

The average plantation density ranges from 70 to 135 trees/ha, for the non-irrigated and irrigated orchards respectively. In the traditional plantations, the density ranges from 30 trees/ha in the Alpes-Maritimes to 90 in the Bouches-du-Rhône. In modern intensive plantations, the average plantation density is 280 trees/ha and the yield can reach 2 tonnes/ha. There are some intensive high density plantations (e.g. trials with 1000 trees/ha in Languedoc Roussillon) with mechanization but they are still rare.

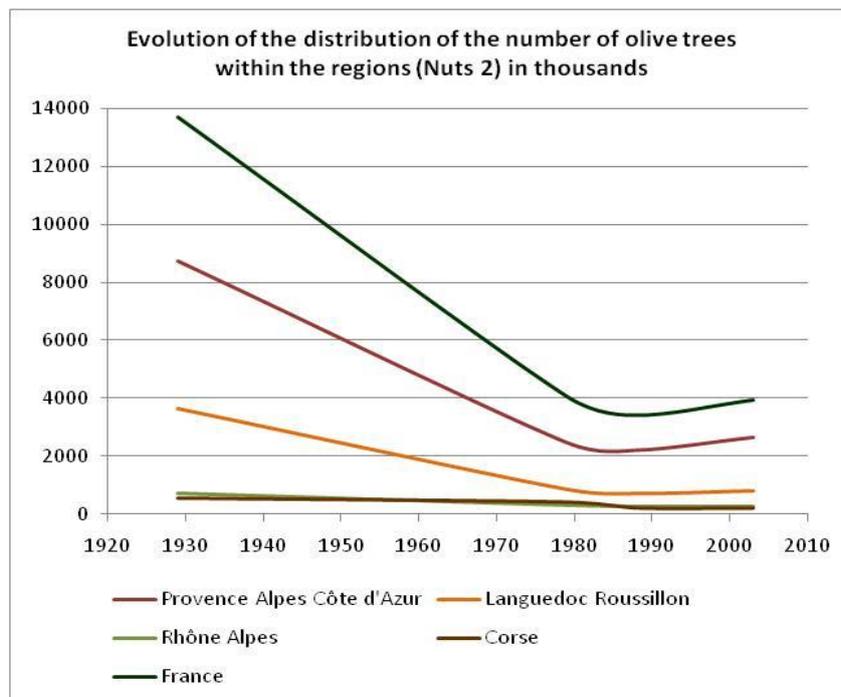
In 2005, 22% of the national production was produced under PDO (Protected Denomination of Origin), which represents about 900t. The PDO rules limit the plantation density to 400 trees/ha and encourage the local variety of olive trees.

An important part of the olive production is for the production of olive fruit, not for oil. This type of olive represented 2000 t in 2000. Furthermore, in 2009, about 1800 ha of olive orchards were organic.

The peak of the olive orchards in France took place around the 1800's. After that period, they declined sharply for two main reasons:

- French colonial politics, which decided to plant olive trees in Northern Africa, where the production per hectare was more important and competed with the French one.
- the phylloxera crisis in vine production from 1870, which induces a need for uncontaminated land: olive orchards were uprooted to plant vineyard.

The decline went on in the 20th century, accelerated by the big frosts of 1929 and 1956. In the last 15 years, an olive renovation program financed by the EU allowed to renew or to plant 3500 ha of olives orchards.



Source : Oniol 2003

2. Photos of different types of olive grove in France



Olive trees on terraces in the Alpes Maritimes ©DDAF Alpes Maritimes



Olive plantation in the Drome ©Jean Weber INRA



Olive groves in Hérault © Jean-Marie Bossenec

3. Policies for olive farming and the environment

Olive orchards in Natura 2000 sites can be eligible for agri-environment schemes, specifically the “mesure agro-environnementale territorialisée, territoire à enjeu Natura 2000”. The number in the national programme is 241-I1. This scheme is managed by a local operator in charge of defining the combination of unitary engagements. These engagements are defined at national level. The local operator also has to canvass the farmers. Farmers sign a 5-year contract with the state, committing themselves to respect the requirements specified in the contract.

