

# FEASIBILITY AND COMPETITIVENESS OF THE VALENCIAN CITRICULTURE SYSTEM

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## 1. INTRODUCTION

The intensive irrigation agriculture of Mediterranean coastline plains faces several changing processes whose impact and degree of visibility has substantially increased for the last past years. Changes affect not only to the extension and territorial location of the farming activity, but they have, as well, influenced the social and cultural systems of wide areas over these regions. On the origin of most of these transformations is the increasing attractive the territory offers for other uses as tourism, new residential uses, or development of infrastructures, services and equipments associated with the increasing population pressure.

A good example of those changes is the citriculture system of the land of Valencia, indisputable economic growth driver for much of the twentieth century. It was the activity that made possible enough capital accumulation to stimulate the process of industrial development and social modernization in many regions. Persistent good prices in the international market and the absence of competitors provided important benefits and financial capacity to a wide range of farmers (Tomás Carpi 1977, Piqueras 1999, Salom y Albertos 2001, Romero et al 2001).

Nevertheless, since the end of the eighties, some problems have appeared, while some previous ones have intensified. This has lead to a situation on which the perception of crisis is generalised. The main problems that confront the Valencian citriculture system can be summarised as followed:

- **An endemic smallholding system.** The medium size of farms is less than a hectare. The problem increases due to the high fragmentation, with an average of four plots of land per farm. The combination of both factors causes huge difficulties for mechanization, and as a consequence, a strong reduction on the efficiency in the production process and farm profitability.

- **Prices crisis.** Although the stagnation of the citrus' prices is dragged out since, at least, one decade ago, in the present juncture it constitutes a primary factor in the explanation of the transformations that are being operated in the sector. The price per 'arroba' (Spanish unit of weight of around 25 pounds, varying according to the region) that the farmer receives remains practically constant for 40 years while all fix costs that the farmer has to face up have been growing according to the labour cost evolution and the associated sectors' prices (pesticides, fertilizers, genetic improvements, harvest, etc.)
- **Inflexibility and distorted elements in the land market,** which implies big difficulties to rationalize the property structure and increase the average size of farms. Cultural reasons are underlined in the discussion, as the desire of elderly farmers to maintain the ownership of the land, even beyond retirement, but the recent profitability expectancies derived from fast increases of land prices associated with land uses changes (mainly because of the new residential development), are not negligible. The price of a 'fanegada' (Spanish unit measure which is equal to 813 square meters) of oranges in full production is calculated between 3,000 and 6,000 . These prices can be increased, in a short period of time, by 10 to 15 times more, in view of the urbanization expectancy.
- **A structural water shortage.** The annual average rainfall is settling between 450 and 600 mm in most part of the territory. These values decrease on the South of the mountain ranges of *La Marina* in Alicante, and they only register higher values on the orographic basin of La Safor- Marina Alta, in the boundary between Valencia and Alicante. In spite of the important efforts on the rationalization of the irrigation system, agriculture consumes most of the available water resources.

The main consequence of the combined action of these processes is the incipient substitution of an agrarian system based on a traditional family model, to other constituted by a fewer number of big professional farms. The failure, at least partially, of the Cooperatives model, together with the land maintenance as a secure investment value for big capitals, together with the continuous expectancies of transformations from rural to urban land, are the main factors in the basis of this transformation process. Their consequences, some of them predictable ones, other evident, are summarised as: the effective set aside in terms of production in many small farms (mainly in places where urbanization transformation is expected), a significant reduction in the number of farmers, the professionalization of rural workers, the re-assemblage of a land percentage in a smaller number of farms (some of them very technical, professional and competitive) and the dissolution of the specific culture associated with the traditional citriculture system.

Throughout the next pages we undertake an analysis and explanation of these processes. To commit it we use available data and the result of nine in depth interviews performed with key actors of the citric sector: five farmers with different characteristics, two representatives of the main agricultural unions of the region (COAG and AVA-ASAJA), one agent of the Agriculture Department of the Regional government and one academic expert.

