

1. GENERAL DESCRIPTION OF OLIVE GROWING IN GREECE

1.1. Introduction



Figure 1. Location of Greece (Source: UN)

With an annual output of some 300 000 t, Greece is the world's third largest producer of olive oil, coming after Spain and Italy. As much as 70% of all its production is extra virgin grade.

Despite having the highest annual per capita consumption in the world (16 kg), one-third (135 000 t) of annual production goes for export. In fact, Greece is the world's leading exporter of extra virgin olive oil.

Greek olive oil mainly goes to the European Union, which takes 90% of all its exports (80% in bulk plus 10% as Greek brands), but exports are rising to other countries such as Canada, Australia, Japan and the United States. (Source: Greek Association of Olive Oil Industries and Processors, SEVITEL)

In 2008, a total area of 1 160 000 ha was under olive trees in Greece. According to the Ministry of Rural Development and Food, the average orchard density is 150 trees/ha and there are approximately 750 000 agricultural holdings.

1.2. Socio-economic indicators

- Area: 131 957 sq km (UN, 2008)
- Capital city: Athens (UN)
- Currency: Euro (EUR) (UN, 2009)
- Population: 11 283 293 (World Bank, 2009)
- Urban population: 61% (World Bank, 2010)
- Rural population: 39% (World Bank, 2010)
- Population growth rate: 0.1% (UN, 2010/15)
- Life expectancy: 77.7 years (men), 82.5 years (women) (UN, 2010/15)
- Main exports by quantity: wheat (FAOSTAT, 2009)
- Main imports by quantity: wheat, soybean cake and soybeans (FAOSTAT, 2009)
- GNI per capita, PPP (current international \$): 27 050 (World Bank, 2010)
- GDP per capita, PPP (current international \$): 27 805 (World Bank, 2010)
- Employment in agriculture: 11.9% (World Bank, 2009)
- Employees in agriculture, female: 12% (World Bank, 2009)
- Employees in agriculture, male: 12% (World Bank, 2009)

2. BACKGROUND DATA

2.1. Olive oils

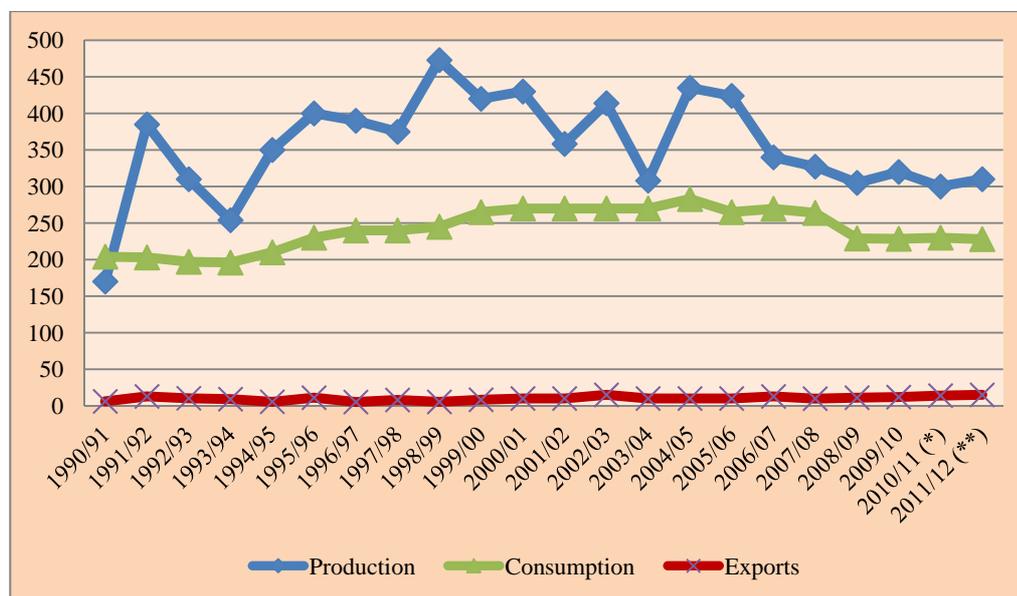


Figure 2. Olive oil production, consumption and exports 1990–2012 (1 000 tonnes)

* Estimates

** Forecasts (Source: IOC)

Table 1. Olive oils (1 000 tonnes) (Source: <http://www.internationaloliveoil.org/estaticos/view/131-world-olive-oil-figures>)

	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Production	430.0	358.3	414.0	308.0	435.0	424.0	340.0	327.2	305.0	320.0
Consumption	270.0	270.0	270.0	270.0	283.0	265.0	269.5	264.0	229.0	228.5
Exports	10.0	10.0	15.0	10.0	10.0	10.0	12.8	9.8	11.0	12.0

