



AUSTRALIAN AGRIBUSINESS GROUP

MARKET OVERVIEW – THE AUSTRALIAN OLIVE INDUSTRY

Independent Assessment - November 2006

Industry Snapshot

- The promotion of the health benefits associated with eating olive oil and continuing interest in Mediterranean cuisine has seen demand for olives in Australia and across the world increase significantly in the past decade.
- Current estimates suggest that at present the number of commercially grown trees in Australia is between 7 and 9 million.
- The Mediterranean countries in Spain, Italy and Greece dominate the production of olives, together accounting for 67% of world production.
- Currently Australia produces 5,000 tonnes of olive oil, a massive 900% increase since 1998/99. It is estimated that Australian production will increase to 30,000 tonnes in the medium term.
- While Australia is a net importer of olive oil, contributing 6% to the world total, it is estimated that by 2010, Australia will produce enough olive oil to meet domestic demand and become a net exporter.
- The future of the Australian Olive Industry is reliant on producing a quality differentiated product and developing the export market.

1 Introduction

Native to Turkey, the olive tree spread to the Middle East and to the rest of the Mediterranean basin 6,000 years ago and is one of the oldest known cultivated trees in the world ¹. The first olive tree arrived in Australia in 1800 and over the next 150 years substantial commercial plantings were established, particularly in Victoria and South Australia. However a decline in prospects due to high costs saw the industry decline until there was an increased demand for olive products during the 1990's. This created a noticeable resurgence in the Australian olive industry, producing both olive oil and table olives.

There is masses of evidence to suggest that the olive has many associated health benefits, as well as a being a source of mono-saturated fat. Olives are also a source of antioxidants helping to protect against damage from free radicals and the formation of cancers. They are also said to help lower blood pressure, preventing or delaying the onset of diabetes and bolster the immune system. Consuming olive oil has also been linked to averting osteoporosis and memory loss and has also been found to prevent the skin from ageing.

The **olive oil** quality grading system is based on both chemical and taste tests. The four major categories of olive oils are virgin olive oils, refined olive oils, pure olive oil and olive pomace oils. Virgin olive oils are the oils obtained from the fruit of the olive tree solely by mechanical or other physical means; extra virgin olive oil is considered the best-quality grade and is the primary focus of most olive oil producers in Australia as it attracts a premium price.

Australia has the ability to produce some of the finest olive oils in the world, with 95% of its oils produced obtaining extra virgin oil status ². Refined olive oils are obtained from virgin olive oil by refining methods used to improve the odour, flavour and taste. Pure olive oil is a blend of refined and virgin olive oil. Olive pomace oils are created when the olive pomace (solid material left after the first oil extraction) is treated with solvents to extract the remaining oil ².

Olives have traditionally been harvested by hand, however for an economically viable large-scale operation in Australia, mechanical harvesting is essential. Most olives throughout Australia are harvested mechanically with varying levels of technology used. Over 90 per cent of Australia's olive production is used for oil ². The other 10 per cent of olives are consumed as a **table olive**. The proportion of table olives produced may decline in the future, with many of the new large scale plantations targeting oil production.

2 Growing Regions In Australia

The similar climatic conditions in Australia to that of the olives' native region, the Mediterranean, mean that olives grow extremely well in many parts of Australia. The preferred growing climate for olives is cool, wet winters and long, dry summers². These conditions are ideal for olive growth as they are cool enough in the winter for flowers to bud and warm enough in the summer for fruit to ripen.

In Australia, the main growing regions are the Murray River region of north west Victoria and south west New South Wales, central Victoria, Darling Downs region of south east Queensland, Riverina region of southern New South Wales, Adelaide Hills region of south east South Australia, Gwydir River region of northern New South Wales, Gingin, north of Perth, and south west Western Australia (Figure 1).

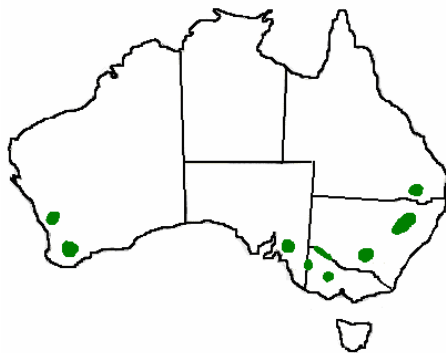


Figure 1 Australian olive growing regions.

Olives will grow in a variety of soil types provided that they are well drained. It is recommended that to achieve maximum yields olive groves need to be irrigated².

