
ARTICLES

EVOLUTION AND CONSOLIDATION OF THE IRRIGATED VINEYARD IN LA MANCHA

Ángel Raúl Ruiz Pulpón

Departamento de Geografía y Ordenación del Territorio
Universidad de Castilla-La Mancha

INTRODUCTION

The Autonomous Region of Castilla-La Mancha counts at the present time with near 600,000 hectares of vineyard, which supposes around 48% of total Spanish extension. Its cultivation constitutes one of the main economic activities of the region by its contribution the Agrarian Final Production, by the creation of employment, and the soundness of its agribusiness.

During century XX, the dry vineyard has predominated, giving over the production of the white variety. In the last twenty years, the agrarian model has experienced a significant transformation owing to the introduction of the irrigated land and the prominence of new varieties of more profitable grapevines. La Mancha, subregion within the Autonomous Region, is a place where this process has been more manifest, as reunites two of the third parts of the regional surface of vine.

The objective of this article tries to analyze the range of that transformation on the farms of vineyard in La Mancha, being identified the causes that explain the delay of their irrigation and the factors that have favoured their spectacular expansion from the Nineties. In this process, the restructuring programs and the new mechanisms of management and commercialization are playing an excellent role in the improvement of the crop; and in counterpoint, new environmental and social problems are arising derivatives from their propagation in a water-bearing over-exploited.

HISTORIC SIGNIFICANCE

The vine was well-known by some municipalities of La Mancha before its definitive territorial expansion in 19th century. At the Modern Age, the traditional centres went strengthening, mainly those that were near of centers of population either to communication routes, like Valdepeñas or Ocaña, which they began to count on a incipient viticulture commerce from 16th century. Until 19th century the general agrarian structure continued

being dominated by cereals, whereas the vineyard was located in marginal land and with an aim destined self-sufficiency. The stories of the romantic travellers who crossed the La Mancha in their way towards Andalucía, like Gautier or Dumas, verify the little presence of the vine and the monotonous character of the landscapes.

At the end of 19th century, the price of cereals, the crisis of the French phylloxera and the arrival of the railway to La Mancha conditioned the definitive expansion, whose consequences were proved at economic and social level, since the cultivation interested to all type of landowners, was more and more demanded by the national markets, and in addition it favoured the gain of population of great part of his municipalities. The increase of surfaces continued until the Seventies of 20th century, moment at which, its growth became paralyzed owing to the first administrative precepts. The accumulation of farming surpluses, consequence of the process of automation and agrarian modernization, forced to that the authorities bet by policies that stimulated the vineyard uproot to get the herbaceous crops of irrigated land.

At the present time, the tendency to the reduction of total surface in the Eighties continued with certain maintenance at the end of the Nineties, and backward movement since year 2001, characterised by the elimination of the dry vineyard and of low quality, and the increase of the irrigated land surfaces.

EVOLUTION OF IRRIGATED VINEYARD IN LA MANCHA

The vine distributes by all La Mancha adapting itself to the chemical and biological conditions of the land, to the horizontal topographic, and the climatic rigors of a low level of rainfall, common of a semi-arid dominion. The predominance of grapevine determines an agrarian model characterized by the pronounced parcel fragmentation, consequence of the hereditary transmission of familiar type, and by the creation of wage labor.

In its modality of irrigated land, the vine has been increasing since 1993, evolving to the almost 63,000 at present, which supposes a fifth part the total surfaces of irrigated land, and 18.2% of the vineyard, when twelve years before, it only meant 2.3%. The tendency from 1993 has been similar to the one of other uses of the land, mainly of some cereals that benefited from the compensatory payments of the CAP. The growth of the irrigated areas contrasts with the gradual loss of the surfaces of dry farming, based in more than 120,000 hectares from 1993. The decrease is owed the policies of vineyard uproot, initiated by Regulation 1442/88 of definitive abandonment, that offered up to 7,000 ECUS by uprooted hectare, and whose effects were specially manifest in the period between 1991 and 1996.

The abandon of the dry farming will worsen shortly after by the incidence of a period of drought from 1991 to 1995, which served as incentive for the transformation towards the irrigated land. The drought opened the debate on the suitability to continue maintaining the prohibition of the irrigation established in the *Estatuto de la Viña, del Vino y de los Alcoholes* of 1970. The Statute, at least during the Seventies and the first Eighties, did not originate important disadvantages for La Mancha, since the dry grapevine maintained acceptable conditions of production because, in some territories, the levels of the water-bearing one were to very little depth, which made possible a continuous humidity contribution in the radicle system of the plant.

Finally, the Ministry of Agriculture by means of Law 8/1996 of 15 of January *sobre medidas urgentes para reparar los efectos de la sequía*, raised the prohibition of the irrigation in its Transitory Disposition Second. With it was made possible that the wine grower enjoyed a more favourable and competitive situation in the European Union, since apposite of what happened in Europe, in Spain not allowed its irrigation. The aim of the prohibition explains the growth of almost 30,000 hectares in only six years, in where the profusion of new varieties implanted by dripping will have an essential role. In this case, the restructuring policies went fundamental, since it implies the abandon of the crop by another use of the land, and the modernization of the vineyard that has remained obsolete or is of bad quality, from the application of an irrigation of support.