2.2. Table olives

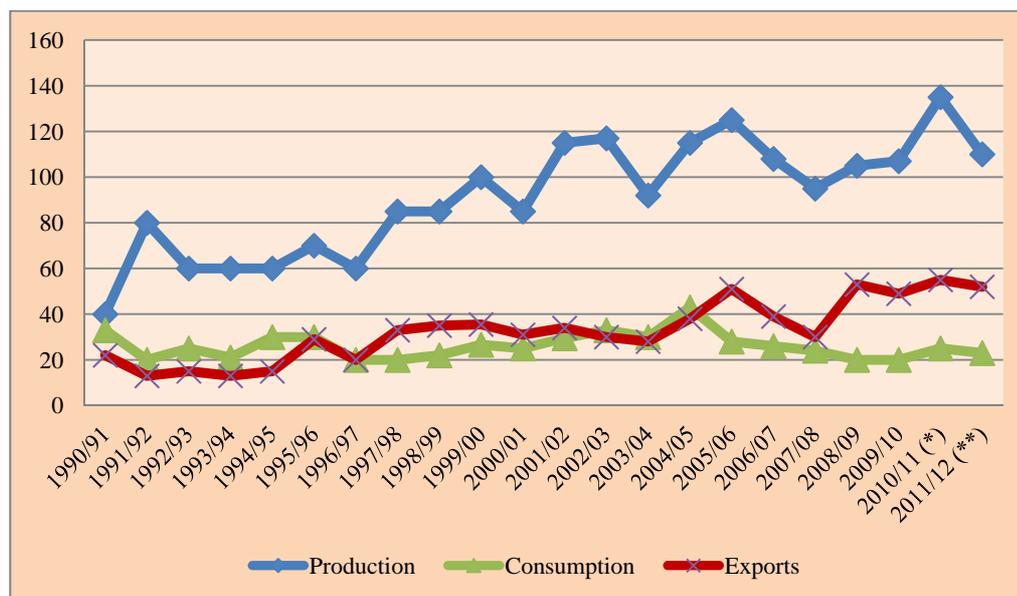


Figure 3. Table olive production, consumption and exports 1990–2012 (1 000 tonnes)

* Estimates

** Forecasts (Source: IOC)

Table 2. Table olives (1 000 tonnes) (Source: <http://www.internationaloliveoil.org/estaticos/view/132-world-table-olive-figures>)

	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
Production	85.0	115.0	117.0	92.0	115.0	125.0	108.0	95.0	105.0	107.0
Consumption	25.0	29.5	33.0	30.0	43.0	28.0	26.0	24.0	20.0	20.0
Exports	31.0	34.0	30.0	28.0	38.0	51.0	39.0	30.0	53.0	49.0

2.3. Total area planted

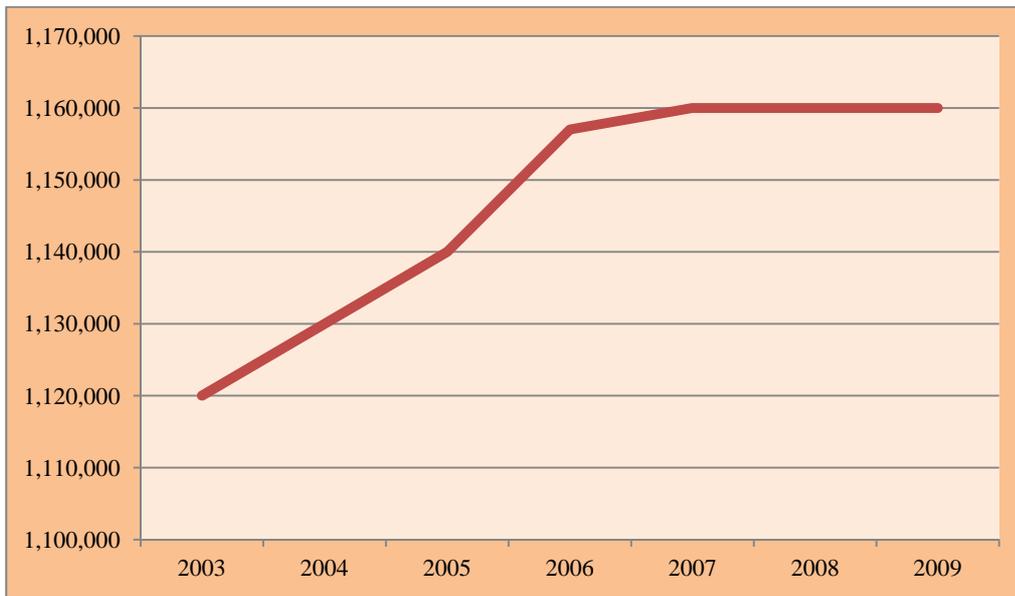


Figure 4. Changes in area planted with olive trees (ha) (Source: IOC)

