.

Financial Ratios

With respect to the financial ratios, set out in Appendix 2, Figure 16 "Evolution of Financial Ratios from Valencia F&V Cooperatives" and Figure 17 "Evolution of Financial Ratios from Almeria Cooperatives" we are able to offer some comparisons.²⁴ The liquidity ratio indicates the capacity of a company to meet its debt obligations. In the case of Valencia, we can observe that the ratio has worsened significantly during the period of study while in the case of Almería there is a slight increase of liquidity over the three years. (The increase of liquidity is due to the increase of current assets as a consequence of the increase in the amount of commercial debtors.) With respect to the solvency of the cooperatives, in both regions there is a reduction

²⁴ Data for other ratios available for Valencia F&V Cooperatives were not available for Almeria F&V Cooperatives. It should be noted that as we are dealing with available information the years differ: for Valencia from 2005-2009 and for Almería 2008 to 2010, observations should be taken as only suggestive in comparison.

of solvency and thus it appears a more pronounced difficulty in meeting their long term debt obligations. With respect to debt, in both cases it is growing, however we can see that it is less so in the case of Almería. If we analyse the composition of this debt, both in the case of Valencia and Almería one can appreciate the greater importance of short term debt, somewhat higher in the case of Almería.

Selected Main Cooperatives of Each Region

In comparing main cooperatives of the two areas we have chosen Anecoop and CASI and Vicasol, juxtaposing their financial ratios over 3 years (See Appendix 3). Anecoop is the most important cooperative with total assets in 2011 of 88 million. In Almería, CASI has total assets of 79 million and Vicasol with 49 million. With respect to the turnover, Anecoop has 482 million in 2011, followed by CASI con 193 and Vicasol with 111 million. If we analyse the debt structure, Vicasol has 63% of equity, as opposed to 53% of Anecoop and 30% of CASI. In light of this, we can observe that the three cooperatives are sufficiently capitalized. As for its evolution over time, in the three cooperatives the turnover has increased over the period considered, with Vicasol having the most growth (27%) as against Anecoop (3%) and CASI (1%). In the case of CASI and Vicasol, this increase in turnover has been accompanied by a rise in total assets, the contrary of Anecoop.

First-tier and Second-tier and historical circumstance

A striking difference in the two regions is the structure of the cooperative sector in terms of first-tier and second-tier cooperatives, with Valencia being dominated by the largest second-tier cooperative in Spain, Anecoop. Since 1975 such cooperative has been the bench mark for other Spanish agricultural cooperatives. From the point of view of experts in Valencian F&V agriculture, the creation of Anecoop was a strategic response of the first-tier cooperatives to meet the progressive concentration of demand and also to face the challenges of internationalization, without their members losing their territorial connections. In Valencia cooperatives are “cooperatives of the villages” and this is an important cultural consideration. As mentioned above, Valencia had a rich agricultural history and fertile land, where first-tier cooperatives, particularly small ones, were already established in a particular territory (whether in citrus, F&V and other fruit).

On the other hand, Almería’s agricultural sector has a very different history, although ultimately no less connected to their cooperatives. One could say that the cooperative institutions of Almería are what created the notion of community and territory, rather than the other way around (Giagnocavo et al, 2012). Given the migration out of Almería due to economic and political hardship (Aznar-Sánchez, 2005) community and territorial ties would have been extremely strained under such circumstances. The cooperative bank was an impetus for cooperative creation and growth and played an organizing role, much like Anecoop did, for the first tier cooperatives. Whether the central role of a few cooperative institutions in Almería made the necessity of second-tier cooperatives redundant is possible. The chosen method in Almería was, and continues to be for the most part, first-tier cooperatives and if growth is desired, mergers.

In speaking with Almería cooperative representatives, first-tier cooperatives were considered to be more “efficient” even though it was considered to be a more difficult and time consuming process than that of creating a second-tier cooperative. Reasons for efficiency were a streamlined governance structure and the ability to dissuade farmer members from leaving. When there is an integration of capital it is more difficult to separate, this being important

during difficult years.²⁵ Historical “fact” was also brought up: that the largest and most successful cooperatives were first-tier. But of course, this “fact” is also available to argue for the presence of second-tier cooperatives in Valencia. This case study suggests that the choice of first and second-tier cooperatives are somewhat path dependent and that depending on the area, both models have their logic. As mentioned throughout this case study, whether by anecdotal evidence or more formal empirical studies, the professionalization of management and the improvement of strategic management is of great importance to both areas, whether in first or second-tier cooperatives. Without such capacity it will be difficult to undertake projects and capture more value along the food supply chain for members.

Food Supply Chain

Valencia cooperatives have been traditionally farther downstream in the food chain than those of Almería, focusing on commercialization and internationalisation for much longer than Almería, particularly with Anecoop leading the way, not only for Valencia but for Spanish cooperatives in general. However, Almería cooperatives have in the last decade begun to turn away from being mere producers. Both regions can be considered to be intermediate in the food chain, although Almería still less so than Valencia. Entering the IV and V range products has been a difficult task for both regions, even though such products signify more participation in the food chain value. Anecoop, in its 2011 Memoria has mentioned that it abandoned such initiative. Almería cooperatives are in their nascent steps in such area and it cannot be said to yet be a significant area for the cooperatives. Efforts to shorten the supply chain are evident in both cases.

Collaborations and Internationalization

Anecoop’s collaborations, both scientific and business are quite extensive. Their degree of collaborations with both cooperatives and IOFs as well as their internationalization/commercialisation is the most advanced in Spain. They have recently managed to enter into the complicated Persian Gulf market, in addition to their international presence noted above.²⁶ The key to their concentration of offer is that they have a “Spain brand”, selling from 6 different autonomous communities, through the simplicity of one contact. The commercial department is integrated in such a manner that there is no competition between neighbouring cooperatives, but rather with other countries.

What we can also say in respect to Almería, is that the cooperative sector has increasingly undertaken collaborations and entered into innovative business ventures with both other cooperatives and IOFs, as evidenced in the descriptions of the particular cooperatives. Of note is the inter-collaboration between entities within Almería. In Andalusia there is an effort to use the “Andalucía brand” and other smaller denominations of origin. This has yet to prove to be a convincing strategy to add value in F&V.

SWOT Analysis of Almería and Valencia Cooperatives

Recent prior SWOT analyses performed on the two cooperatives regions have been juxtaposed below to aid in the comparison of the two agricultural areas.

²⁵ It is interesting to note that from 2008 to 2011 Anecoop lost 20 members and gained 4, according to its 2009/2010 and 2010/2011 Memoria. This was attributed to mergers of such members with other cooperatives.

²⁶ http://www.agro-alimentarias.coop/1/1_2_1.php?id=MzU4NA==

| ALMERÍA* | VALENCIA** |
|--|--|
| Weaknesses | Weaknesses |
| <ul style="list-style-type: none"> -difficulty in strategic decision making -“atomised” sector with lack of market power and little control over prices -lack of professionalization, particularly in management -upstream in the supply chain | <ul style="list-style-type: none"> -small-sized farms -ageing population -dispersion of the agricultural supply -part-time work prevalence |
| Threats | Threats |
| <ul style="list-style-type: none"> -grossly unequal bargaining power vs. distributors which pressures prices downward -competition within links of agro alimentary supply chain-concentration of entities between coops and consumers -CAP and market liberalisation -growing competition from countries with lower standards and/or lower labour costs -rising production costs (related to petroleum) -climate change -complex and numerous legislative initiatives | <ul style="list-style-type: none"> -concentration distribution -Common Agricultural Policy from the EU |
| Strengths | Strengths |
| <ul style="list-style-type: none"> -cooperative control of production processes -“state of the art” production and processes (including HR and economics) -supplier to wide range of European countries -availability of technological and logistic resources | <ul style="list-style-type: none"> -Images & roots of the territory -Channel diversification -Efficient Water use -Existence of agricultural cooperatives -Research capacity -Strong export position |
| Opportunities | Opportunities |
| <ul style="list-style-type: none"> -growing global markets -possibility to leverage environmental and healthy characteristics -relatively favourable financial situation with sufficient liquidity -new marketing channels -development of new products to fit with more urban consumers | <ul style="list-style-type: none"> -use of ITC -groups of Agricultural Producers -proximity to markets -traceability of products |

*Giagnocavo (2011)

**Campos y Climent (2011, utilizing Delphi method and in consultation with sector professionals.)

The main findings for Valencia was that their strength lay in centuries-old experience in the sector, while for Almería, such strength was the cooperative control of the processes of production. Weaknesses for Valencia and Almería can be seen to be due to causes related to the small size of farms. Opportunities for Valencia are related to their cooperative ability, whilst in Almería it was the ability to leverage capacity to participate in new markets. Both identified as threats the CAP policies and distributor concentration.

For Almería, concentration of offer, increased exports, cooperative oriented professionalization and increased and continued emphasis in R+D+I were seen as measures against weaknesses. Measures against threats were seen to be a renovation of cooperative organizations and representative entities, including but not limited to giving real power to inter-professional organizations, diversification, internationalization and strategic collaborations.

Measures against weaknesses proposed by Valencian experts were: concentration of supply; economies of scale, referring to small-sized farms; supply diversification; improving professionalism; ITC introduction and quality management. Measures against threats proposed by Valencia experts: cooperation among F&V cooperatives; improving product quality; participation in a cooperative group to carry out vertical integration processes; internationalization.

5. Research Questions, Hypotheses, and Policy Questions

Below the research questions, hypotheses and policy questions are answered based on the information gathered and analysed above. With respect to the research questions, earlier text has addressed them in more detail. Below we set out salient points.

