



AUSTRALIAN AGRIBUSINESS GROUP

# MARKET OVERVIEW – THE AUSTRALIAN ALMOND INDUSTRY

Independent Assessment - January 2006 Update

## Industry Snapshot

- Almonds are widely acknowledged as not only being one of the most versatile edible nut, but also the healthiest.
- The Australian almond industry is made up of increasingly large scale and intensively managed orchards predominantly located in Australia's South East which are capable of producing the highest yields in the world.
- There are six major almond producing countries with the USA dominating and producing 85% of global production.
- Although almond production in Australia has increased three fold since 1990, the Australian contribution to the export market is small, and as a result is not likely to have any major bearing on world price.
- Australia's high quality almonds are well placed in the global almond industry, with potential to increase productivity and competitiveness, factors in the continued success of the Australian almond industry.

## 1 Introduction

Of all edible nuts, almonds are one of the most versatile. Not only can they be consumed raw, but used in a variety of cooking, confectionary, cereals and baked goods <sup>1</sup>.

Recently, momentum has increased in the promotion of almonds in developed countries, emphasizing the advantages of almonds as a healthy food <sup>2</sup>. The 'healthy' mono-saturated fat of almonds, reduce bad cholesterol in the body, resulting in a reduced risk of heart disease and has also shown to lower the risk of strokes.

With its very hot and dry summers, the Australian is very well suited to the production of almonds. Due primarily to the large size, flavour, light colour and consistent quality of nut produced, Australian almonds are highly regarded overseas. Australia's clean and green production reputation also assists with Australian almond desirability <sup>2</sup>.

Counter seasonal production is Australia's main competitive advantage with Australian almonds coming on stream when the major producing countries like USA and Spain have low stocks of fresh nuts. Approximately 95% of almonds are grown in the northern hemisphere. Due to Australia's ability to produce consistent yields compared to that of California, global consumers can be dependent on a quality, fresh alternative <sup>3</sup>.

Almond yields per hectare in Australia are substantially higher than the world average and despite the dry conditions experienced in Australia recently, there has been no noticeable decline in yields. Australia produces 10,000 tonnes of almonds annually, which comprises approximately 1.0% of global production, which in 2004 consisted of 1.55 million tonnes shelled. Because of this, Australia plays a small role in the world almond market <sup>2</sup>.

The Almond Board of Australia which was formed in 2002 by the Australian almond industry. Acting on behalf of stakeholders in the industry, the Almond Board develops and implement strategic research and marketing initiatives in the best interests of the almond industry <sup>4</sup>.

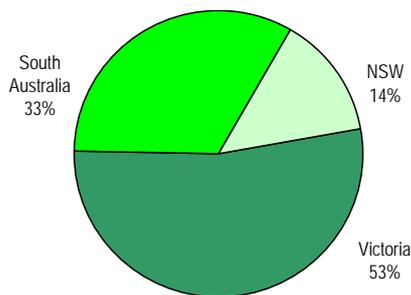
## 2 Growing Regions In Australia

The first almonds grew in the South Australia Central Adelaide Plains region and from there, spread to other districts including the Central Adelaide Plains, Southern Districts, Riverlands and Northern Adelaide Plains <sup>1</sup>. Due to the favourable growing conditions and reliable water sources, almond growing commenced across North Western Victoria and Southern NSW over 30 years ago. Due to urban development, production in the Central Plains has gradually ceased, at the same, production in the Riverlands and Sunraysia regions have experience dramatic development <sup>1</sup>.



**Figure 1** Australia's main regions of almond production <sup>14</sup>.

Victorian almond production is predominantly in the north western regions of Sunraysia and Lindsay Point (Figure 1) and accounts for 53% of the total Australian production (Figure 2). These operations are mostly large scale, large investment, and high yielding.



**Figure 2** Proportion of Australian almond production by state <sup>1</sup>.

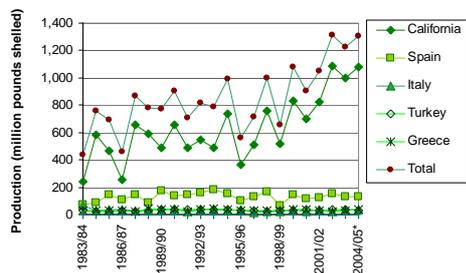
In South Australia there are also the smaller, more traditional Murray River and Southern Districts (Figure 1), with the overall almond production in this state being 33% (Figure 2) of Australian production. Southern NSW (Figure 1) makes up 14% (Figure 2) of Australian production on generally intense and highly mechanised orchards <sup>1</sup>.