3. OLIVE INDUSTRY IN GREECE

3.1. *Historical background*

Olive cultivation in Greece dates back more than 4 000 years ago. Discoveries made at archaeological sites such as Knossos, Phaistos, Malia, Mycenae, Pylos and Thebes all bear witness to the key role that olives and olive oil played in the life and customs of Ancient Greece. Viewed as a symbol of knowledge, wisdom, abundance, peace, health, strength and beauty, it was adored for thousands of years and was closely intertwined with the diet, economy and religious rites of the people.

It was the Phoenicians who took the olive to the Greek islands in the sixteenth century BC, from where it later spread widely to the Greek mainland. The expansion of olive growing and the use of olive oil in the Western Mediterranean are partly attributed to the Greeks who disseminated the olive in Italy.

The Greeks considered the olive tree to be the main crop of the Mediterranean and it continues to play a central part in the country's agriculture and trade.

(Source: SEVITEL)

3.2. *Location*

Olive trees in Greece grow mainly on hilly land where the soils are predominantly clay and limestone. The country's heritage olive orchards are located in the Chalkidiki peninsula, Crete, western mainland Greece and the Ionian and Aegean Islands.

Geographically speaking, almost 80% of olive oil production is centred in three regions: Peloponnese (37%), Crete (30%) and the Ionian Islands (12%) where the chief olive growing areas are Messinia and Ilia (Peloponnese), Iraklion and Chania (Crete) and Corfu (Ionian Islands).

3.3. *Varieties*

Among the varieties of olive grown in Greece, three predominate in oil production: Koroneiki, Mastoidis and Adramitini.

Koroneiki

This is the chief oil variety of Greece. It has a medium rooting ability. It comes into bearing early and it flowers early. It produces abundant pollen, and its time of ripening is early to intermediate.

It has a high, constant productivity. The oil yield is high and the oil is rated highly. It has a very high content of oleic acid and a very high stability.

It is resistant to drought but does not tolerate cold; for this reason, in Crete at altitudes of more than 400–500 metres above sea level or in exposed sites it is replaced by the Mastoidis variety, which is also used as a polliniser.

It is resistant to olive leaf spot and moderately resistant to verticillium wilt but sensitive to olive knot.

Mastoidis

This variety gets its name from the characteristic breast-like shape of the fruit. In all probability, in the past the same denomination was given to different populations owing to the similar shape and size of their fruit.

It is considered hardy and can be cultivated up to 1 000 metres above sea level. It is cultivated on the highest, harshest side of Crete in combination with Koroneiki, for which it is considered a good polliniser. It has a medium rooting ability, and its start of bearing and time of flowering are intermediate. It has a medium, alternate productivity. It has a high oil yield and it is freestone. It is used for producing good quality oil as well as for pickling black olives.

It is resistant to cold and moderately tolerant of dry climates. In addition, it is resistant to olive knot but susceptible to olive leaf spot.

Andramitini

This hardy variety has a medium rooting ability and an intermediate start of bearing. Its time of flowering and harvesting are also intermediate.

Its productivity is medium and alternate. It gives top- quality oil. The fruit has a medium removal force and a high oil content and it is freestone.

It is sensitive to attacks from olive fly and olive knot and moderately resistant to cold.

(Source: World Catalogue of Olive Varieties, IOC)

3.5. Olive oil: production and yield

Between 2000/01 and 2009/10 (Table 1), Greek production of olive oil ranged from a low of 305 000 t (2008/09) to a record high of 435 000 t (2004/05), averaging out at 366 150 t/year. When compared with the mean for the preceding decade (352 700 t), we find that olive oil production has consolidated, growing by an aggregate 3.8%.

Estimates for the 2011/12 season assess Greek olive oil production at 310 000 t. According to data furnished by the Ministry of Rural Development and Food, there are approximately 1 800 olive oil mills in Greece.

3.6. Olive oil: domestic consumption and foreign trade

Greek olive oil goes for both domestic consumption and export.

Looking at Table 1, it can be seen that domestic consumption has been fairly steady over 2000/01 to 2009/10, ranging between 270 000 t and 264 000 t, except in the last two seasons of the decade when it dropped to 229 000 t and 228 500 t, respectively.

