1. GENERAL DESCRIPTION OF OLIVE GROWING IN ARGENTINA

1.1. Introduction

Figure 1. Location of Argentina (Source: UN)

In recent years, Argentina has climbed to join the ranks of the leading producers of olive oil and table olives, becoming America's top producer and exporter. Translated into figures, it supplies 1% of the olive oil consumed in the world and 5% of the table olives according to data for the 2008/09 season. In the world ranking, it lies 8th in table olive production, 10th in olive oil production and 6th in terms of its olive oil exports.

At present, the industry directly provides employment for over 15 000 people. At harvest time, this number is swelled by 10 000 seasonal workers. In addition, it is estimated to generate 45 000 indirect jobs.

(Source: *OLIVAE* 116)

1.2. Socio-economic indicators

- **Area: 2 780 400 sq km (UN, 2008)**
- **Capital city: Buenos Aires (UN)**
- **Currency: Argentine Peso (ARS) (UN, 2009)**
- **Population: 40 276 376 (World Bank, 2009)**
- **Urban population: 92% (World Bank, 2010)**
- **Rural population: 8% (World Bank, 2010)**
- **Population growth rate: 0.9 % (UN, 2010/15)**
- **Life expectancy: 80.0 years (men), 72.5 years (women) (UN, 2010/15)**
- **Main exports by quantity: raisins and potatoes (FAOSTAT, 2009)**
- **Main imports by quantity: soybeans, bananas and sunflower seed (FAOSTAT, 2009)**
- **GNI per capita, PPP (current international $): 15 570 (World Bank, 2010)**
- **GDP per capita, PPP (current international $): 6 012 (World Bank, 2010)**
- **Employment in agriculture: 1.2% (World Bank, 2009)**
- **Employees in agriculture, female: 0% (World Bank, 2008)**
- **Employees in agriculture, male: 2% (World Bank, 2008)**

2. BACKGROUND DATA

2.1. Olive oils

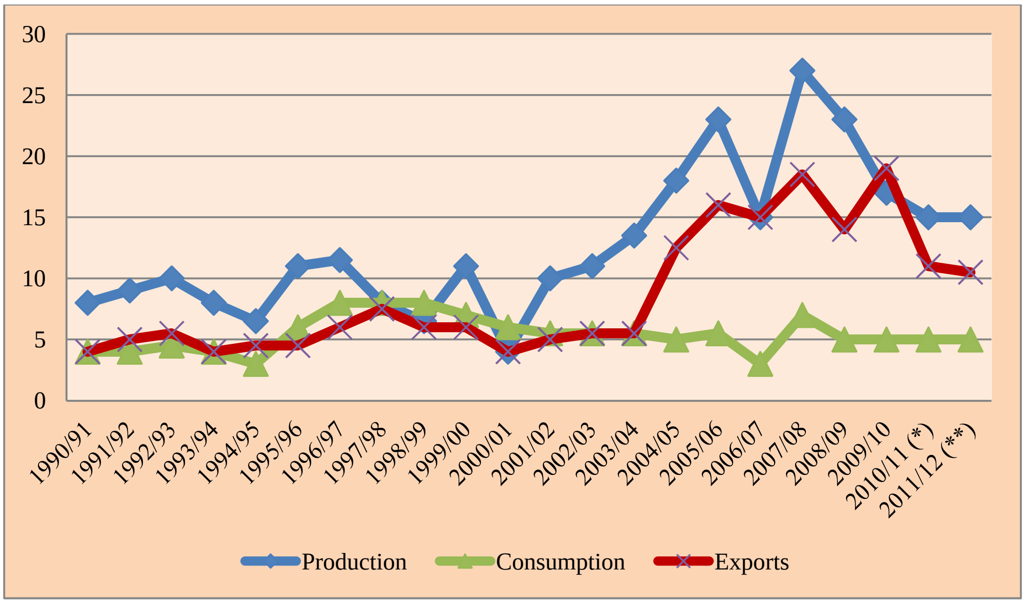

Figure 2. Olive oil production, consumption and exports 1990–2012 (1 000 tonnes)
* Estimates
** Forecasts (Source: IOC)

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	4.0	10.0	11.0	13.5	18.0	23.0	15.0	27.0	23.0	17.0
Consumption	6.0	5.5	5.5	5.5	5.0	5.5	3.0	7.0	5.0	5.0
Exports	4.0	5.0	5.5	5.5	12.5	16.0	15.0	18.5	14.0	19.0