1. How are the strategies of the F&V cooperatives in Almería and Valencia affected by the structure (e.g., size, internal governance, first versus second tier cooperatives, collaboration among cooperatives or between cooperatives and IOFs, internationalization, etc.) of their respective cooperatives?
 - In Almería, most cooperatives are first- tier and are involved in marketing product of small farmers and thus they are not traditionally highly vertically integrated. Those that continue to compete solely on price and increased production experience difficulties. Local characteristics deter internationalisation and collaborations outside of the region and outside of Spain, although this is beginning to change. The majority of the largest cooperatives are first tier cooperatives which have proven efficient (Murgiverde, CASI, Vicasol, etc.) and governance problems are less pronounced. Second tier cooperative such as UNICA have “lock up” measures to avoid common second-tier weaknesses. However, as there is not real sample of second-tier cooperatives with which to compare, we cannot say that first-tier are *more* efficient, only that they have proved to be efficient in the context of Almería.
 - Almería F&V cooperatives have a close relationship with the local credit cooperative and the agricultural and technical research services and thus generally have not had problems with access to credit. The agricultural cluster (cooperatives, SMEs, IOFs and large enterprises) has served to create synergies and strengthen the cooperative sector, with various collaborations and strategic alliances. Given the increasingly larger size of first-tier cooperatives there has been more emphasis on professionalization of management, although this is still a pending task.
 - In Valencia, the early integration of first-tier cooperatives into second-tier cooperatives as early as 1975 resulted in a level of internationalisation and commercialisation that was novel in Spain. As a result of such internationalisation, cooperatives such as Anecoop were able to absorb and implement innovative practices.
 - However, there remains an important gap between the strategic actions that cooperatives need to carry out, requiring a professional management and management ability, and the F&V cooperative reality. Most cooperatives have a manager but they are not professionally qualified (usually he/she is a member of the cooperative). This differs from Almería, where larger cooperatives hire a professional manager (*gerente*). Pending strategies for Valencian F&V cooperatives include: basing their competitive strategy in product differentiation without compromising cost reduction; and as a corporate strategy, basing their competitiveness in cooperative alliances. In order to develop these strategies quality management is necessary, which as yet is not well developed in most F&V cooperatives.
2. How has the historical development of F&V cooperatives in Almería and Valencia affected the strategies and structures of their respective cooperatives?

- The parallel development between the agricultural and credit cooperatives in Almería has been crucial to the success of these cooperatives, whereby the credit cooperative financed R+D+i, assumed financial and experimental risk and acted as a catalyst for development and change management. The agricultural district or “cluster” model of Almería created a “virtuous” cycle of productivity and allowed reinvestment. Almería’s F&V sector commenced later than other regions, such as Valencia, and resulted in a lack of more sophisticated commercialisation, concentration and growth strategies. In the last decade there has been a refocus of the sector on exports, concentration, internationalisation and collaborations. First-tier cooperatives dominate and are seen to be more efficient, though mergers are seen to be more complex. Where second-tier cooperatives have been set up such as UNICA Group, they are structured contractually to mimic certain first-tier characteristics.
- With respect to Valencia the cooperatives have been functioning for much longer and this has had a significant effect on their internationalisation processes. In 1975 when Anecoop was formed by the first-tier cooperatives, cooperatives in Almería were just beginning. The established first-tier cooperatives were organised on the basis of their territory, such towns spread out across the autonomous community of Valencia.
- The different histories of the two regions have meant that there has been little collaboration in spite of the fact of evident synergies, although this is changing. There still exists significant lack of trust between the two regions. Anecoop has 5 cooperative members in Almería and has invested 100s of thousands of Euros in collaboration with the University of Almería in experimental farms.
- Anecoop uses a “made in Spain” strategy sourcing product from various regions in Spain, given its presence and recognition throughout the cooperative sector in Spain. Almería currently is more tied to the Andalusia or in some cases attempts to market denomination of origin product, although the opinion is mixed on whether this is a viable strategy. Certain cooperatives prefer collaborations and strategic alliances, “renting” established brands rather than using resources to build one from the beginning.

3. What are the main differences between structure and strategy of F&V cooperatives in Almería and Valencia, and to what extent can these differences be attributed to differences in regulation and policy measures?

- The F&V cooperative sector in Valencia is older and based on citrus which has a long history of trade and internationalisation in Spanish history. The greenhouse cooperatives of Almería are relative newcomers and do not have the same commercialization history. This is an historical fact, and has little to do with policy. However, the encouragement to form cooperatives and PO groups have had a positive effect on Almería and has allowed it to rapidly develop such that its total F&V turnover competes with Anecoop. From a production point of view Almería has progressed exponentially. But it still has not reached the level of Valencia in terms of internationalization/commercialization and organizational capacity.
- The Valencia F&V cooperative sector is dominated by the presence of Anecoop, which integrates a large proportion of the first-tier cooperatives of Valencia. The creation of Anecoop was a strategic response of the first-tier cooperatives to meet the progressive concentration of demand and also to face the challenges of internationalization, without their members losing their territorial connections. In Valencia cooperatives are

“cooperatives of the villages” and this is an important cultural consideration. As mentioned above, Valencia had a rich agricultural history and fertile land, where first-tier cooperatives were already established in a particular territory (whether in citrus, F&V and other fruit). However, notwithstanding the atomization of the first-tier cooperatives, Anecoop was a strong institutional and “benchmark” setting source of innovation. Policies which encouraged second-level cooperatives could be seen to be the impetus for this situation in Valencia. On the contrary, the Almería F&V cooperatives are more individualized. There was an attempt at second-tier cooperative in Almería, but due to poor management it was not successful.

It cannot be said definitively that the differences in first and second-tier cooperatives were due to regulatory or policy measures, given that both regions were subject to the same national cooperative legislation. The regional cooperative legislation brought into force in 1982 by the Autonomous Community of Andalusia and the Community of Valencia brought into force their own legislation in 1985. Valencian legislation did provide specifically for credit sections, although in Almería the presence of a cooperative bank took care of such credit needs.

- Valencian legislation of 2003 was more flexible than that of Andalusia, which has recently brought in new legislation in 2011.
- An important difference has been the role of credit institutions and access to affordable credit by the F&V cooperatives. The Almería F&V sector has been accompanied by Cajamar since its inception—they “grew up” together. While Valencia had credit cooperatives and credit sections, changes brought into force by the Valencian government in 2006 caused the demise of many credit sections due to onerous capital requirements. Due to the SIP (system of institutional protection for banks which required the creation of groups) cooperative banks either had to lead a group or be absorbed into one. Cajamar from Almería, was the first cooperative bank to form such a group and has recently absorbed the Valencian credit cooperatives.
- Above we have noted that in spite of differences, the two areas face similar serious problems.

Analysis of Hypothesis

H [8a] A higher degree of vertical integration of cooperatives in a sector is positively associated with higher producer income.

Almería-This hypothesis is generally supported as cooperatives that compete only on price/kg do not take advantage of value added. This is particularly true given competition from countries such as Morocco, Egypt and other countries with low cost labour and where agricultural technology has been exported.

Valencia-*ibid.*

H [10] Agricultural cooperatives that are successfully involved in selling final, consumer products, have a higher chance of adopting innovative ownership, governance, and capital acquisition methods.

Almería- It appears that the sale of final consumer products has more to do with strategy decisions than innovative or sophisticated ownership, governance and capital acquisition methods.

Valencia- This hypothesis is neither accepted or rejected. It is a strategic option that can be successful but it isn't the only one.

H [15] Agricultural cooperatives which focus primarily on achieving social goals do worse, in terms of economic performance, than cooperatives which focus primarily on achieving economic goals.

Almería-The formulation of the hypothesis was not accepted. Cooperative members and representatives repeatedly stressed that they were running a business and that to the extent the business was successful, social benefits would be had by both members and the society at large. The growth of the cooperative sector, both agricultural and credit as well as the auxiliary businesses, which depend on the success of a strong cooperative sector were considered evidence of economic and therefore social development. Success in integrated and bio control was seen as contributing to environmental “goods”.

Valencia- The formulation of this hypothesis was not accepted. With respect to the objectives of cooperatives, a cooperative is either “social” or it is not a cooperative. The economic objectives are a method by which to obtain social objectives, for which they form part of the mission and values of the cooperative.

H [17] The federated cooperative structure (more than one tiers) is less efficient than the centralized one (one tier structure; farmers are directly members to the cooperative).

Almería- this hypothesis was supported, to the extent to which it can be said that evidence shows that the largest and most successful cooperatives in Almería being first tier (although logically, that would be a faulty conclusion as we have no evidence that second-tier are actually inefficient). The tendency to contractually “bolster” second tier cooperatives to give them the characteristics of first tier cooperatives suggests that this is believed to be the case.

Valencia- Rejected for Valencia, the largest second-tier cooperative is Valencian and its existence has resulted in an improvement for the bargaining power of associated first-tier cooperatives. Anecoop was founded in 1975 and has served as a cooperative leader for other agricultural cooperatives in Spain.

H [18] Agricultural cooperatives which collaborate with other cooperatives or IOFs do better, in terms of economic performance and services provided to their members.

Almería- This hypothesis is supported. Collaborations with other cooperatives, with wholesalers and retailers, as well as with other IOFs is a characteristic of the cluster. In addition, this is also evidenced by virtue of the strong institutional presence of both Coexphal and Cajamar, which institutions facilitate such collaborations.

Valencia-This hypothesis is supported, as evidenced by the numerous collaborations with other cooperatives and IOFs by Anecoop.

Policy Questions

- Should public policies treat different types of cooperatives differently based on their ability to increase/stabilise farmers’ income?

Given the difficulties that the F&V agricultural cooperative sector has in counterbalancing the bargaining power of the large distribution they should be afforded more tools to stabilise prices.

- Should public policies facilitate cooperatives in achieving a balance between economic and social goals and, if yes, in which ways?