The most common olive varieties grown in Australia include arbequina, barnea, Californian mission, coratina, frantoio, FS17, koroneiki, leccino, nevadillo blanco, pendolino, and picual. However, cross-fertilisation of olive varieties usually benefits yield. As such, most olive groves have at least three or four different varieties planted in alternating rows².

Olive trees tend to be biennial bearers, commencing commercial bearing around 3 to 5 years after planting. Maximum production occurs between years 7 to 8². During 2005 it was estimated that there was between 7 and 9 million olive trees in production throughout Australia.

3 International Supply and Demand

The major olive producing countries are Spain, Italy and Greece, with 29%, 26% and 12% of world production respectively⁴. Other leading olive producing nations include Turkey (9%), Syria (5%), Tunisia (4%) and Morocco (3%). Australia is a minor producer on the global scale accounting for just 0.01% of production (Figure 2)⁴.

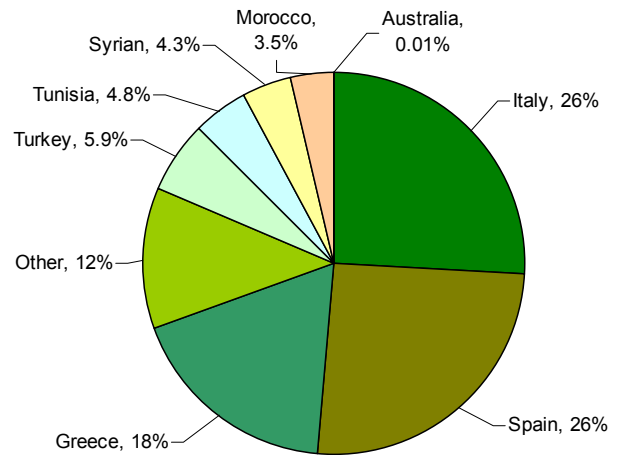


Figure 2 Major olive producing countries, percentage of world olive production, 2005⁴.

World raw olive harvest levels have remained relatively steady over the last nine years, after a strong increase in the mid-nineties. Average annual world olive production from 2000 to 2004 was 15.6 million tonnes⁴.

World olive oil production and consumption trends have been closely aligned for the past fourteen years, with world consumption outstripping world production in 2005/06. World olive oil production during 2003/04 reached a record level of almost 3.2 million tonnes. Since then production has fallen, with 2.6 million tonnes produced during 2005/06 (Figure 3)⁵.

The worldwide promotion of olive oil as a healthy alternative to other oils and continued interest in Mediterranean cuisine has resulted in world olive oil consumption increasing by over 46% since 1995/96 (Figure 3)⁵.

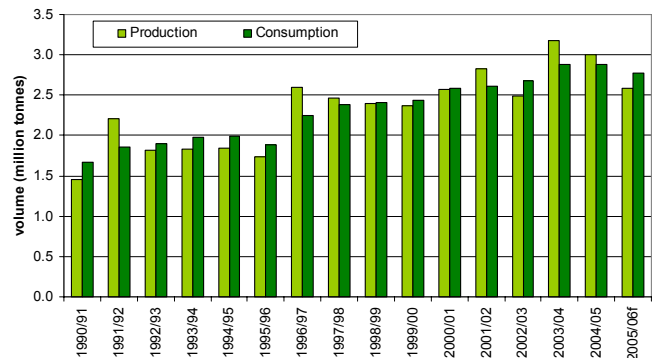


Figure 3 World olive oil production and consumption from 1990/91 to 2004/05⁵.

World trade in olive oil has increased significantly in the last decade with 682,500 tonnes imported during 2005/06, a 137% increase since 1995/96. The EU and the USA are the largest importers of olive oil accounting for 34% and 38% of world imports respectively. Other major olive oil importers include Japan and Australia. Both countries have seen significant import growth over the past decade due to increased consumer demand (Figure 4)⁵.

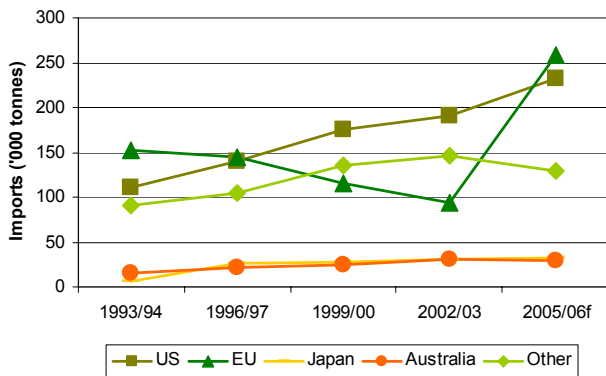


Figure 4 Major olive oil importing countries (1993/94 - 2005/06) ⁵

The largest producers of **olive oil**, Italy and Spain, are also dominant exporters of olive oil, together accounting for almost 50% of world olive oil exports (Figure 5). Unlike other major exporters, such as Tunisia and Turkey, Spain and Italy's exports have consistently risen over the past decade, suggesting more reliable production levels in these countries ⁵.