2.2. Table olives

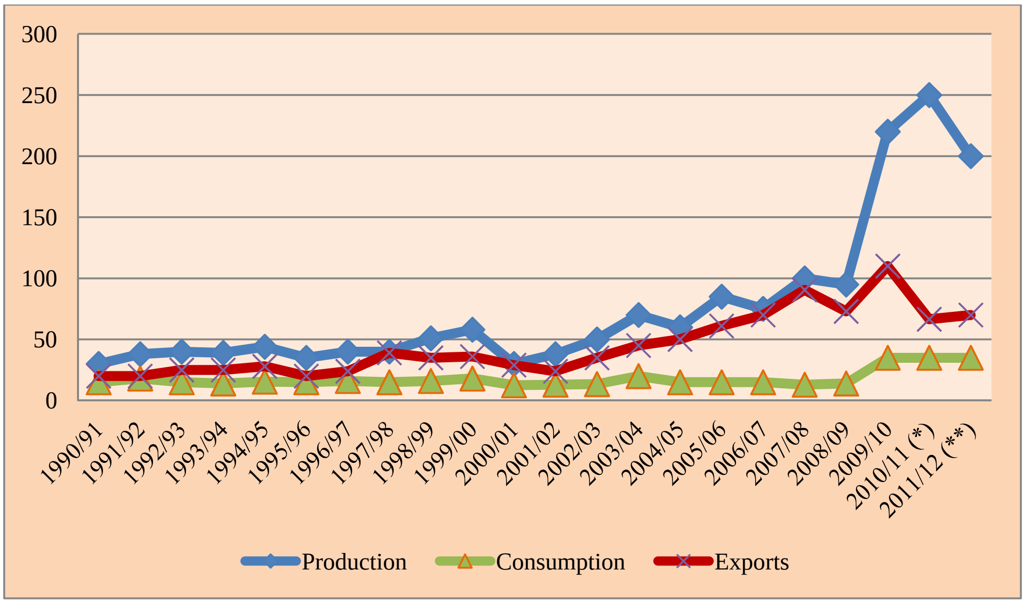

Figure 3. Table olive production, consumption and exports 1990–2012 (1 000 tonnes)
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Table 2. Table olives (1 000 tonnes) (Source: http://www.internationaloliveoil.org/estaticos/view/132-world-table-olive-figures)

	2000/01	*2001/02*	*2002/03*	*2003/04*	*2004/05*	*2005/06*	*2006/07*	*2007/08*	*2008/09*	*2009/10*
Production	30.0	38.0	50.0	70.0	60.0	85.0	75.0	100.0	95.0	220.0
Consumption	12.5	13.0	13.5	20.0	15.0	15.0	15.0	13.0	14.0	35.0
Exports	29.0	24.0	35.0	45.0	50.0	61.0	70.0	90.5	73.0	110.0

2.3. Total area planted

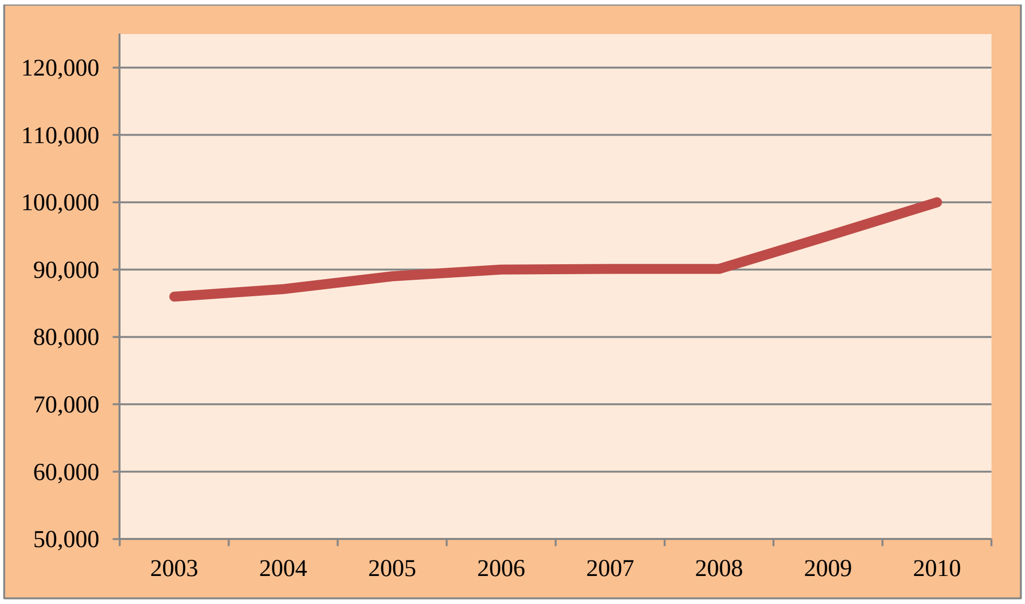

Figure 4. Changes in area planted with olive trees (ha) (Source: IOC)

3. OLIVE INDUSTRY IN ARGENTINA

3.1. Historical background

The origins of olive growing in Argentina can be traced to the Spanish colonisation when the first orchards were planted in Arauco (La Rioja). A 400-year-old specimen survives to this day as testimony to that period.