Cooperatives should not be “penalised” for carrying out social goals or as a result of their structure being different than IOFs, suffer restrictions. However, given the inequalities in the distribution chain, they should be allowed to use necessary tools to maintain fair prices and thus achieve their main social function, which is to obtain value for their members. If cooperatives do not economically thrive they cannot fulfil their social function.

- Which public support measures (local, regional, national and/or European) have an impact on the development and success/failure of the case cooperatives?

Various issues are addressed above in prior sections in relation to Almería and Valencia. However, main issues are those that are exogenous: the agreement with Morocco, legislation which affects cooperative banks and credit sections, thus making their survival difficult (with the exception of Cajamar), particularly as a source of finance linked to the F&V cooperatives; lack of investment in transport and other infrastructure (particularly in the case of Almería, but also Valencia); CAP and the lack of measures to control falling prices. The failure to sufficiently support alternative energy initiatives also has a negative impact.

6. Conclusions

In our case study we have compared two successful intensive F&V cooperatives areas in Spain: The first is Valencia the historical leader with a second-tier structure and a strong record of internationalization, commercialisation and innovation, with first-tier “atomised”, territorially based cooperatives on fertile farming land organized into large second-tier cooperatives. The second is Almería, a F&V cooperative sector dominated by small to medium first-tier cooperatives, most of which were set up in the late 1970s or 1980s in a poor, isolated and small geographic area with infertile land. Over the space of a few decades Almería’s F&V cooperative sector has almost reached the dimensions (in turnover) of Valencia and has begun to internationalise, enter into collaborations and strategic agreements, etc. Both sectors have currently a very high technical level and a strong R+D+i capability. The supporting cooperative institutional structures and fabric is high. Market share of cooperatives is also high being approximately 50% in each case.

We have done so to identify factors that lead to success. We have also carried out this research to identify whether policy can affect such outcome.

The sectors are not without their problems. While differences exist in terms of structure and strategies, as described above, not to mention history and institutional conditions, both areas share serious common challenges. These problems are at both a local and international level and are rooted in institutional, political and economic factors.

From a legal institutional perspective, in both cases, there are inefficiencies and a lack of harmonization caused by the different levels of legislation. The different levels of legal jurisdiction so not cause significant conflict of laws. Rather, it is a problem due to jurisdiction (whether the cooperative is constituted at a regional level under regional laws or under national law), whereby regional governments prefer to maintain control over and take credit for agricultural law and policy and aid. This situation reinforces regionalism in cooperatives and discourages a national cooperative business perspective.

Major challenges include the grossly unequal bargaining position of the distribution entities, global competition and the lack of adequate measures (CAP) at their disposal to influence prices, or for that matter inputs. This has been exacerbated by the agreement between the EU and Morocco while at the same time further liberalization is being suggested. With respect to CAP, prices of F&V products are not guaranteed by the European Agricultural Guarantee Fund in the same way as continental agricultural products. For example, the use of withdrawal prices provided in CMO is limited because they are lower than in the continental case with regard to the production cost. New agreements between Morocco and Mercosur result in decreasing F&V prices, becoming an important threat. As mentioned before, the use of product withdrawals and amounts raises several issues when marketing of other agricultural products is permitted and yet not subject to the same requirements for food safety, traceability and labour and environmental guarantees. The lower prices of such products are not due to the use of better technology or a higher level of productivity. This results in products of higher quality and safety (in terms of traceability and food safety) being withdrawn, thus promoting inefficiencies and resulting in inequitable treatment for European producers.

While the sector has mastered the production of quality product, food safety and security, traceability and the development of added value products, the ability to capture this value up the supply chain is an outstanding matter. In Almería this is even more so given that it does not have the logistics and investment in infrastructure to reach other European and international markets to the same extent as Valencia (although both are lacking a high speed

rail connection afforded to other areas of the country, resulting in a reliance on highway transport on congested roads).

It is true that in both areas a pending task is the further professionalization of the cooperative sector and the more extended use of advanced technology. Whether a well established cooperative sector such as that of Valencia or a more recent one as Almería, whether first-tier or second-tier, a new generation of sophisticated cooperative managers, who actually understand cooperative business forms and cooperative purpose is imperative. Cooperative representative institutions such as the association of producer organizations, federations and inter-professional groups must also function on a more consolidated and professional level—and they should be given the corresponding power to actually have some affect. The solution to these issues may indeed be a more serious and professional re-commitment to the cooperative business form. The “modernization” of cooperative laws may be a piece of the puzzle—in Almería it is too early to tell, but caution should prevail when relying on legislative fiat as a driver of change—often cooperative laws serve to reflect the demands of the sector.

In our case study we have found that both Almería and Valencia F&V cooperative sectors may be seen from a “neo-endogenous” approach, (a mix of exogenous and endogenous factors wherein local level characteristics and actors must interact with external or global forces). If the role of cooperatives is to harness, guide and leverage the strengths and capacity of local economies in its interaction with other environments, whether in the form of markets or political institutions, then the role of cooperative policy and regulation should serve to support cooperatives in building the tools by which to do so.

In light of this it is may be useful to consider that while there has been an external policy push for mergers, concentration, etc. it appears that empirical evidence suggests that size is not the determining factor in cooperative success. Policies merely advocating “bigger is better” are not so effective—policies that focus more on capacity building and strengthening local actors have proven to be more useful (and this may include growth strategies). In Almería and Valencia we have an analysis of how the agro cluster system mediates between external and internal factors, and the cooperative role therein. Certain factors such as collaboration between cooperatives and IOFs, internationalization, investment in R+D+I, and above all, having a management in place such that cooperatives can leverage the strengths and capacity of their members and local economies in meeting external challenges is more important than policy dictating cooperative structure.

In seeking solutions, one findsthe same conversation that has been carried out by the Spanish agricultural confederation and politicians for the past 20 years. Public policy makers and politicians of all stripes in Spain have constantly recommended that the sector needs to innovate, to increase in size to have more weight in the supply chain, invest more in research and marketing, and above all, have a business vision (most recently, Fernando Marcén, president of the Spanish agricultural confederation). We might observe that cooperatives like Anecoop have been a good example of this and that the cooperatives of Almería have certainly been good “students” of such measures. If so, then we may also ask why it is that there is so much continued difficulty in the sector.

The new minister of agriculture, Miguel Arias Cañete has promised a new plan for cooperative integration, which will attempt to enlist the autonomous communities, to push for the creation and development of marketing structures of a relevant size that are innovative. Along with this is a promise to revise the national cooperative law and the cooperative tax law²⁷.

²⁷ Cooperativas Agroalimentarias (2012, April 2): “Cooperativas Agro-alimentarias y el Ministerio apuestan por la integración cooperativa”. Cooperativas Agroalimentarias. Retrieved April 2, 2012, from http://www.agro-alimentarias.coop/1/1_2_1.php?id=MzY5MA==

But what is often absent from this conversation from the management or organizational perspective is the very basic, indeed fundamental issue of a cooperative business: the ability to exercise some influence or control over the price of product. While gaining sufficient market power would be difficult even with an emphasis on concentration, given the huge dimensions of distributors and supermarkets, a serious obstacle exists at the level of sector organization in inter-professional structures and representatives of producer organisations. According to experts in FAECA, competition law inhibits measures to manage the markets, improve quality and withdraw product in exceptional situations of crises in relation to prices, even when the prices are for a long period below the cost of production.²⁸

In 2011 the Spanish National Competition Commission in its report on the relationship between producers and distributors in the food sector recognized the inherent inequality of bargaining power, and its long term detrimental effects on the sector (Comisión Nacional de la Competencia, 2011).

On such note, this case study closes with the word of the president of the F&V sector of Cooperativas Agroalimentarias (Spanish Confederation), Cirilo Arnandis²⁹:

[The cooperatives] already cannot continue in this situation, because there aren't any resources left. We are providing a great employment value chain, wealth and activity, but who is giving the farmer a fair price for their product [?]. We don't want subsidies, we want a new legislation that impedes abuses. At the end, because of a few cents per kilo we are going to lose a source of wealth from which so many have filled their mouths and now is not defended as it should be (translation from Spanish-Giagnocavo).

²⁸ A memo was passed on to the project meeting in November, 2011 from Coexphal pointing out such issues.

²⁹ Ribera Express (2012): "La federació de Cooperatives Agrícoles reclama medidas para evitar que los agricultores abandonen su actividad". Ribera Express. Retrieves April 2, 2012, from: <http://www.riberaexpress.es/?p=30856>