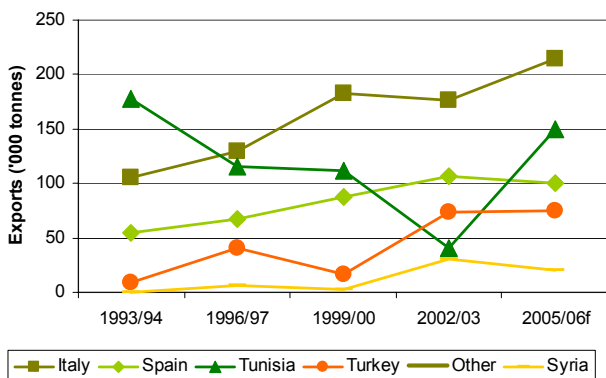


Figure 5 Major Exporting countries olive oil from 1992/93 to 2004/05 ('000 tonnes) ⁵

The 2005/06 harvest saw world imports at 682,000 tonnes and world exports at 654,000 tonnes ⁵. This situation with imports larger than exports indicates a lowering of world stocks, leading to an overall healthier position for the industry.

Although the majority of olives grown throughout the world are used to produce **olive oil**, **table olives** account for around 10% of production. Table olives are used for consumption as a whole fruit or as food ingredients ⁵.

In 2004/05, world production of **table olives** recorded a slight increase on the previous year at 1.7 million tonnes (Figure 6) ⁵. Consumption has been growing consistently in recent years, due primarily to the fact that when a country has a bumper season, the extra product is generally consumed immediately, resulting in seasonally low prices. Consumption has also risen due to increased product familiarity, better presentation, enhanced quality, population growth and consumers gaining higher purchasing power ⁴.

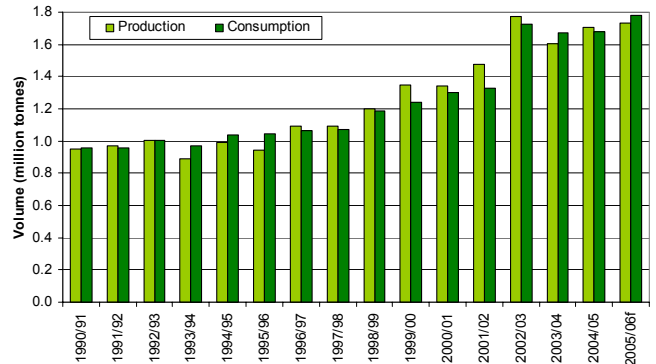


Figure 6 World table olive production and consumption from 1990/91 to 2005/06 ⁵.

Worldwide, a total of 484,000 tonnes of **table olives** were exported in 2005/06 ⁵. Of this, Spain dominated exports, accounting for 39% of trade. Other significant exporters were Morocco and Turkey. Like **olive oil**, the USA dominates the imports of **table olives** accounting for 25% of the market, while the EU, Brazil and Switzerland are other major importers ⁵.

Due to the increased world **olive oil** and **table olive** production, it is imperative for the industry to expand their consumer base in both producer and non-producer countries. This will involve continuing to improve the quality of production while simultaneously strengthening a consumption promotion policy, where all parts of the production chain are decisively involved ⁵.

4 Australian Supply and Demand

Australia has recently seen a large increase in interest for olive production as an agribusiness venture, as a result of several factors including a large rise in domestic demand for olive products and the advent of mechanised olive harvesting. This harvesting method has allowed Australian olive producers to become more competitive with Mediterranean producers ². Domestic production of olive oil reached 5,000 tonnes during 2005/06, a massive increase of 900% since 1998/99 ⁵. It is predicted by some industry experts that Australian olive oil production figures will increase significantly by the end of the decade to around 30,000 tonnes.

Although domestic production has increased significantly, with domestic consumption at 32,500 tonnes during 2005/06, Australia is a net importer of **olive oil**. Australia exported 1,500 tonnes of olive oil during 2005/06 and imported 29,000 tonnes to satisfy consumer demand. As consumers preference for olive oil has increased, consumption and hence imports have risen significantly, with record imports in 2002/03 (Figure 7) ⁶.