Viewed in terms of ten-year averages, consumption performance on the domestic market has been quite positive. The yearly mean for the latest decade (2000/01–2009/10) works out at 261 900 t (Table 3), representing 17.44% growth on the annual average of 223 000 t recorded in the preceding ten seasons.

Besides being a domestic consumer Greece is also a net exporter of olive oil, with exports ranging between 10 000 t and 15 000 t in the crop years between 2000/01 and 2009/10 (Table 1). In terms of decade averages, exports expanded by a significant 35.54% between the two periods reported in Table 3, going up from 8 160 t to 11 060 t. In general, trends in production are reflected in foreign trade.

Table 3. OLIVE OIL (Source: IOC)

	Average (t) 1990/91–1999/00	Average (t) 2000/01–2009/10	Change (%)
Production	352 700	366 150	3.81
Consumption	223 000	261 900	17.44
Exports*	8 160	11 060	35.54

*Disregarding intra-EU trade

3.7. Table olives

The varieties grown in Greece for table olive processing include Konservolia (dual-purpose variety), Kalamon (another dual-purpose variety) and lastly Chalkidiki.

Konservolia

This variety is of medium hardiness and has a medium rooting ability. When irrigated, it grows quickly and comes into bearing after three to four years. It has a high pistil abortion rate. Its time of flowering is intermediate while the time of ripening is intermediate-late. Its productivity is high and alternate. Harvest date depends on the end use of the fruit.

Its ability to adapt to different environmental conditions means that it can be cultivated from sea level up to an altitude of 500–600 metres, provided rainfall is not less than 500 mm/ year. It is used mainly for preparing green table olives, although it also goes for black olives and oil extraction. The fruit has a medium content of good quality oil. The flesh of the fruit is firm and therefore resistant to damage during transportation and handling, which is why it is intended for black pickling. It is freestone.

It is resistant to cold and to olive knot whereas it is sensitive to verticillium wilt and moderately sensitive to dry climates.

Kalamon

This variety is of medium hardiness. It has a medium rooting ability and an intermediate start of bearing.

The fruit ripens late and is harvested when it has changed colour fully. Although dual-purpose, it is grown chiefly for Greek-style black olives. Its productivity is high and alternate. The fruit stands up well to preparation and handling and can be processed in different ways, although always as black olives because it retains its colour well. It has a high flesh-to-stone ratio and it is freestone.

It gives a medium yield of excellent quality oil.

It is moderately resistant to cold and sensitive to excessively hot climates. It is moderately susceptible to olive leaf spot and verticillium wilt but resistant to olive knot.

Chalkidiki

This variety is of medium hardiness. It has a medium rooting ability, an intermediate start of bearing and a medium pistil abortion rate.

The fruit is harvested early and it has a medium removal force. It does not turn completely black when it reaches maturity. It is used for green pickling and it gives a medium oil yield. Its productivity is medium and alternate and it is freestone. It is resistant to drought and cold.

(Source: World Catalogue of Olive Varieties, IOC)

Through the last decade, production has remained above 100 000 t a year (see Table 2), except in three seasons when it dipped to 85 000 t (2000/01), 92 000 t (2003/04) and 95 000 t (2007/98). This is supported by the average data reported in Table 4 below, where it can be seen that table olive production averaged 106 400 t per year. It is also noteworthy that this tonnage is a sharp 52% higher than the mean for the previous ten-season period (70 000 t).

In the ten crop years from 2000/01 to 2009/10 (Table 2) consumption ranged between a very sharp peak of 43 000 t (2004/05) and a low of 20 000 t (2009/10). However, the averages for the latest two decades reported in Table 4 show less fluctuation, with a 12.47% increase in the mean yearly level of consumption between the two periods.

Lastly, in the two ten-season periods reported in Table 4 below, average Greek exports of table olives climbed by a noteworthy 66.16%.

Table 4. TABLE OLIVES (Source: IOC)

	Average (t) 1990/91–1999/00	Average (t) 2000/01–2009/10	Change (%)
Production	70 000	106 400	52.00
Consumption	24 760	27 850	12.47
Exports*	23 050	38 300	66.16

*Disregarding intra-EU trade

4. SOURCES

IOC database

<http://www.internationaloliveoil.org/estaticos/view/130-survey-and-assessment-division>

United Nations

<http://data.un.org/Default.aspx>

World Bank

<http://data.worldbank.org/country>

FAOSTAT

<http://faostat.fao.org/site/342/default.aspx>

OFFICIAL SEVITEL CAMPAIGN TO PROMOTE OLIVE OIL

<http://www.oliveoil.gr/>

<http://www.sevitel.gr/en/sevitel/>