References

- Abad, V. (1991): Cooperativas cítricas de exportación (1892-1990), Anecoop, Valencia.
- Aguado, C. (2005): "El sector cítrico ante su futuro". En: Jornada Reflexiones sobre la citricultura de la Comunidad Valenciana, IGP "Cítricos Valencianos", Puçol.
- Álvarez, J. (1984): "Las Agrupaciones de Productores Agrarios Hortofrutícolas", *Revista de Estudios Agrosociales*, nº 127, pp. 63-97.
- Aznar Sánchez, J.A. (2005): "Dinamicidad demográfica, estructura de la población y movimientos migratorios" in *La economía de la provincia de Almería*, Caja Rural Intermediterránea (eds.). Instituto de Estudios de Cajamar, Almería pp. 123-150.
- Aznar Sánchez, J.A. (2010): "El Cluster Agroindustrial de la Horticultura Intensiva de Almería: Surgimiento, Dinámica Y Perspectivas" in Cuadernos de Estudios Agroalimentarios v.2 2011, Fundación Cajamar, Almería.
- Aznar-Sánchez, J.A. and A. Sánchez-Picón (2010): "Innovación y distrito en torno a un 'milagro': la configuración del sistema productivo local de la agricultura intensiva de Almería". *Revista de Historia Industrial* 42 pp. 157-193
- Baamonde, E. (2009): "El cooperativismo agroalimentario". En: El nuevo sistema agroalimentario en una crisis global. Colección Mediterráneo económico, nº 15, pp 229-246.
- Bono, E. (2010): "Naranja y desarrollo. La base agrícola exportadora de la economía del País Valenciano y el modelo de crecimiento hacia afuera". Publicacions de la Universitat de València, València.
- Brusca, J. (2005): "El futuro del citricultor: la rentabilidad". En: Jornada Reflexiones sobre la citricultura de la Comunidad Valenciana, IGP "Cítricos Valencianos", Puçol.
- Caballer, V. (1995): "El asociacionismo y la vertebración del sistema agroalimentario". *Revista Española de Economía Agraria*, nº 173, pp 281.
- Cabrera, et al, (2010): "Análisis de la campaña hortofrutícola de Almería: campaña 2009/2010", Almería, Spain: Fundación Cajamar.
- Campos i Climent, V. (2011): "La crisi de l'agricultura mediterrània a l'Arc Mediterrani Central. Un estudi de les seues causes, propostes de solució i finançament des de l'Economia Social". Thesis presented in the Official Program of Doctorate of Social Economy of IUDESCOOP.
- Campos, V., Apetrei, A. y Chaves, R. (2012): "The use of Delphi Method as a technique for strategic analysis. An empirical study applied to horticultural cooperatives", *Management Decision*, 50 (7).
- Campos, V., Sanchis, J.R. y Fajardo, G. (2006): "Las secciones de crédito de las cooperativas agrarias de la Comunidad Valenciana. Análisis estratégico sobre la situación actual, nuevos retos y estrategias futuras", Edita FECOAV, Valencia.
- Campos, V, Sanchís, J.R and Lassala, C (2012): "Ratio analysis tools used to determine financial strategies. An empirical research on horticultural cooperatives", 2nd Congress International Network of business Administration INBAM, València.

CAPA (2011): "Informe Anual del sector Agrario en la Comunidad Valenciana", Conselleria d'Agricultura, Pesca i Alimentació de la Generalitat Valenciana, València.

CAP (2010): "Estadísticas de la producción ecológica a 31/12/2010" [on line] <http://www.juntadeandalucia.es/agriculturaypesca/portal/export/sites/default/comun/galerias/galeriaDescargas/cap/produccion-ecologica/informacion-operadores/E. ANDALUCIA 2010 definit6.pdf>

CAP (2011a): "Anuario de estadísticas agrarias y pesqueras 2009". [on line] <http://www.juntadeandalucia.es/agriculturaypesca/portal/servicios/estadisticas/estadisticas/agrarias/resumen-anual.html>

CAP (2011b): "Avance de superficies y producciones" [on line] <http://www.juntadeandalucia.es/agriculturaypesca/portal/servicios/estadisticas/estadisticas/agrarias/superficies-y-producciones.html>

Cazorla Sánchez, A. (1999): "Desarrollo sin Reformistas: dictadura y campesinado en el nacimiento de una nueva sociedad en Almería, 1939-1975", Almería: Instituto de Estudios Almerienses.

Cazorla-Sánchez, A. (2010): "Fear and Progress: ordinary lives in Franco's Spain, 1939-1975", Wiley-Blackwell, Chichester, West Sussex, U.K.

Cogeca (2005): "Agricultural Cooperatives in Europe. Main Issues and Trends". <http://www.ccae.es/ficheros/doc/01470.pdf>

Comisión Nacional de la Competencia (2011): "Informe sobre las relaciones entre fabricantes y distribuidores en el sector alimentario".

Cooperativas Agroalimentarias (2010): "Memoria Anual 2010" [on line] <http://www.agro-alimentarias.coop/ficheros/doc/03277.pdf>

Downward, S.R. and R. Taylor (2007): "An assessment of Spain's Programa AGUA and its implications for sustainable water management in the province of Almería, southeast Spain", *Journal Environmental Management*, nº 82(2), pp 277-89.

Encinas, B. et al (2011): "Las cooperativas hortofrutícolas frente a la crisis. La necesaria apuesta por la competitividad. Aspectos económico-financieros". *CIRIEC-España, Revista de economía pública, social y cooperativa*, nº 72, pp 125-156.

EURICSE (European Research Institute on Cooperative and Social Enterprises) Raiffeisen and Cooperazione Trentina (2010), "The European common agricultural policy and the role of enterprise networks". Position Paper obtained from Euricse.

Ferraro-García, J. and Aznar-Sánchez, J.A. (2008): "El Distrito Agroindustrial de Almería: Un caso Atípico" pp. 353-382 in Soler i Marco, V. (coord.) *Los Distritos Industriales*, Mediterráneo Económico, Cajamar Caja Rural, Almería.

Flores Jiménez, F, Ed. (2005): "Historia de la Agroindustrial de Almería", Horto del Poniente, Almería, Spain.

Font de Mora, L. (1998): "Anecoop y Sunkist: dos cooperativas líderes en aproximación", *CIRIEC-España, Revista de Economía Pública, Social y Cooperativa*, nº 30, pp. 35-52.

Fundación Tecnova (2009): "Tecnómetro. Observatorio económica y de innovación de la industria auxiliar de la agricultura". Almería: Fundación Tecnova.

Fuster, J. (1962): "Nosaltres els Valencians". Edicions 62, Barcelona.

Galdeano-Gómez, E. et al (2011): "The Complexity of Theories on Rural Development in Europe: An Analysis of the Paradigmatic Case of Almería (South-east Spain)". *Sociologia Ruralis*, Vol. 51, nº 1, pp. 54-78.

Gallego, J.R. (2008): "Economía social y dinámica innovadora en los sistemas territoriales de producción y de innovación. Especial referencia a los sistemas agroalimentarios", *CIRIEC-España, Revista de Economía Pública, Social y Cooperativa*, nº 60, pp. 7-40.

Gallego, J.R., Garnier, J. y Mercier, D. (2008): "L'articulation entre dynamiques économique, sociale et politique dans la transition des aires d'ancienne industrialisation. Comparaison des cas de Sagunto (Espagne) et La Ciotat (France)", *Économies et Sociétés, Série Développement, croissance et progrès*, nº 44, pp. 773-806.

Gallego Bono, J.R. (2009): "La articulación local-global de sistemas territoriales de producción y de innovación", *Revista de Estudios Regionales*, nº 40, pp. 53-82.

Gallego, J.R. and Lamanthe, A. (2011): "¿Por qué las cooperativas no dominan en los sistemas hortofrutícolas tradicionales? Una comparación entre España y Francia". *CIRIEC-España, Revista de economía pública, social y cooperativa*, nº 72, pp 9-42.

García Álvarez-Coque, J.M. (2007): "La reforma de la OCM de frutas y hortalizas. Evaluación de la propuesta de la Comisión", *Boletín Económico de ICE*, nº 2910, pp. 19-30

García Torrente, R. (2005): "La financiación de la horticultura almeriense" in Flores Jiménez, Francisco Ed., *La Historia de la Agroindustria de Almería*, Horto del Poniente: Almería, Spain.

Generalitat Valenciana (2010): "Informe del sector agrario 2010". [on line] http://www.agricultura.gva.es/web/c/document_library/get_file?uuid=f0128d9b-3de3-43d7-a3f2-5bcdac0cf10d&groupId=16

Giagnocavo, C. et al (2010): "Modern sustainable agriculture, financial innovation and local development". In *Financial cooperative approaches to local development through sustainable innovation*. Euricse - European Research Institute on Cooperative and Social Enterprises and the School on Local Development of the University of Trento, Italy.

Giagnocavo, C. et al (2012, forthcoming): "The case for proactive cooperative banks in local development: innovation, growth, and community building in Almería, Spain" in Goglio, S. and Alexopoulos, Y. Eds., *Financial Cooperatives and Local Development*, (London: Routledge).

Giagnocavo, C. and C. Vargas-Vasserot (2011): "Support for Famers' Cooperatives in Spain".

Gómez López, J.D. (2004): "Las Cooperativas Agrarias de la Comunidad de Valencia Frente al Proceso de Globalización". *Cuadernos de Geografía*, nº 75, pp. 1-16.

Grabher, G. (1993): "The weakness of strong ties. The lock-in of regional development in the Ruhr area". En: Grabher, G. (Ed.), *The Embedded Firm. On the Socio-economics of Industrial Networks*, Routledge, Londres/Nueva York, pp. 255-277.

Juliá, J.F., and Meliá, E. (2003): "Challenges for agricultural cooperatives in the European Union: the case of the Spanish agricultural cooperatives". *International Journal of Cooperative Management*, nº 1, pp 16-23.

Juliá, J.F., and Server, R.J. (1999). "Restos y praxis del cooperativismo agrario en la Unión Europea". *Cuadernos de Desarrollo Rural*, 42:13-33.

Juliá, J.F. And Server, R.(Coords.) (2003): "Agricultura y cooperativismo. UTECO-València, 60 años al servicio de la agricultura". UTECO-València, València.

La Voz de Almería (2010): "Anuario de la Agricultura Almeriense, 2010". Novotécnica, Almería.

MARM (2011): "Cuentas económicas de la agricultura". [on line] <http://www.magrama.gob.es/es/estadistica/temas/estadisticas-agrarias/economia/cuentas-economicas-agricultura/#para2>

Martin, R. and Sunley, P. (2006): "Path Dependence and Regional Economic Evolution", *Journal of Economic Geography*, 6, pp. 395-437

Meliá, E. (2004): "La concentración empresarial en las cooperativas agrarias. Estudio metodológico de los procesos de fusión". Comité Económico y Social de las Comunidad Valenciana.