The results shown here have been obtained through the participation of the author in the project *Study on Employment in Rural Areas Demographic and Employment Trends – In*

*Particular for Young People and Women - and Typologies of Rural Areas*, carried out in the frame of a contract with the General Directorate of the European Union (AGRI/2004/F3/1).

## **2. THE STATE OF THE ART: DIAGNOSIS OF THE VALENCIAN CITRICULTURE SYSTEM; A MEDITERRANEAN AGRICULTURE IN CRISIS**

The Valencian agriculture is based on irrigation, especially citrus, that represents almost 60% of the irrigated land area<sup>1</sup>. Geographically, it is concentrated in the coastal lowlands and river valley due to the necessary bioclimatic conditions for its development. Citriculture alone represents 29% (180,668 hectares)<sup>2</sup> of total cultivated land. In 2002, citriculture got the equivalent incomes of 67% of the VAB from the regional agrarian sector (1,123.66 million Euros)<sup>3</sup>.

In spite of the relevance of the exposed data, the citriculture system faces internal and external difficulties that threaten its future feasibility. Among the internal difficulties, it is remarkable the high cost of labour force, water, chemical products to treat diseases; the strong pressures over land that have increased exponentially its value; the increase of environmental requirements; tax costs; requirements derived from the inclusion of traceability elements for products and waste management, etc.

With regards to external difficulties, difficulties relate to the increasing competition from other non-EU production areas. In this respect, it is remarkable the 'flight of capitals' from Valencian enterprises towards the South of Spain (especially Huelva) and, at a latter stage, to the North of Africa where, land and labour are much cheaper, structural problems are scarce, and the environmental protection standards and the production quality are downplayed considerably. Other of the external and more notable difficulties is the poor consideration that citriculture and, in general, the fruit and vegetable sectors has had until now inside the protective framework of the Common Agricultural Policy, despite the numerous difficulties that the sector faces up and that will be remarked, in the case of the Valencian citriculture, in the next pages.

As previously pointed out, the social and economic relevance of citriculture comes not only from the direct crop exploitation but also from the abundant subsidiary activities that are presented along the productive process. In this sense, citriculture is a strongly mechanised agriculture, intensive in the use of raw materials, demanding a big amount of labour force, mainly in the harvesting process, orientated to the exportation and, as a consequence, a driving force of ship and road transport. All these sectors depend, to a greater or lesser extent, of citriculture, and they generate employment and economic benefits, insofar as the activity and the citrus production exist.

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1 White Book of Agriculture and Rural Development. MAPYA.

2 Basic data book about the Valencian agrarian sector. October 2005. Valencian Council.

3 CAPA Data. Basic data book about the Valencian agrarian sector. October 2005. Valencian Council.

### **3. PERSPECTIVES. TRANSITION FROM THE TRADITIONAL FAMILIAR AGRICULTURE MODEL TO THE PROFESSIONAL AGRICULTURE MODEL**

In this section, by way of summaries and conclusions from the previous reflections, some considerations about the citriculture function in the economic, social and territorial configuration of the Valencian Land are exposed.

#### **3.1. The agriculture function in the region**

The intensive farming system was the base of the capital accumulation process in the region of Valencia during the last decades of the nineteenth century and the first half of the twentieth century, leading to development of the industrial and service sectors. From the second half of the twentieth century, there has been a transition from an agriculture-based society towards a modern and complex society, based on the tertiary sector, where tourism and the simultaneous urbanization processes are the real drivers of the economy. Consequently, the agricultural employment (from which citriculture represents the highest percentage) has reduced to 2,59% of total (IVE, 2005), although it has to be taken into account that this percentage increases significantly if we considered, on one hand, part-time farming (important on coastal plains and peri-urban areas) and, on the other hand, the auxiliary sectors (farm machinery, chemical industry, agrarian insurance, logistic and distribution, etc.). In any case, citriculture can be considered a fundamental activity from the economic point of view, even more important as a reflection of the traditional social organization, a culture and a lifestyle deeply-rooted on the territory, as well as an essential green lung to stop the desertification tendency that affects vastly the terrain of the region.