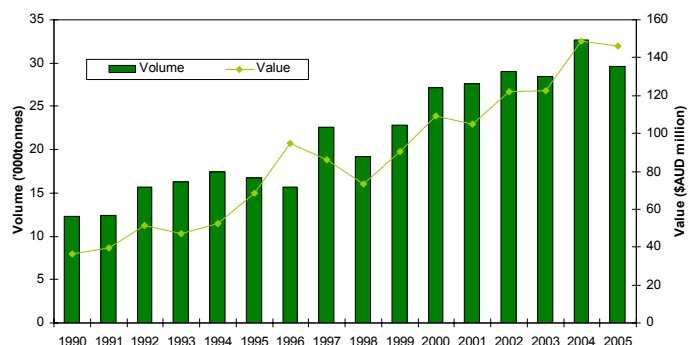


Figure 7 Australian imports of olive oil by volume from 1990 - 2005 ⁶.

Australian **olive oil** imports have increased almost 90% in the last decade, with imports valued at \$146 million in 2005. Growth in import volume has been following a similar trend to import value over recent years (Figure 7) ⁶. With Australia's ability to supply much of the domestic demand for olive oil increasing in the near future, it is expected that the volume of olive oil imports will decline substantially.

There has been substantial growth, particularly in 2005, in both the volume and value of exports over previous years (Figure 8) ⁶. The massive increase in production seen in 2005 has been due to large scale olive groves coming on line with production. However, even with sharp growth in recent times, Australian **olive oil** and **table olive** exports are still insignificant on the global scale, accounting for only 0.01% of total world exports ⁴.

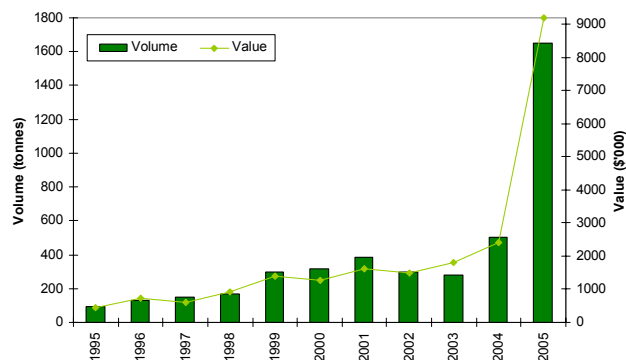


Figure 8 Australian exports of olive oil by volume and value from 1995 to 2005 ⁶.

As domestic production increases, exports of **olive oil** will continue to rise. It is estimated by 2010 that Australian olive oil production will be at least 30,000 tonnes, and hence there will be enough olive oil produced within Australia to meet current domestic consumption needs ⁷ (Table 1).

Some industry experts believe that within a decade, Australia will increase their export market presence from below 0.01 %, to a more significant (relatively) 1%. The good news continues with the forecast that Australia will supply 5% - 7 % of the worlds extra premium oil export market within the decade ².

Australian's consumption of **table olives** has increased by 70% since 1995/96, with 17,000 tonnes consumed during 2005/06 ⁵. Consumption is forecast to rise further as consumer demand increases. In 2005/06, Australia produced 4,000 tonnes and imported 13,500 tonnes of table olives.

Australian Agribusiness Group's (AAG) estimation of the amount of **olive oil** that will be produced in Australia by the end of 2010 (Table 1) is based on the potential production of the number of trees that are currently planted.

	Low case	Base	High case	Note
(a) # trees planted nationally	8 million	8 million	10 million	1, 2
(b) # hectares planted nationally	26,700	26,700	33,333	1, 2
(c) Yield of olives(tonne/ha)	8	14	18	1
(d) National Yield of olives (tonnes) (b x c)	213,600	373,800	599,994	3
(e) Proportion of olives produced to olive oil	90%	90%	90%	1
(f) Oil yield	16%	17%	18%	1
(g) National Yield of olive oil (tonne) (d x e x f)	30,758	57,191	97,199	3

1 – Paul Miller, President of the Australian Olive Association, April 2005, 2 – AAG research, 3 – calculated

Despite over a 100% difference in the AAG low and high case scenarios, there is evidence that there will be a large increase in domestically produced olive oil over the next 5 years. The high case scenario suggests that production could be up to three times the current import volume and current domestic consumption. Hence, it is vital that larger local producers focus on export markets, since Australia's local markets are likely to become saturated with domestically produced products in the near future. The large groves (Managed Investment Schemes) AAG is familiar with are already exporting product in substantial volumes.