The Order 08-08-2000 of the Consejería de Agricultura, regulated the presentation and the concession of subsidies to the plans of restructuring the vineyard in Castilla-La Mancha. The most interesting rules were the articles dedicated to the transformation in espaliers. This modality acted like a new stimulus for the conversion towards the irrigated land, because an espalier grapevine hardly was made viable without an irrigation contribution, more necessary, if another variety is cultivated that it requires of greater humidity. The vineyard in espalier has become a new landscaping reality in La Mancha. The data facilitated by the *Dirección General de Producción Agraria* for year 2005 show that all these typologies suppose more than 40% of the surfaces of vineyard irrigated in municipalities like Socuéllamos, Campo de Criptana or Daimiel, and between the 15 and 30% in others where the watered grapevine is the more extended. Its diffusion is related to the optimal welcome to the program. According to the listings published by the regional government, from 2002 they had assigned provisionally a total of 450 million euros in Castilla-La Mancha.

The greater importance every time of the watered surfaces is demonstrated from 1999 to 2005. In 1999 they are located in the most central and western part of water-bearing nº 23 (Daimiel, Manzanares, Socuéllamos) and in the municipalities of the Eastern South of the province of Toledo (Corral de Almaguer, Lillo, El Toboso, etc.), being practically nonexistent in the rest of the territory. Six years later, the same places have experienced such an important profusion and it begins to distribute by the rest of the subregion, mainly by the most northern and Eastern zone.

It is not necessary to have initiated a firm bet for the irrigation in municipalities which the vineyard almost monopolize the agrarian structure, and in counterpart, localities with percentage of vineyard below 25% of his advantages, like Daimiel in the western South end, they can get to water until 70% of the extension of vineyard. These circumstances can be explained by the interaction of ecological, social and legal factors. The water resources of the most central part of water-bearing nº 23 are more optimal than other places that are in zone of edge, which they have accused the drop in the water levels of the water-bearing one. Apart from its scope of influence the irrigated land has been developed only in those places of greater water availability, as it happens in Eastern zones pertaining to water-bearing 20, and more concretely, around the well-known hydrographical unit like the 04.03 of Consuegra-Villacañas, and in other municipalities located in the bordering zone with water-bearing 19, like El Toboso or Miguel Esteban who counts with more of 40% of the total surface of watered vineyard.

From a social and legal perspective it stands out the possession of water rights and the potentiality for the irrigation that supposes that a farm is located on a water-bearing one over-exploited or no. The administrative concession is necessary to be able to water in water-bearing over-exploited, and those rights can be used in different uses from the land, between which appear the vineyard with the fundamental administrative support. Therefore, municipalities that don't count on the same tradition, nor with the same meaning of grape growing within their agrarian structures like Daimiel, have seen growing their surfaces of vineyard watered in more than 2,600 hectares in five years. The places with greater tradition of the vineyard and located on water-bearing 23 have not been able to initiate in the same form that conversion, due to the smaller water availability, the prohibition to make new wells, and to that they did not accede of the same way to the process of recognition of rights, since as we mentioned, the grapevine could not be watered. In this situation are as important municipalities as Pedro Muñoz, Socuéllamos or Tomelloso, that lodge a great number of illegal wells, which favours the conflict before the well closing, the sanctions, etc. These problems do not appear in the not over-exploited municipalities pertaining to water-bearing, reason why a priori they have counted with certain freedom to initiate its transformations, so and as it has happened in localities located to the north of water-bearing 23, like El Toboso, Quintanar of the Order, Villanueva de Alcardete, etc.

Consequently, the sanctions that receive wells without concession constitute another element of conflict that is added to the complex problem of the management of the water of the *Alto Guadiana* that is united to him to the problems of hiring of manual work at times of wine harvest. The contingents foreign workers with contracts in origin have not been sufficient for satisfy the demand of work at the time of harvesting, which forces to commitments with irregular manual work, and to expose themselves to the sanctions of a work inspection. The delay in the request of the work, the ignorance of the laws, the troublesome administrative proceedings, and the commitments that the agriculturist must contract, - to run with the expenses of lodging, to support to the outward journey or the one of return, and to pay according to the collective agreement-, are factors that also have played against.

CONCLUSION

The irrigated land has determined the improvement of the farmers and it has adapted satisfactorily to the process of implantation of new varieties. The relative one under water consumption, the creation of labour force, and the optimal relation with the type of climate and land, determines one more a more beneficial relation of the vineyard of irrigated land with the paradigm of the sustainability, more if it fits when it is put in relation to other herbaceous cultures devoid of tradition, or without capacity to generate use.

The difficulties are originated by the accumulation of excess and some of the suggested solutions for their economic and social solution, that can be debated by their presumed ecological damage in the producing regions. It is the case of the vineyard uproot as long as it does not take ties an agro-environmental measurement of substitution that restrains the desertification, or the territorial consequences that are derived from a process of massive restructuring. To the effects on the prices that can cause an excess of production, it is united

the lack of vine-growing culture, capitalization and development of marketing strategies that allows the wine to compete in equality of conditions with other national and international vine-growing regions, and also the absence of previous territorial diagnoses that warn about the consequences of their implantation in a territory with a water supply very limited, very sensible before the increase of the volume of water that takes with himself the new varieties and the vineyard in espalier.

Among other questions, it is necessary to articulate the dispositions within a territorial development strategy, that pleads for a better planning and safeguard for naturel resources, including key directives of vine-grewing sector. In this case, the sanction of a plan of agricultural arrangement of the vineyard could be a good instrument to identify the weaknesses and opportunities of the sector, allowing us to propose pertinet solutions in a proceeding framework defined in advance, relying on coordination between administrations that have both water and agriculture competences.