However, it was not until the late 19th century that olive cultivation started to develop to cope with demand from the influx of Italian and Spanish immigrants which supplies on the Argentinean market were unable to meet.

(Source: *OLIVAE* 114)

3.2. Orchard resources

The industry in Argentina uses more than 105 000 hectares of land to grow olives, concentrated in the key producing provinces (Mendoza, San Juan, Catamarca, La Rioja, Córdoba and Buenos Aires), which have been joined recently by Neuquén.

With over 10 000 hectares of olive orchards yet to start bearing crops, the outlook for production growth is noteworthy. When this area starts to produce, the tonnage available for export is expected to rise considerably.

To give an idea of the extent to which the sector has expanded, at the beginning of the 1990s olive orchards were cultivated on no more than 29 600 ha. There were an estimated 3 000 000 olive trees in the country, which yielded an average 140 000 t nationwide, split evenly between olives for oil and for table olive production. (Source: Argentine Olive Growing Federation) In 2010, there were 100 00 ha under olives.

Planting densities in the olive farms set up under the tax deferral legislation are generally between 250 and 330 trees/ha. (Source: *OLIVAE* 114)

3.3. Location

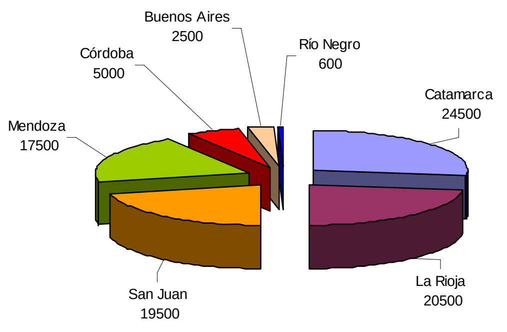

Figure 5. Distribution of olive growing area (ha) in Argentina (SAGPyA, Secretariat for Agriculture, Livestock, Fisheries & Food of the Argentine Republic, 2009)

Currently, the olive growing map of Argentina mainly covers the provinces of Catamarca, La Rioja, San Juan and Mendoza where the most important olive growing areas are Valle Central, Pomán and Tinogasta in Catamarca with 24 500 ha; Chilecito, Aimogasta and La Rioja Capital in La Rioja with 20 500 ha; and Valle del Tulum, Jáchal and Ullum-Zonda in San Juan with 19 500 ha. Olives are also grown in the provinces of Córdoba and Buenos Aires, and new crop expansion projects have recently been established in Río Negro (600 ha), San Luis and Neuquén. (Source: *OLIVAE* 116)

3.4. Varieties

According to the latest surveys, the varieties can be identified by the source area of the orchard:

- Valle Central de Catamarca (province of Catamarca): Arbequina, Manzanilla and Coratina.
- Bolsón de Pipanaco (province of Catamarca): Arbequina, Manzanilla and Picual.
- Tinogasta and Fiambalá (province of Catamarca): Arbequina and Coratina.
- Chilecito (province of La Rioja): Arbequina, Barnea, Picual and Coratina.
- La Rioja Capital (province of La Rioja): Arbequina, Manzanilla and Picual.
- Poman (province of Catamarca): Arbequina, Barnea, Coratina and Frantoio.
- San Juan (province of San Juan): Arbequina, Frantoio, Picual, Coratina and Changlot Real.
- Jachal and Rodeo (province of San Juan): Arbequina and Changlot Real.
- Oasis Norte and Centro (province of Mendoza): from 2005, over 2000 ha of monovarietal orchards were planted with Arbequina, Picual, Coratina and Farga.
- Oasis Sur–San Rafael (province of Mendoza): Arbequina and Arauco.
- Coronel Dorrego (province of Buenos Aires): Arbequina, Farga, Nevadillo and Frantoio.

(Source: *OLIVAE* 116)

Arauco variety

This variety was probably obtained from the selection of olive seedlings introduced into Argentina from Spain. It appears to match the Azapa variety of Chile and the Sevillana of Peru. It is adapted to the arid climate of the northernmost parts of Argentina (Aimogasta) and it has spread owing to the excellent quality of its fruit (size and colour). In different climatic conditions its productivity is rather low.

It is partially self-compatible. Its time of flowering is intermediate and it has a low pistil abortion rate. It has an intermediate start of bearing. Manzanilla, Arbequina, Pendolino, Morchiaio and Ascolana are reported as pollinisers in the scientific literature. The pollen has a high germination capacity. Its productivity is high and alternate. The fruit has a high removal force. When it starts to mature, it changes in colour from green to greenish yellow, winey pink and then black. Because of its firm flesh, the fruit can be used for different trade preparations. It has a high flesh-to-stone ratio and a low oil content and it is freestone.