Approximately 87% of all olive oils currently sold in Australia are imported. The companies deriving returns from this market will not welcome import replacement products, such as domestically produced olive oil, reinforcing how important it is for the Australian olive industry to devise methods to maximise export success in the future.

Key future markets for Australia are those with significantly expanding imports of olive products, such as the US and Japan who have seen dramatic increases in imports over the past decade of 115% and 97% respectively ⁵.

5 Possible Price and Yield Scenarios

There are a variety of factors that impact the global market for each grade of olive ⁸. Factors contributing to the dynamic nature of olive returns include exchange rates, labour, land values, production costs, world seasonal production and global consumption along with marketing and production.

Despite consumption rates of olive oil growing by approximately 9% per annum, domestic production is set to exceed domestic consumption by the end of the decade ⁹. In addition strong competition within the local and international industries may place downward pressure on prices, unless adequate product differentiation occurs, to attract a premium price ¹⁰ or large volumes are exported.

Olive oil is traded on several exchanges in Europe, with the three largest Bari (Italy), Heraklion/Messinia (Greece) and Jaén (Spain) accounting for approximately 79% of the olive oil produced in the world. Therefore, the performance of these prices impacts pricing in other regions of the EC and in other producer countries, particularly non-EC olive oil exporters ¹¹. The price of olive oil on these three exchanges has trended upwards over the previous six years (Figure 9) ⁵.

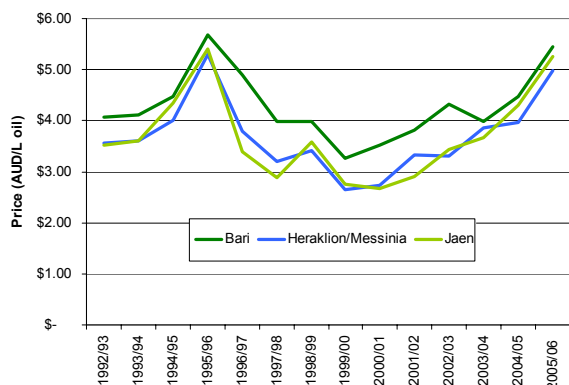


Figure 9 Price of extra virgin olive oil 1992/93 – 2005/06 ⁵

The fruit yield and oil content determines the yield of olives. Many factors contribute to the final yield of olives such as the variety, warmth of season, time of harvest, management of trees (i.e. pruning) and any unusual weather conditions (i.e. frosts and droughts).

In Australia, the average oil content ranges from 16% - 22%, with fruit yields ranging from 8 - 20 t/ha. The average yield of olives in Australia is approximately 14 t/ha, on the proviso that the grove is planted in the right location and under good management ⁷.

6 Future Outlook and Conclusions

Despite the relatively small size of the industry the future success of the Australian olive industry seems to lie within a combination of select, well defined and heavily targeted domestic markets and a high quality, reliable and distinct export product which can establish a strong and notable international reputation ¹².

There are several challenges that the Australian olive industry must overcome to be competitive in both the domestic and global arena. These challenges include ensuring Australian producers can consistently produce large volumes of high quality product, strengthening product differentiation for 'boutique' producers and implementing a successful marketing campaign to maintain competitiveness.

Although challenges exist for Australian olive producers, the industry has several advantages over its European counterparts. Firstly, there is a more prevalent use of irrigation, creating a more stable environment for the olive groves and as such, more reliable yields ⁷. Secondly, due to the low level of pests and diseases the Australian olive industry has the potential to be able to market significant volumes of organically grown products, at premium prices ².

As a result of decreased margins, it is anticipated that smaller scale olive enterprises will be unable to compete on price with imported products and the larger scale domestic enterprises. To survive, these smaller enterprises will need to establish niche markets with boutique branded products. There are already a significant number of these types of brands on the market.

Australian olive oil will also be able to compete more successfully on both the domestic and global markets in the future by implementing best practice techniques, planting the world's best varieties, using modern technology (mechanical harvesting, irrigation etc) and improving economies of scale ². In addition, with Australia producing some of the world's finest olive oils, the Australian olive industry must promote its product as being of the highest quality in order to gain markets where premium prices can be commanded.

In summary the ultimate future success of the Australian olive industry is dependent on both reliable production levels and export market development. Those within the industry who have the ability to deal with the development stage that the Australian olive industry is experiencing are likely to succeed.

7 References

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