Meliá, E. and Martinez, A. (2011): "Caracterización y análisis del impacto y los resultados de las fusiones de cooperativas en el sector agroalimentario español". Forthcoming, University of Almería, Cátedra Cajamar

Melián, A., Campos, V. y Sanchis, J.R. (2011): "Análisis de las fusiones entre cajas rurales y su influencia en las cooperativas agrarias. El caso valenciano en España", *Revista Innovar Journal*, 21 (41), pp. 91-109.

Molina-Herrera, J. (2005), "Claves para la interpretación económica de la provincia de Almería in *La Economía de la Provincia de Almería*", Caja Rural Intermediterránea (eds.), Instituto de Estudios de Cajamar, Almería.

Montero, A., and Montero, A. (2005): "El cooperativismo agroalimentario y formas de integración". Ministerio de Agricultura, Pesca y Alimentación, Madrid, 3rd ed.

OSCAE (2005): "Cooperativismo en cifras. Observatorio socioeconómico del cooperativismo agrario español". [on line] <http://www.agro-alimentarias.coop/ficheros/doc/01867.pdf>

OSCAE (2007): "Cooperativismo en cifras. Observatorio socioeconómico del cooperativismo agrario español". [on line] <http://www.agro-alimentarias.coop/ficheros/doc/02462.pdf>

OSCAE (2009): "Confederación de cooperativas agrarias de España. Cooperativismo en cifras. Observatorio socioeconómico del cooperativismo agrario español". [on line] <http://www.agro-alimentarias.coop/>

OSCAE (2011): "Confederación de cooperativas agrarias de España. Cooperativismo en cifras. Observatorio socioeconómico del cooperativismo agrario español". [on line] <http://www.agro-alimentarias.coop/ficheros/doc/03580.pdf>

Parra Gómez, S. and Cabrera Sánchez, A. (2011): “Análisis de los Programas Operativos de las OPFH en la provincia de Almería (1999-2008)”. Informes y Monografías. Fundación Cajamar, Almería.

Sánchez-Picon, A. (2005): “De frontera a milagro. La conformación histórica de la economía almeriense” in *La Economía de la Provincia de Almería*, Molina-Herrera, J.(coord.) (2005), Caja Rural Intermediterránea, Instituto de Estudios de Cajamar, Almería.

Sanchís, J.R. y Campos, V. (2007): “La Dirección Estratégica en la Economía Social: utilización de herramientas de análisis estratégico en las Cooperativas”, CIRIEC-España, Revista de Economía Pública, Social y Cooperativa, 59, pp. 237-258.

Uclés, D. and Teruel, M. (2011): “Competitividad y tamaño en la industria de alimentación y bebidas”. Fundación Cajamar.

Vargas, A. (2007): “Las sociedades cooperativas como empresas excelentes”. XV Conferencia Regional Cohesión e Inclusión Social.

VIDAL F., SEGURA B., DEL CAMPO F.J., (2000): “Eficiencia económica de las cooperativas de comercialización hortofrutícola de la Comunidad Valenciana”. *Revista de Estudios Agrosociales y Pesqueros*, nº 188, 205-224.

Vidal, F., Del Campo, F., and Segura, B. (2000): “Caracterización empresarial del cooperativismo de comercialización hortofrutícola de la Comunidad Valenciana: un análisis provincial”. *Revista CIRIEC-España. Revista de economía pública, social y cooperativa*, nº34, pp 71-94.

Appendix 1- Hypotheses and Dependent and Independent Variables

| Hypo-thesis # | Hypothesis Description | Measure dependent variable | Measure independent variable |
|---------------|---|---|---|
| 8a | A higher degree of vertical integration of cooperatives in a sector is positively associated with higher producer income. | Producer income | Degree of vertical integration |
| 10 | Agricultural cooperatives that are successfully involved in selling final, consumer products, have a higher chance of adopting innovative ownership, governance, and capital acquisition methods. | # innovative ownership, governance, and capital acquisition methods | # successfully selling final, consumer products |
| 15 | Agricultural cooperatives which focus primarily on achieving social goals do worse, in terms of economic performance, than cooperatives which focus primarily on achieving economic goals. | Market share | # focus on social goals |
| 17 | The federated cooperative structure (more than one tiers) is less efficient than the centralized one (one tier structure; farmers are directly members to the cooperative). | Market share | # centralisation |
| 18 | Agricultural cooperatives which collaborate with other cooperatives or IOFs do better, in terms of economic performance and services provided to their members. | Market share; # member services provided | # collaboration with other cooperatives or IOFs |

Appendix 2 – Ratios

| Types of ratios | Ratios |
|------------------|--|
| Financial ratios | 1. Liquidity $L = (CA - Inventories) / CL$ 2. Solvency $S = TA / (CL + NCL)$ 3. Indebtedness $D = (CL + NCL) / TL$ 4. Debt Structure $DS = CL / (CL + NCL)$ |
| Economic ratios | 5. Sales Margin $SM = EBIT / Sales$ 6. Asset Turnover $AT = Sales / TA$ 7. Efficiency $E = Operating Expenses / EBIT$ |
| Mixed ratios | 8. Economic Profitability $ROA = EBIT / TA$ 9. Financial Profitability $ROE = EBT / Equity$ |

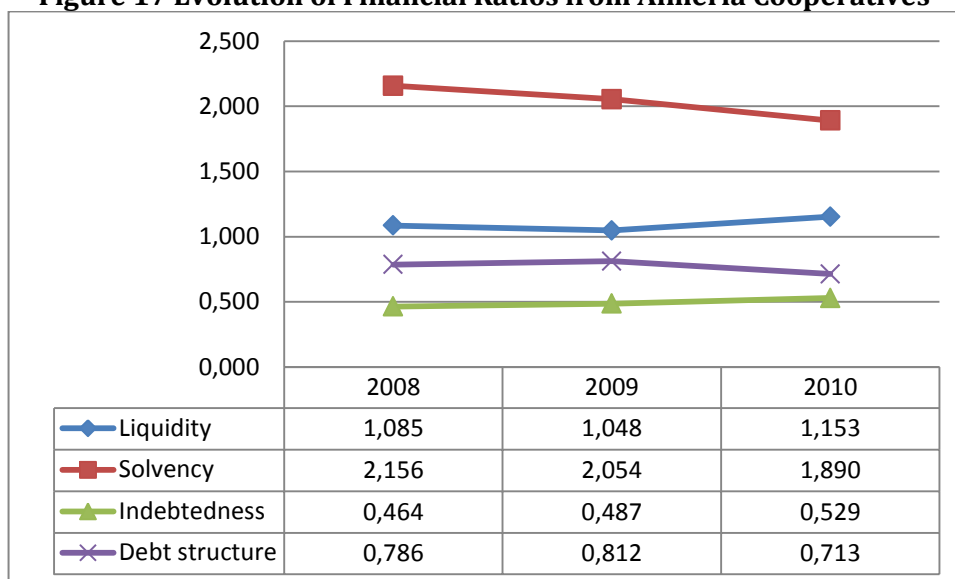
Source: Campos i Climent, V. (2011)

Figure 16 Evolution of financial ratios for Valencian F&V Cooperatives



Source: Campos i Climent, V. (2011)

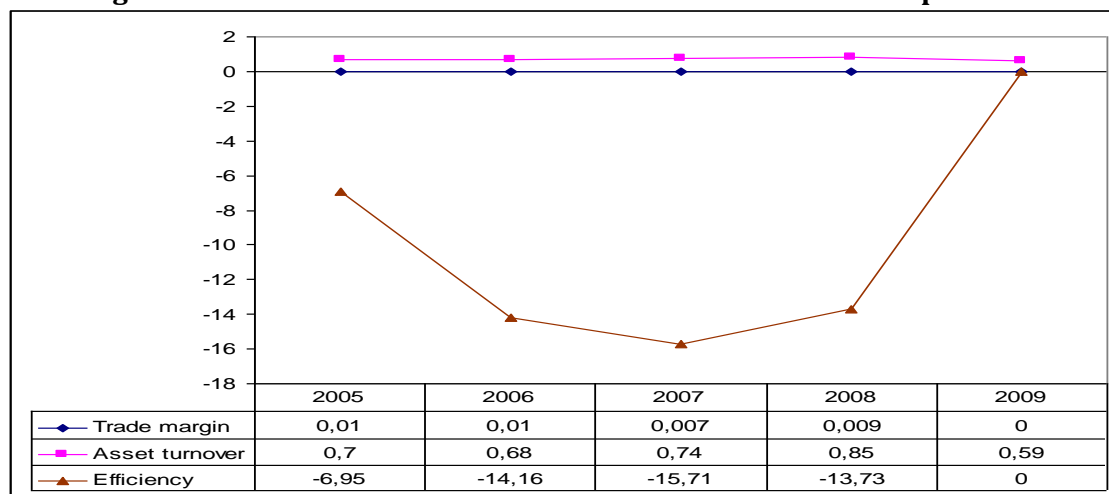
Figure 17 Evolution of Financial Ratios from Almeria Cooperatives*



Source: elaboration by Giagnocavo and Gerez from selected cooperative accounts

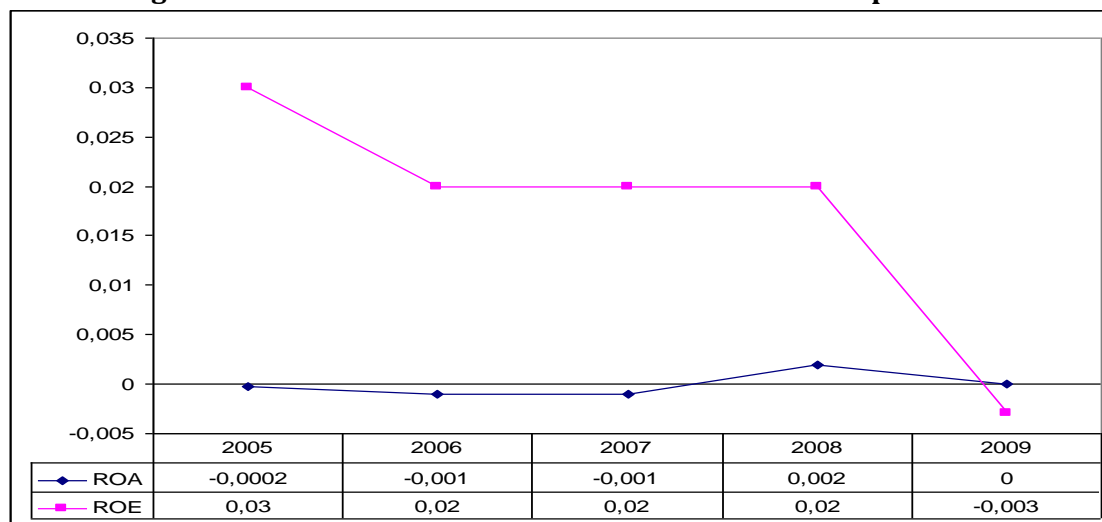
*Sample of 13 cooperatives of Almería, including the some of the largest one.