It is sensitive to cold and to numerous pests and diseases: verticillium wilt, olive knot, olive anthracnose, sooty mould, olive scale and *Cercospora cladosporoides*. Conversely, it is particularly tolerant of arid, saline and calcareous soils.

(Source: World Catalogue of Olive Varieties, IOC)

3.5. Olive oil: production and yield

Olive oil production has experienced constant growth since the late 1990s. In the 1999/00 season Argentina produced 11 000 t, ranking it as the world’s tenth biggest producer. Since then, its production has climbed, reaching 18 000 t in 2004/05 and 27 000 t in 2007/08.

3.6. Olive oil: processing sector

The majority of oil mills are modern and use the two-phase system. Modern processing facilities enable the industry to turn out a top-quality, internationally renowned product. Processing is very highly concentrated in that although there are more than 90 registered processing companies, only four process 70% of production.

(Source: *OLIVAE* 114)

3.7. Olive oil: marketing, domestic consumption and foreign trade

Argentina consumes less than a quarter of a litre of olive oil per person and year, compared with 12 litres in Spain. The reason is that Argentineans still have a strong taste for other seed oils, particularly sunflower oil. This is the main reason for the 6.19% drop in average yearly consumption between the two decades reported in Table 3.

Most of the oil (69% in 2007/08) is exported to other countries, because of its high cost compared with seed oils since it is five to six times more expensive than home produced soybean and sunflower oil. The United States is currently the main destination for Argentine exports, taking more than 10 000 t of extra virgin olive oil, followed by Brazil with 8 000 t. The third export destination is Uruguay, which imports 460 t, with Chile following behind with 380 t. Expressed in percentage terms, the United States takes 50% of the oil produced in Argentina while Brazil takes 40 per cent. The remaining 10% is exported to more than 35 countries. (Source: *OLIVAE* 116)

From the table below, it can be seen that exports have surged by 116.98% over the two decades.

Table 3. OLIVE OIL (Source: IOC)

	Average (t) 1990/91–1999/00	Average (t) 2000/01–2009/10	Change (%)
Production	8 950	16 150	80.44
Consumption	5 650	5 300	-6.19
Exports	5 300	11 500	116.98

A review of exports by format type shows very strong growth of bulk exports of olive oil, with a volume share of close to 20 000 t compared with almost 5 000 t of packed exports.

Importantly, 96% of the olive oils exported by Argentina are virgin oils, mostly belonging to the extra virgin grade; 3% are blended and 1% is refined. This gives Argentina a differential advantage when positioning itself as a world-standard supplier, given the extremely high quality of the oil it has available for export. (Source: *OLIVAE* 116)

3.8. Table olives: production and yield

In the 1999/00 season, Argentina was positioned ninth in the world league, with a table olive output of 58 000 t. Ten years later it was producing 220 000 t, keeping in step with world expansion.

This 380% rate of growth is partly explained by the fact that the new olive orchards planted in the 1990s have started bearing crops.

3.10. Table olives: marketing, domestic consumption and foreign trade

Consumption has not fluctuated much during the last decade, averaging 16 600 t compared with 15 750 t in the previous ten-season period (Table 4).

In 2007/08, Argentine table olive exports amounted to more than 90 500 t, showing a 29% increase on the season-before level of 70 000 t. It is interesting to note that these exports only amounted to 36 000 t at the end of the year 2000. This gives a clear indication of the marked growth in this segment.

Brazil was the chief destination for Argentina's table olives (2007/08 crop year), importing over 53 000 t worth more than 63 million dollars FOB. The United States was next, taking more than 22 000 t, which generated 35 million dollars in earnings. It is noteworthy that between the two of them, these countries took 83% of Argentina's exports. The remaining 17% went to several countries, notably Venezuela, Canada, Uruguay and Chile. (Source: *OLIVAE* 116)

Table 4.TABLE OLIVES (Source: IOC)

	Average (t) 1990/91–1999/00	Average (t) 2000/01–2009/10	Change (%)
Production	41 500	82 300	98.31
Consumption	15 750	16 600	5.39
Exports	27 200	58 750	115.99

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

OLIVAE 114***, Olive growing in the arid valleys of Northwest Argentina*** (provinces of Catamarca, La Rioja and San Juan), *M. Gómez del Campo, A. Morales-Sillero, F. Vita Serman, M. C. Rousseaux & P. S. Searles*. http://www.internationaloliveoil.org/store/index/48-olivae-publications

OLIVAE 116***, The local olive growing industry in Argentina: development, prospects and potential***, Argentine Olive Growing Federation. http://www.internationaloliveoil.org/store/index/48-olivae-publications