For example, in the department of the Bouches du Rhône, farmers using olive orchards on the Sainte Victoire Mountain can participate in the agri-environment scheme for a maximum payment of 190 Euros/ha. This scheme aims to improve the entomofauna by maintaining a permanent grass cover under the trees. The unitary engagement is COUVER_03, and the name of the scheme is ARBORICULTURE PA_SV13-VE. On the Sainte Victoire Mountain, 6 farmers have signed the contract for a total amount of 250,000 € for 5 years on 500 ha.

Some olive tree species are also under the scheme for endangered domestic species, especially in the region Provence Alpes Côtes d’Azur. This scheme concerns only very small areas. The scheme is named “préservation des ressources végétales menacées de disparition”. The number in the national programmation is 241-G. At a regional level, a group of experts decides of a list of endangered domestic species. In Provence Alpes Côtes d’Azur, there are 49 varieties of olive trees in this list. To be eligible to this 5 year contract, the farmer must have a minimum area of orchards, and a minimum density of trees. He also has to sign a convention with a genetic resource board.

4. Cross-compliance – summary of conditions

The olive parcels receiving Pillar 1 support are subject to Good Agricultural and Environmental Condition (GAEC) requirements.

At a national level, the GAEC conditions for olives are:

- No uprooting of olive trees without a special dispensation from the local administration (Nuts 3).
- Respect of maintenance rules defined at local level (Nuts 3).

The maintenance rules are similar across the different departments (nuts 3). They are updated every year. For 2010, they are approximately as follows:

- Olive trees must be pruned regularly (at least every 2 or 3 years).
- The soil must be maintained by mowing or tillage before the 30th of June if the orchard is under grass. There should be no scrub, trees or crops between the trees.
- Uprooting is forbidden, but there are exceptions:
 - to contend with a declared disease. [In this case, the farmer needs documentary evidence from the regional agriculture administration (nuts 2)].
 - in case of climatic or fire accident
 - to adjust the density plantation to PDO criteria

5. Recent olive projects

The French LIFE Environment project Arboretum Beauregard (LIFE99 ENV/F/000497) investigated the importance of preserving a traditional landscape, with its associated biodiversity. Located in the Provence-Alpes-Côte d'Azur region, in southern France, the 1999-2002 project targeted the restoration of damaged natural habitats – riverbank woods, hedges and related habitats along the banks of the Ouvèze river, to avoid the risk of flash flooding. The site is situated at the northern limit of the natural distribution area of the olive tree, an area that has suffered considerably from climatic and economic problems, causing the progressive disappearance of olive groves and of traditional terrace cultivation. Another aim therefore, was to restore the diversity of native tree species and vegetation. For example, from a once-diverse range of olive-tree varieties only three species remained at the beginning of the project.

Working with the Conservatoire Botanique National Méditerranéen de Porquerolles – a national conservatory and botanical garden located in the Port-Cros national park – the project has planted an olive grove for research purposes, with the 35 olive-tree varieties grown in France, including 15 species of high economic value. The aim is to demonstrate the advantages of using wild native species. Parts of the area's traditional terraces were also restored. Importantly, a "National chart for the preservation of the genetic resources of olive trees" has been agreed upon regionally. Moreover, the project helped raise awareness

among the local population about the different olive varieties, and of the economic opportunities for promoting their premium olive oils.

The international project "Terra Olea" brings together 3 areas of South Western Europe (Baena in Spain, Mirandela in Portugal, Nîmes in France). Its aim is to promote regional identity around the olive growing heritage and to develop tourism around this theme.

An ambitious research project called ECCOLIV is underway at the moment. Some aspects of this project focus on biodiversity and landscape.

"KNOLEUM" Olive tree landscape is a cooperative project, part of INTERREG III, the cooperation programme co-financed by the European Union. Its aims are to encourage studies to identify the links within the Mediterranean basin with olive tree landscape, and to reinforce the Mediterranean identity through the knowledge of this common olive culture. This programme takes place in Andalusia (Spain), Languedoc Roussillon (France), Portugal, Lebanon, Greece, Morocco and Umbria (Italy). <http://www.paysagesdelolivier.eu/>

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