Figure 18 Evolution of economical ratio for F&V Valencian cooperatives



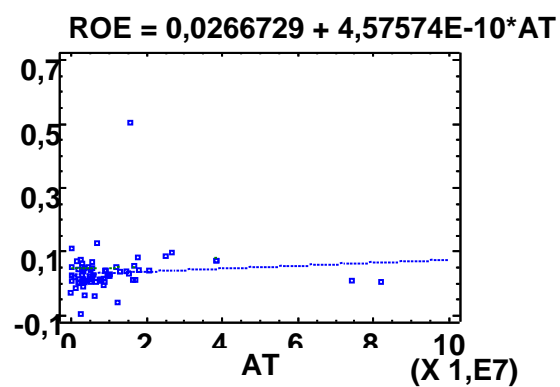
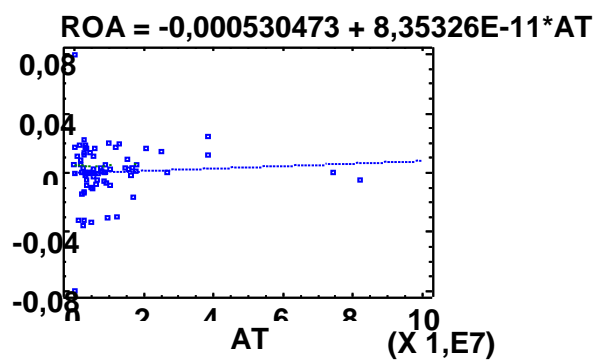
Source: Campos i Climent, V. (2011)

Figure 19 mixed ratios evolution for Valencian F&V Cooperatives.



Source: Campos i Climent, V. (2011)

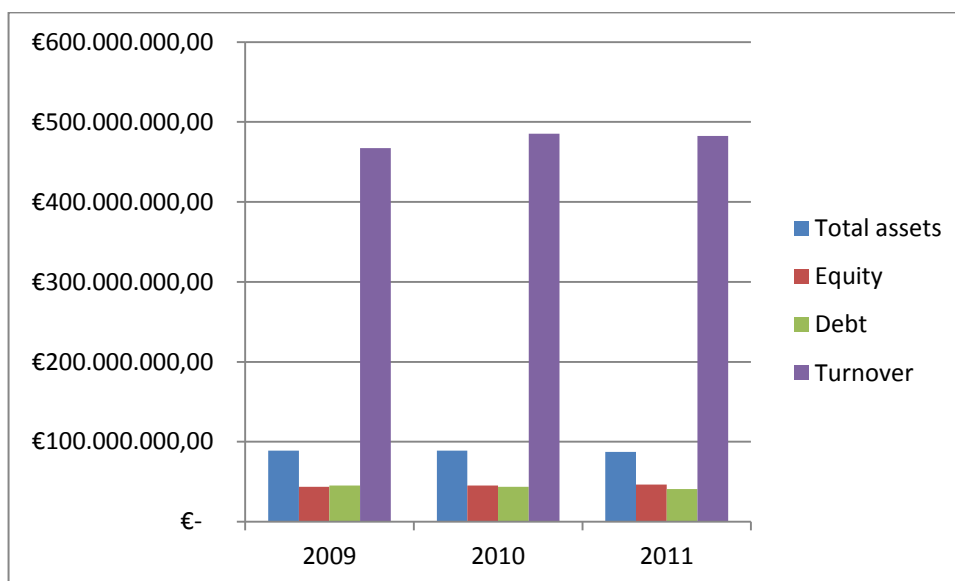
Graphic 20: Scatter plot, linear regression.



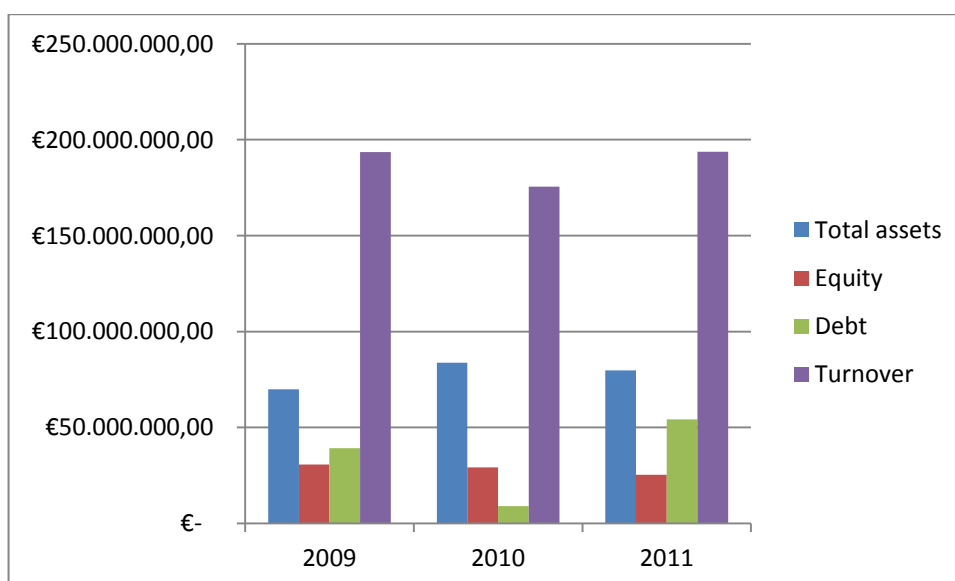
Source: Campos i Climent, V. (2011)

Appendix 3 – Main data from selected cooperatives

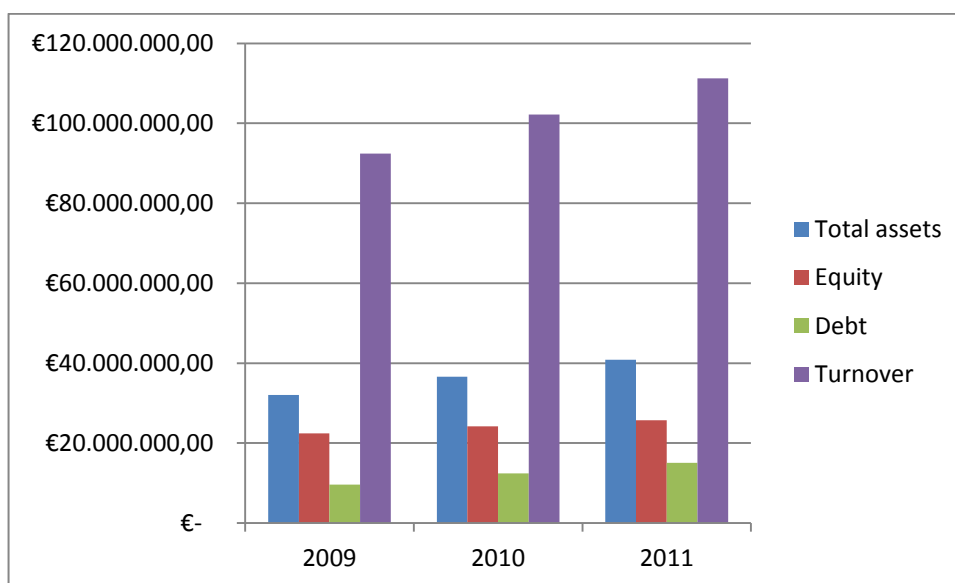
Anecoop



CASI



Vicasol



Appendix 4 Policy Measures Relevant to Almeria and Valencia Agricultural Cooperatives