### 3 International Supply and Demand

There are 6 main almond producing countries globally with a further 44 that are only minor producers like Australia.

Approximately 85% of global almond production in 2005 was produced by the USA, with most of this from California <sup>5</sup>. Other major producing countries include Spain (9.9%), Turkey (2.3%), Greece (2.5%) and Italy (2.5%) <sup>5</sup>. Notably, Spain's growing area is three times that of the USA, but approximately 75% less tonnes of almonds are produced <sup>4</sup>.

The global production of almonds is clearly dominated by the USA (Figure 3), with no immediate threat of rivalry from any other producers illustrated by the total global production trendline mirroring the USA production trendline.



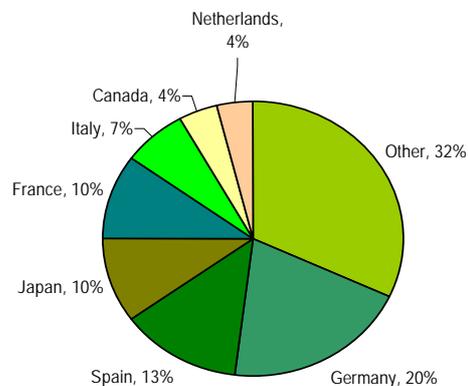
**Figure 3** Major Producing Countries of Commercial Almond Production 1983 - 2005 <sup>2</sup>.

Almond nut production decreases when trees reach about 20-25 years of age or more, so orchards are often replaced after that time.

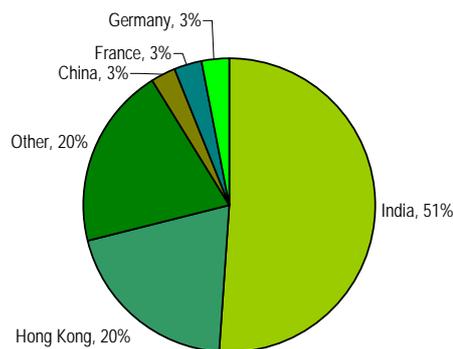
In the past low removal rates of USA almond bearing acres has resulted in 25% of trees now being over 20 years old <sup>3</sup>. However favourable returns in the USA has encouraged many almond growers and investors to plant new trees with USA nurseries predicting that plantings will be at record levels in 2005, 2006 and 2007 <sup>6</sup>.

Therefore we may likely witness a decrease in short term production from the USA, while these older trees are being replaced. Nevertheless it's foreseeable that by the end of the decade there will be a record supply from the USA <sup>6</sup>.

Although Spain is the world's second largest producer of almonds, it is the second largest importer of shelled almonds (Figure 4), behind Germany owing to the fact that between 50-60% of these imports are subsequently exported to neighbouring countries <sup>13</sup>. As can be seen in (Figure 5), India continues to dominate the importing of in-shell almonds as these are the preferred mode of import of almonds into the country.



**Figure 4** Leading importers of Shelled Almonds <sup>13</sup>



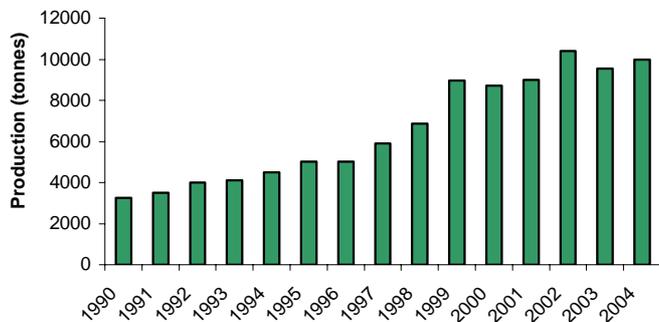
**Figure 5** Leading importers of In-Shell Almonds <sup>13</sup>

There is continued strong demand from Asian countries, including China and Japan, which this is likely to continue in the future. Asian demand is driven largely through a combination of the average income increasing and almonds being seen as a prestige symbol.

### 4 Australian Supply and Demand

The area of almond orchards in Australia was approximately 15,000 acres or 6,000 hectares in 2003 and has increased significantly over the past few years <sup>8</sup>. No more recent figures are available at this current.

Almond production has vastly increased in the last decade and a half, with production three times that of the 1990 levels <sup>4</sup>. However, it is apparent that recent production growth has remained fairly constant (Figure 6) due to the major production regions experiencing dry conditions with. Excluding 2003, we have seen a very slight increase in Australian almond production in the past five years <sup>4</sup>. Due to newer, more extensive orchards being set up in Australia which incorporate modern irrigation systems, further dry conditions will have less of an impact on Australia's almond production.