#### **3.2. Professionalism and consequences over the employment**

The gradual implementation of a professionalized citric farm model will lead, in the next 15-20 years, to a significant reduction of the total number of farms and their owners. This cutback in the agrarian employment will be compensated by an increased number of wage farm workers in farming tasks.

An augment of part-time farming is predictable in a significant number of farms in relation to less profitability, a lack of generational replacement and, to some extent, with the economic profitability expectancies because of land sale. This process will lead to an exacerbation of the current crisis of the family citriculture model and its substitution, at least partial, by a more professional model, characterised by a reduction in the number of farms that will be more modern and technical, bigger and with more competitive features.

The number of employees in auxiliary sectors will remain stable or will slightly grow. The professionalization of the citriculture system will have an impact over these sectors through the establishment of new and more powerful circuits of services and goods supply.

The main challenges for agricultural employment will be: firstly, the poor attractive of the rural work for youth generations due to the intrinsic nature of this kind of work (perceived as tough and unrewarding), the decreasing profit margins over the last 10-15 years, certain social legitimacy loss linked with the perception of environmental damages that agriculture origins

(soil and aquifer pollution, excessive use of water resources) and, in the case of new farmers, the strong and risky initial investment needed; secondly, the employment opportunities available in other sectors that offer secure salaries, fix timetables and paid holidays in the majority of cases; thirdly, certain transfer of full-time towards part-time farming, due to the mentioned erosion of the production profitability and the major availability of complementary jobs (occasional, seasonal or part-time jobs) in other activity sectors; finally, in a lot of families, the citric land ownership, linked to poor interest on the inheritors' in farm activity, will generalise withdrawals processes over the production as far as old farmers retire.

### 3.3. Structural inefficiencies

Probably, this is the main hurdle of the citriculture system and, as well, one of the most difficult ones to solve. The heritage transmission legal system has contributed to a progressive automation and compartmentalization of the agrarian property, mainly in the irrigated coastal and pre-coastal areas. Because of this we are facing irrational property structures, with average surfaces smaller than one hectare, compartmentalized in four plots of lands on average. This configuration reduces drastically the viability and profitability in medium and long-term.

The problem of small land ownership has been swept for decades thanks to a good juncture and high profit margins. In the sixties and seventies, a family could live comfortably with four '*fanegadas*' (about 3,200 sq m) of citrus production. Nevertheless, over the last 10-15 years, a sequence of processes has been consolidated and translated into an important reduction of production profitability, and, as a consequence, in an increase of the average size needed for a lucrative farm (around 20-30 '*fanegadas*' nowadays). Some of these processes have been described before but they are summarised in: (i) a progressive lost of social legitimacy of agriculture in relation to a pollutant production model intensive in resource consumption; (ii) lack of generational replacement; (iii) increase of competition about soil use with other activities (mainly the ones related to residential construction, but also the ones linked with infrastructures, equipments and their associated services); (iv) the structural deficit of water resources; (v) the poor impact of the European agrarian policy on fruits and vegetables. This accumulation of factors and processes will decisively influence on the characteristics, orientation and size of the citric sector in the future. The Valencian citriculture system seems to be placed in a transition process from a familiar farm model towards a professionalised and competitive one, with fewer farmers.

To conclude, there are some recommendations in relation to the direction that the European agrarian policy should take; firstly, the preferential agreement signature with tertiary countries (mainly the Mediterranean) must consider the inclusion of the same environmental and quality controls as the ones imposed to the Member States to avoid pest expansion and low quality; secondly, the producers organizations models must be supported to maintain the familiar farm model, as for the employment generation and the cultural and territorial organization implications. This support should be clarified into a better negotiation capacity with the oligarchy distribution; at the same time, it will suppose important advantages and economies in the shared use of machinery, the price of inputs (economies of scale) and the final product quality through the establishment of quality system.