| Policy Measure Name | Policy Measure Type | Regulatory Objective | Policy target | Expert comment on effects on development of the cooperative |
|---|---|---|--|--|
| LAW 14/2011, of December 23, Andalusian Cooperative Societies. | 1. Mandate. Cooperative legislation | 2. Attainment of equity or social goals | 1. Specific to cooperatives | -Applicable to cooperative societies which carry out their principle cooperative activity in Andalusia . -the objective of this new law is to allow for greater competitiveness for cooperatives and to provide legal and economic-financing instruments which will be at the disposition of the cooperatives that are compatible with the nature of the cooperative movement. - Elimination of numerous bureaucratic hurdles -The law allows more freedom for the cooperatives to craft their own bylaws - There is a new figure of capitalist member or investor. - Voluntary establishment of plural votes. - Free assignment of capital contributions to third persons. - Greater liberty in the distribution of benefits. - Reduction of the limitations of dealings with third parties and the strengthening of mergers through the simplification of procedures. |
| Community of Valencia Cooperatives Law 8/2003, 24 March | 1. Mandate. Cooperative legislation | 2. Attainment of equity or social goals | 1. Specific to cooperatives | -Applicable to cooperatives that carry out their principle cooperative activity in the Community of Valencia . -Art. 87 is dedicated to agricultural cooperatives and art. 88 to cooperatives for the exploitation of common lands , setting out the objective of such cooperatives, their activities, voting, related activities, special content of statutes and bylaws, etc. |
| Royal Decree 1776/1981, 3 August, approval of the Statute that regulates the Agrarian Societies of Transformation (SATs) | 1. Mandate. Cooperative legislation | 2. Attainment of equity or social goals | 1. Specific to cooperatives (SAT, similar to cooperatives) | National -This regulation provides for the Statute of the Agrarian Societies of Transformation (SATs) , that is, it establishes, independently of other dispositions which may apply to such entities, provisions defining their character and their functioning, the regulation of the rights of members and the participation of the same in the agrarian common company. This norm sets out basic characteristics which must be fulfilled, the rules applicable to members, necessary documentation, organisational bodies, dissolution, liquidation and cancellation of the SAT. |
| Order of 14 September, 1982 which develops Royal Decree 1776/1981, of the 3 of August, approving the Statute which regulates the Agrarian Societies of Transformation (SATs) | 1. Mandate. Cooperative legislation | 2. Attainment of equity or social goals | 1. Specific to cooperatives (SAT, similar to cooperatives) | -Establishment of the requirements for the constitution and registry inscription of SATs |

| | | | | |
|---|--|---|---|--|
| Sustainable Development of the Rural Environment Law 45/2007, 13 December | 2. Inducements Economic incentives 3. Capacity Building | 2. Attainment of equity or social goals | 3. Applicable to business in general (specific to agricultural) | -This law sets out actions to promote agriculture which is compatible with sustainable rural development, giving preferential treatment to agricultural professionals and priority to titleholders of farm lands. In addition, it promotes the adoption of measures by Public Administrations focused on economic diversification, support for the creation of businesses, self employment and cooperative employment. -Prioritises activities carried out by associative entities. |
| Law 38/1994, 30 December, regulating Agricultural Interprofessional Organisations | 1. Mandate. Incorporation law | 2. Attainment of equity or social goals | 3. Applicable to business in general (specific to agricultural) | -Applicable to the agricultural inter-professional organisations at the national level or a level superior to that of an autonomous community. The object of the law is to regulate the recognition of such entities and bestow a private legal identity and the powers that is inherent in such status, such as the agreements into which they enter. |
| Royal Decree 705/1997, 16 May, approving Regulation of Law 38/1994 of 30 December, regulating Agro Alimentary Inter-professional Organisations, as modified by Law 13/1996, 30 December, of tax, administrative and social order measures. | 1. Mandate. Legislation | 2. Attainment of equity or social goals | 3. Applicable to business in general (specific to agricultural) | -This Regulation advances significantly Law 28/1994 of 30 December, regulating Interprofessional Organisations. |
| Order TAS (Minister of Employment and Social Affairs) /3501/2005, 7 November, to establish the regulatory bases for the concession of subsidies for the promotion of employment and the improvement of competitiveness in cooperatives and labour societies | 3. Capacity Building 2. Inducement. Financial incentives (subsidy). | 2. Attainment of equity or social goals | 1. Specific to cooperatives | -This norm establishes the regulatory bases for the concession of subsidies directed to promote the incorporation, on a permanent basis, of unemployed workers or temporary cooperative employees, as cooperative or worker cooperative members. Subsidies are also provided for investment which contributes to the creation, consolidation or improvement of competitiveness of cooperatives or worker societies, etc. However, the Order is not applicable to companies within the transport sector or to the development of activities related to the production, primary transformation or commercialization of the majority of products which are included in Annex I of the Treaty to Constitute the European Community (amongst others, meat, fish, milk and milk products, legumes, edible fruits, cereals, sugar beet, etc.) or exportation activities. |
| Royal Decree 395/2007, 23 March, regulating subsystems for | 3. Capacity Building | 2. Attainment of equity or social goals | 3. Applicable to business in general | -Objective is to regulate the distinct training initiatives that make up professional employment training, its system of operating and financing as well as organisational structure and participating institutions. |

| | | | | |
|---|---|---|---|--|
| professional training for employment. | | | | |
| Royal Decree 1972/2008, 28 November, re: recognition of organisations of producers of fruits and vegetables | 1. Mandate. Incorporation law | 1. Correction of market or regulatory failures 2. Attainment of equity or social goals | 2. Specific to an agricultural subsector | -Establishes the basic rules for the recognition of organisations of fruit and vegetable producers and associations of organisations of producers. -To guarantee the correct execution of the activities of such organisations in terms of duration and efficiency of concentration of offer, the decree establishes categories of products among which the organisations must choose in order to be recognized. It also regulates: assignment of votes, terms upon which its members, subsidiaries or external services can provide the necessary measures to carry out their functions, concretize the procedure and the conditions which are necessary for such recognitions, the activities which can be carried out by such associations, etc. -An organisation of producers must be, in any case, an associative entity constituted on the initiative of the producers. |
| Resolution 27 March, 2009, of the General Directorate of Industry and Alimentary Markets, providing for the publication of the Agreement of the Council of Ministers, establishing measures to promote innovation in agrarian and agro alimentary businesses. | 3. Capacity Building | 1. Correction of market or regulatory failures 2. Attainment of equity or social goals | 3. Applicable to business in general (specific to agricultural) | -The agreement establishes measures to promote innovation in agrarian and agro alimentary businesses through interest incentives of the credit lines of the National Institute of Official Credit known as "ICO" such as ICO-PYME 2009-for small and medium enterprises, ICO-Crecimiento Empresarial 2009-for business growth, ICO-Emprendedores 2009-for entrepreneurs and ICO-Internacionalización 2009 del Instituto de Crédito Oficial-for internationalization, ICO-Liquidez (Liquidity) 2011, and others. |
| Royal Decree 1302/2009, 31 July, re: funds and operating programmes of fruit and vegetable producer organisations. | 2. Inducement. Financial incentives | 1. Correction of market or regulatory failures 2. Attainment of equity or social goals | 2. Specific to an agricultural subsector | -Establishes the basic norm in relation to the funds and operative programs in development of Council Regulation (EC) n. 1234/2007 - Agricultural Common Market Organisation (CMO) and it establishes specific dispositions for certain agricultural products (Single CMO Regulation) and the Regulation (EC) no. 1580/2007 of the Commission in which they establish the disposition of the application of Council Regulations (EC) n. 2200/1996, (EC) 2201/1996 and (CE) no. 1182/2007, in the sector of fruits and vegetables. |
| Royal Decree 1300/2009, 31 July, of urgent measures of employment for autonomous workers and cooperatives and labour | 3. Capacity Building 2. Inducement. Economic incentives | 1. Correction of market or regulatory failures 2. Attainment of equity or social goals | 1. Specific to cooperatives (and others enterprises). | -Measure to encourage employment for autonomous workers, cooperatives and worker societies , improving certain conditions of access and payment of unemployment benefits with a single payment during the period in which the Royal Decree is in vigour. The 24 month time limit of the prior norm applicable to salaried workers was allowed to be exceeded so that such measure would foster employment. |

| | | | | |
|--|---|--|---|---|
| societies (measures applicable until 31 December 2010) | | | | |
| Royal Decree 457/2010, of 16 of April, regulating the concession of subsidies for the renewal of the national industrial area of agricultural machinery. | 2. Inducement. Financial and other incentives 3. Capacity Building | 2. Attainment of equity or social goals | 3. Applicable to business in general (specific to agricultural) | -Objective to promote the renewal of a national industrial area of tractors and agricultural machines to improve work conditions, achieve better energy efficiency and have a lower environmental impact . Amongst other who can be beneficiaries: agricultural cooperatives, CUMAs, agricultural worker cooperatives and SATs |
| Resolution of 19 April, 2011, of the Secretary of State of Rural and Water Environments providing for the publication for 2011 the convocation of aid destined to promote the integration of cooperatives at the state level | 2. Inducement. Economic incentives | 1. Correction of market or regulatory failures 2. Attainment of equity or social goals | 1. Specific to cooperatives | -Establishes the convocation of competitions for subsidies for 2011 in relation to the promotion of cooperative integration at the state level , provided for in Order APA/180/2008. Amongst the evaluation criteria for awarding the subsidy: the fusion of two or more entities, having as a principle objective innovation in production processes, have as a principle objective innovation in commercialization processes, fostering the participation of women, being a cooperative society of worker association with agrarian activity, being a second-tier cooperative, etc. |
| Plan of Initiation for Foreign Marketing (PIPE) | 2. Inducement. Financial and other incentives 3. Capacity Building | 2. Attainment of equity or social goals | 3. Applicable to Business in general | -The Plan for the Initiation of Foreign Marketing (PIPE) is the first program on a national level aimed especially at Spanish SMEs that seek commercial development through exports . |
| Financing Program for Social Economy businesses (ENISA-National Innovation Company) | 2. Inducement. Financial and other incentives | 2. Attainment of equity or social goals | 1. Specific to cooperatives (and other social economic enterprises) | - Beneficiaries of this financing can include cooperatives and labour societies which are SMEs according to EU definitions. The financing assumes a participative loan (period of amortizations of 9 years, interest rate in function of the results of the beneficiary with a minimum and maximum, without guarantees, etc. |
| ICEX-ICO Agreement-Financial Support for exporters through the (official state line of credit) ICO-LIQUIDEZ 2011 | 2. Inducement. Financial and other incentives 3. Capacity Building | 1. Correction of market or regulatory failures. 2. Attainment of equity or social goals | 3. Applicable to Business in general | -ICEX has entered into a collaboration agreement with ICO, the official state credit institute, creating a section of Financial Support for the Exporting sector through the line of credit "ICO-LIQUIDEZ 2011". |