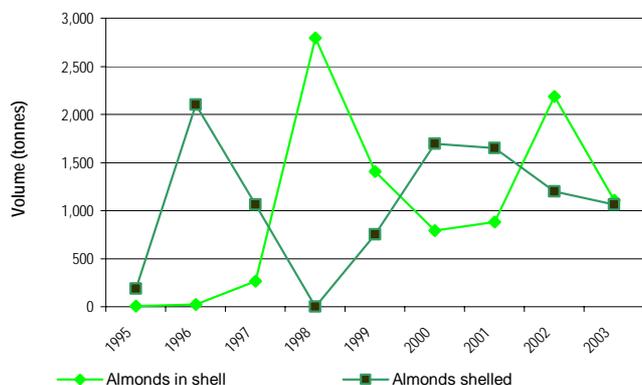
**Figure 6 Australian Production of Almonds (shelled) 1990 – 2004<sup>5</sup>.**

The volume and destination of Australian almond exports fluctuates from year to year. This is due primarily because of a lack of buyer loyalty in the international almond markets, with erratic purchase patterns and demand volumes of major customers<sup>1</sup>. Strong marketing links are essential for Australian growers.

Almonds are highly demand elastic commodities as a result of their prominence in low to middle class diets. Demand has been stimulated in recent years by lower prices and an increase in global consumption. Economic development suggests that societies' middle class population will grow over the next decade and as such the demand trend is set to continue<sup>1</sup>.

Australia's major almond export destinations include the United Kingdom, Germany, France, Spain, the Middle East, China, India, Japan and South East Asia<sup>1</sup>.

Australian almond exports dramatically improved in the late nineties before declining slightly in 2000 due to drought affected crops and increasing cultural diversity leading to increased domestic consumption (Figure 7).



**Figure 7 Australian Almond 1995-2004<sup>5</sup>.**

As is evident in Figure 7, that over the last ten years there has not been any dominance in export volumes between either form of the "shelled" or "in shell" almond commodity. Both of these forms and the overall almond volumes shipped internationally on a yearly basis have varied greatly since the Australian industry first made a mark in 1996<sup>4</sup>.

The strong domestic production growth in the last decade has resulted in a significant decrease of almond imports into Australia. From 1991 to 2001 imports declined by 83%, while the value of these imports had reduced by nearly 100%<sup>4</sup>.

However, current Australian production now exceeds domestic demand and as such imports are likely to decrease further, but it is unlikely they will completely cease<sup>4</sup>. The export market will be the future focus of the Australian almond industry through both value added exports and direct exports.

In general, Australia's almonds are of a higher quality and value when compared to the almonds that are entering Australia which are mostly smaller and of lower quality. There is little threat to domestic production as a consequence. Australia's export almonds are targeted at generating returns of over \$9/kg, while the approximate price of import almonds are \$5/kg<sup>9</sup>.

## 5 Possible Price and Yield Scenarios

The USA essentially determines the export and domestic almond prices with regular ups and downs in Australia as a direct result of USA supply and demand. Australia has little to no influence on the global industry. It is not likely that the USA will be challenged in output volume by any other producers in the near future. However, market access might be gained by competitors via product differentiation of quality, variety or price.

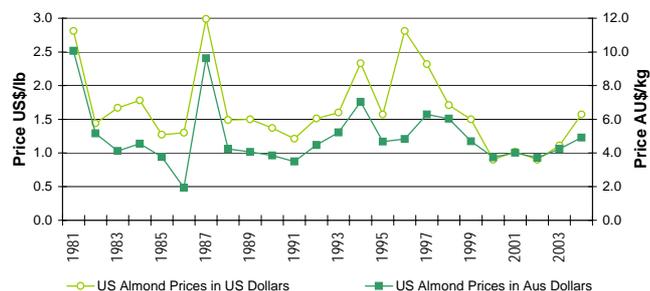
Influences on Australian almond prices have included the US:AUD exchange rate and the increasing demand for quality almonds produced counter seasonally to that of the USA, which has resulted in the gradual increased competitiveness of the Australian industry<sup>2</sup>.

Due to imported almonds being subject to 5% import duty, freight and handling costs, domestically traded Australian almonds currently receive a premium price. In the next ten years it is likely that the import duty will be gradually and completely reduced, due to the free trade agreement.

Most industry stakeholders believe that Australian almonds have been compromised by the recently formulated free trade agreement with the USA. Predictions of up to a 5% drop in Australian grower returns may occur upon ratification of the agreement for almonds sold in Australia<sup>1</sup>.

The average price (quoted by Almondco) that Australian growers received in 2004 was approximately \$6.42/kg (shelled), an increase of \$0.62 on the 2003 average, with \$6.64/kg being considered a high price return for average quality almonds<sup>1</sup>.

In 2000-2002 almond prices for US producers reached the lowest in almost a decade as a result of an abundant supply (Figure 8)<sup>4</sup>. Since then, prices have recovered slightly, with increasing prices forecast for the fourth straight year<sup>10</sup>.



**Figure 8 Almond Prices Ex US Prior to Transport Costs and Other Duties 1981-2004<sup>5</sup>.**

It is interesting to note that USA almond prices have increased over the past few years (Figure 8) despite the record production levels (Figure 3) indicating the almond market is currently in a strong position. Global demand appears to be outstripping supply and increasing prices to rarely seen before levels in Australia.



It is predicted that US almond production will decrease slightly in the near future as new almond trees are planted in place of older, less productive trees, with strong prices making it viable for US almond farmers to do so <sup>10</sup>. How this and the predicted larger crops that will come onto the market late in the decade remains to be seen.

Larger growers and suppliers of premium quality product are likely to be capable of demanding higher prices than those listed above, which are for average quality almonds.

Almond yields vary considerably according to the location, expertise of the grower and the varieties/root stocks used. Whilst the bottom end of growers achieve yields of only 620 kg/ha, the industry standard is at 3200 kg/ha <sup>11</sup>

The almond industry has invested in trials to identify improvement in irrigation, fertigation, and tree management to maximise yields and growth rates. The impact of these trials are now working their way into commercial orchards, which are regularly exceeding yields of 3200 kg/ha, achieving 3460 kg/ha <sup>11, 7</sup>.

As newer plantings come on line, the potential is to achieve yields exceeding 4000 kg/ha without sacrificing nut size or quality <sup>7</sup>. Even established orchards can benefit from these new techniques. These yields will put Australian growers at the top end of the world yields and depend on ongoing research and development, exacting management standards and absolute commitment to carefully employing best practices.

## 6 Future Outlook and Conclusions

The recent favourable economic placement and improvement in the Australian almond industry seems set to continue and increase in strength in the global market, at least in the short to medium term.

Considering the record harvests produced between 2001 and 2004 despite the major Australian production regions experiencing a drought throughout much of the growing season, it is possible to forecast that Australian production may increase by 65% (6,000t) by 2007 <sup>9</sup>. Bearing in mind recent increased domestic planting rates, Australia could possibly produce up to 15,000t (kernel) per annum beyond this time <sup>9</sup>.

The reason for the increased plantings of almonds in Australia include the booming prices for almonds, strong international demand for Australian almonds and our ability to compete against the USA, with lower costs and minimal risks due to irrigation and favourable climatic conditions <sup>12</sup>.

The demand for high quality, premium priced almonds is forecast to grow in the next decade, giving Australia the realistic opportunity to maintain and further improve the niche market that suppliers are currently enjoying in this healthy export industry <sup>2</sup>.

The continued development and promotion of the Australian almond industry is aided by the major strengths that it contributes to the global market, such as quality, supply reliability and environmentally sound production processes <sup>2</sup>.

It is expected that there will be a rise in global demand of almonds and an increasing focus on the export market, with India and China contributing considerable strength. As the Australian almond industry is particularly focused on these countries, the future is reasonable positive <sup>1</sup>.

The close proximity of the expanding Asian markets to Australia, along with the possibility of the USA experiencing unfavourable exchange rate relationships with this market, suggests that further competitive advantages may be gained in the almond industry <sup>1</sup>.

Gaining and protecting market access, protection from exotic disease threats and the development of new varieties are all key issues for the future success of the Australian almond industry <sup>9</sup>.

The increasingly documented health benefits of almonds combined with a strongly desirable production reputation has led to a continually expanding global trend in almond consumption, which should continue to give Australia consistent and expanding strength in global almond markets.

The production of the Australian almond industry should continue to grow and be increasingly profitable, as long as climatic and financial conditions continue to assist the industry.

The opinions and desires of almond consumers to choose Australian produced almonds, both domestically and internationally, is set to remain a consistent trend in the foreseeable future. Because our 'clean and green' image' is the driving force behind the buying decisions of many consumers, the maintenance of this image is imperative to the continued global demand of our almond products.

The price of almonds is set to become even more affordable to a higher percentage of the population due to an increase in the size of the middle class, as suggested by economic development forecasting. Global and domestic demand for almonds should therefore also increase, especially when past trends have highlighted the demand elasticity of the product and the fact that Australia has such high quality almonds on offer.

The Australian almond industry should continue as a successful, though minor world player, especially with further production development and the forging of closer long term relationships with key export customers.

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