| | | | | |
|---|--|---|---|--|
| Payment Insurance in the framework of the Initiation Plan for Foreign Promotion (PIPE)(see above) | 2. Inducement. Financial and other incentives | 2. Attainment of equity or social goals | 3. Applicable to Business in general | - Insurance policy for export credit designed especially for SMEs belonging to the PIPE club that are attempting to consolidate their activities in the exterior. |
| Order of 30 January 2008, regulating the measures of support for the realisation of preliminary studies for integration of and cooperation between agro alimentary businesses with the goal of concentration of offer, within the framework of the Rural Development Plan of Andalusia 2007 to 2013, and the provision for convocations for the year 2008 (Andalusia) | 3. Capacity Building 2. Inducement. Financial and other incentives | 2. Attainment of equity or social goals | 3. Applicable to business in general (specific to agricultural) | -This program is available for the realisation of preliminary viability studies for the creation and development of commercial structures that integrate existing companies through mergers or cooperation in relation to investment projects for the modernisation, amplification, transfer, equipping and/or reforming of existing commercial establishment to accommodate the new commercial structure. -Micro-businesses and agro alimentary SMEs of Andalusia which demonstrate their intention to constitute a commercial structure of cooperation or integration amongst themselves to achieve the same end may be eligible applicants under the program. |
| Order 9 December 2008, establishing the regulatory bases for a Program of Incentives for the Promotion of Innovation and Business Development in Andalusia and the holding of a convocation for the same for the years 2008-2013 | 3. Capacity Building 2. Inducement. Economic incentives | 2. Attainment of equity or social goals | 3. Applicable to business in general | - Promotion of innovation and business development , in particular in the creation of businesses and their modernisation, the competitiveness of cooperatives, research and development and business innovation. |
| Decree 335/2009, 22 September, regulating the | 3. Capacity Building | 2. Attainment of equity or social goals | 3. Applicable to business in general | -Objective is the regulation of Professional Training for Employment in Andalusia and its functioning and financing. |

| | | | | |
|---|---|---|---|---|
| Ordering of Professional Training for Employment in Andalusia. | | | | |
| Order of 9 June 2009, for the establishment of the regulatory bases for the concession of aid for the primary integration of agrarian associative entities into Andalusian agricultural cooperatives of a higher level, and the providing for related convocations for 2009 (Andalusia) | 3. Capacity Building 2. Inducement. Financial and other incentives | 2. Attainment of equity or social goals | 1. Specific to cooperatives | -This Order establishes the regulatory bases to concede aid for the primary integration of agricultural associative entities in already consolidated superior level Andalusian agricultural cooperative societies : Provided that commercialization of the products which are subject to such integration are amongst its activities. The legal forms of potential beneficiaries are: a) Andalusian agricultural cooperative society b) SATs with its legal place of businesses in Andalusia (which meet certain conditions). -The expenses of the agricultural associative entity for the participation in the social capital of the existing second or higher level cooperative may be subsidized. The maximum quantity of such aid is limited to 100,000 Euros per beneficiary entity. |
| Order 12 June, 2009, establishing the regulatory bases for the concession of aid for the fusion of agricultural cooperatives and the constitution of second-tier (or higher) agricultural cooperatives, and providing for related convocations for 2009 (Andalusia) | 2. Inducement. Financial and other incentives 3. Capacity Building | 2. Attainment of equity or social goals | 1. Specific to cooperatives | -This Order establishes the regulatory bases to concede aid in the creation of entities which are a result of merger projects of agrarian cooperatives and the constitution of second-tier or higher agrarian cooperatives . The legal form of the possible beneficiaries must be: a) Andalusian agrarian cooperative society, b) second-tier Andalusian agrarian cooperative society, c) SATs with its legal place of business in Andalusia (which meet certain conditions), d) cooperative societies and SATs with industrial establishments inscribed (registered) in Andalusia . -The following may be subsidized: pre-merger expenses assumed by the entities that merged; pre-constitution expenses of a second-tier cooperative assumed by the entities that participated in its constitution; etc. -The maximum quantity of such aid is 20,000 Euros divided between the number of businesses that participated in each merger process or constitution. |
| Order 29, June 2009, for the establishment of the regulatory bases for a program of support for innovation and the development of the social economy, and the provisions for related | 3. Capacity Building 2. Inducement. Financial and other incentives | 2. Attainment of equity or social goals | 1. Specific to cooperatives (and other social economic enterprises) | -Provision of measures directed at encouraging the development of an innovative, competitive, entrepreneurial social economy in the framework of the Andalusian productive social/cultural fabric and in its own economic and social principles and values . -The following entities which comply with the relevant conditions may be beneficiaries: Confederations of the Social Economy and Federation of the Social Economy, Foundations, Cooperative Societies and Worker Societies. The possible lines are: diffusion, promotion and innovation in the social economy, professional development and development of associationism. |

| | | | | |
|--|---|---|---|---|
| convocations for 2009 until 2013 (Andalusia) | | | | |
| Order 31 July 2009, establishing the regulatory basis for the concession of subsidies for the modernization of agrarian exploitations in the framework of the Program for Rural Development of Andalusia 2007-2013. | 3. Capacity Building 2. Inducement. Economic incentives | 1. Correction of market or regulatory failures 2. Attainment of equity or social goals | 3. Applicable to business in general (specific to agricultural) | -The object of this aid is to establish non-refundable incentives for the modernization of agricultural exploitations which are owned, amongst others, by cooperatives or by SATs. |
| Order 20 April 2010, establishing the regulatory bases for the concession of aid to support the increase of size and dimension of agro industrial cooperatives, to promote business cooperation, integration, mergers and strategic alliances and fostering the constitution of second and higher level associative entities (Andalusia) | 3. Capacity Building 2. Inducement. Economic incentives | 2. Attainment of equity or social goals | 1. Specific to cooperatives (and other social economic enterprises) | -The object of this aid is the promotion of integration activities of cooperatives of the agro industrial sector, especially directed at promoting concentration projects through the constitution and consolidation of second or higher level cooperatives. |
| Order 26 July 2010, establishing the regulatory bases for the concession of subsidies for the transformation and commercialization of agricultural products in the framework of the Program for | 3. Capacity Building 2. Inducement. Economic incentives | 2. Attainment of equity or social goals | 3. Applicable to business in general (specific to agricultural) | -Agricultural companies dedicated to the transformation and commercialisation of agricultural products for investments directed at increasing added value of products and acquiring innovative and environmentally friendly technologies. |

| | | | | |
|--|---|---|--------------------------------------|--|
| Rural Development of Andalusia 2007-2012 and the convocation of the same for 2010 | | | | |
| Program of the Andalusian Agency for Foreign Promotion (EXTENDA – Regional Government of Andalusia) | 3. Capacity Building | 2. Attainment of equity or social goals | 3. Applicable to business in general | -EXTENDA offers an wide range of programs and services with the objective of increasing the number of Andalusian companies in the process of internationalisation , improving the international position of Andalusian companies that are already active in such process and increasing the foreign Andalusian investment |
| Program of Support for Almeria Exporting Companies (Chamber of Commerce) | 3. Capacity Building | 2. Attainment of equity or social goals | 3. Applicable to business in general | -The objective of this program is the support for companies in their internationalisation processes , in which institution such as the Chamber of Commerce, puts at the disposition of the cooperative their infrastructure and knowledge through an advisory process. |
| Order 9/2011, 3 of March of the local Ministry of Industry, Commerce and Innovation, regulating subsidies in the areas of internationalisation and promotion in 2011, Community of Valencia. | 3. Capacity Building 2. Inducement. Financial and other incentives | 2. Attainment of equity or social goals | 3. Applicable to Business in general | -Objective of this Order is the establishment of system for the concession of subsidies with the purpose of supporting the internationalization of businesses and the promotion of products from the Community of Valencia . As well, it contributes to promotional activities that aid growth and the consolidation of presence in international markets. -Beneficiaries may be business associations, and Regulatory boards related to certification of origin, both related to the Community of Valencia and consortiums, promotion groups and SMEs with legal personality located in the Community of Valencia. |
| Order 14, April, 2009, of the Agricultural local ministry of Agriculture, Fishing and Alimentation, approving the Regulatory bases for aid for Valencia agricultural cooperatives | 3. Capacity Building 2. Inducement. Financial and other incentives | 2. Attainment of equity or social goals | 1. Specific to cooperatives | -The object of this Order is to approve the basis upon which the concession of aid to agrarian cooperation is regulated and the convocation for 2009 for the same. Beneficiaries may be: a) agrarian cooperatives and businesses of other types in which cooperatives have a majority interest, always subject to the condition that the activity maintained is in connected to rural development related to the agrarian and alimentary sector ; b) the representative organisations of agrarian cooperation. In addition, the beneficiaries must have their business domicile in the autonomous community of Valencia . -Auxiliary activities are those which fall within the following measures: a) modernisation of business management, b) constitution of new cooperatives and diversification of activities in existing cooperatives c) cooperative integration and d) business growth and capitalisation. (Through Resolution 27 December 2010, the local ministry of Agriculture, Fishing and Alimentation, held convocation for 2011). |

| | | | | |
|---|------------------------------------|---|--|---|
| Royal Decree 1337/2011, of October 3 regulating funds and operating programs for OPFH | 2. Inducement. Economic incentives | 1. Correction of market or regulatory failures 2. Attainment of equity or social goals | 2. Specific to an agricultural subsector | Establishes the Spanish norm in relation to funds and operating programs for POs re: Commission (EC) Reg.1234/2007 of Oct.22 creating an OCM, and establishing provisions for specific agricultural products; and also executing Commission Regulation (EU) 543/2011 of June 7 establishing the application of Council Regulation (EC) 1234/2007 in the transformation of products in the fruit and vegetable sector. |
|---|------------------------------------|---|--|---|