Potential for Establishing an Olive Industry in Australia (DAQ-210, 98/5)

A report for the Rural Industries Research and Development Corporation

by D McEvoy, E Gomez, A McCarrol, J Sevil

January 1998

RIRDC Publication No 98/5
RIRDC Project No DAQ-210

ISBN 0 642 54028 4
ISSN 1440-6845

Potential for the Establishment of an Olive Industry in Australia
Publication no. 98/5
Project no. DAQ-210

RIRDC Contact Details

Rural Industries Research and Development Corporation
Level 1, AMA House
42 Macquarie Street
BARTON ACT 2600

PO Box 4776
KINGSTON ACT 2604

Phone: 02 6272 4539
Fax: 02 6272 5877
Email: rirdc@rirdc.gov.au
Website: http://www.rirdc.gov.au

Last reprinted in August 1999
Printed on environmentally friendly paper by Canprint

Foreword

This report assesses the market potential for the development of an olive industry in Australia. It contains a brief examination of the commercial viability of the industry, based on an analysis of the three main topics:

- trends in the international production of olives and trade in olive products;
- potential consumer segments and the product characteristics viewed as essential by each segment;
- whether Australia could compete with imported olive products.

The report uses secondary data obtained from a review of the literature and primary data collected using focus groups, in-depth interviews and semi-structured questionnaires. The field research was conducted in Victoria, South Australia and Queensland.

This study, an addition to RIRDCs diverse range of almost 400 research publications, forms part of our New Plant Products R&D program, which aims to facilitate the development of new industries based on plants or plant products that have commercial potential for Australia. The report also complements our earlier olive reports, all of which continue to be in high demand.

Most of our publications are available for viewing, downloading or purchasing online through our website:

- downloads at www.rirdc.gov.au/reports/Index.htm
- purchases at www.rirdc.gov.au/pub/cat/contents.html

Peter Core
Managing Director
Rural Industries Research and Development Corporation

Acknowledgments

The authors are grateful to the Rural Industries Research and Development Corporation (RIRDC) for providing funding for this project, and also to the Committee and members of the Australian Olive Association for their support in kind.

The authors would like to express their appreciation to both the proprietors and executives of the importing, exporting, wholesaling, retailing and manufacturing organisations that helped to obtain market research information. It is also appropriate to thank all those who participated in the many focus groups and personal interviews throughout Australia. Special thanks to Mr Peter Maroudas, Ms Zannie Flanagan and Ms Janice Hunter for their assistance with consumer market research in South Australia and Victoria.

The authors would further like to thank officers from the Food and Agriculture Organization (FAO) in Rome, Mr Gerry Davies and Ms Susan Sweeney from Primary Industries South Australia, Ms Philippa Goodrick from the Australian Olive Oil Association and the Burnett Valley Olive Growers Association for their assistance in obtaining statistical information.

The authors are grateful to members of the reference group for providing direction in the development of this project in its preliminary stages. Special thanks to Mr Grant Vinning for his valuable comments.

Finally, the authors would also like to thank Mrs Janelle McPhail and Mrs Marilyn Healy from the University of Southern Queensland (USQ) for helping with consumer research.

Contents

Tables

Figures

Executive Summary

General interest in the production of olives has resulted in establishment of an increasing number of olive groves across Australia. This interest has been partially driven by the increased value of imports of olive products into Australia, from $30m in 1988 to $115m in 1996.

The essential purpose of this report is to assess the market potential for the development of an olive industry in Australia. It contains a brief examination of the commercial viability of the industry, based on an analysis of the three main topics:

- trends in the international production of olives and trade in olive products;
- potential consumer segments and the product characteristics viewed as essential by each segment;
- whether Australia could compete with imported olive products.

The report uses secondary data obtained from a review of the literature and primary data collected using focus groups, in-depth interviews and semi-structured questionnaires. The field research was conducted in Victoria, South Australia and Queensland.

Production of Olives and Trade in Olive Products

The report identified Spain and Italy as the main olive producing countries, though significant production also occurs in Greece, Turkey and Tunisia. Interestingly, in Egypt production has increased markedly during recent years.

Spain is the largest exporter of olive oil and Italy is the largest importer, obtaining the bulk of its supplies from Spain, Greece and Tunisia. For preserved olives, Spain is the largest exporting country and the United States the main importer.

In Asia, it appears that some potential opportunities are emerging in Japan, China and Hong Kong for the export of olive products. In recent years, there has been noticeable growth in imports of olive oil into Japan, whilst in Thailand imports have been irregular. For preserved olives, growth in imports has occurred in China, Japan and Hong Kong; other countries registering imports include Malaysia, South Korea, Macau, the Philippines and Indonesia.

In the past the European olive industry was considered inefficient as a result of fragmentation and was characterised by the use of traditional methods of growing, harvesting and processing. However, as a result of industry rationalisation, technological improvements and government assistance, the European industry is expected to be very competitive in the future.

The Australian Market

In 1996, Australia imported $115.4 million of olive products, with olive oils accounting for $94.8 million and table olives for $20.6 million. The main suppliers are Spain, Italy and Greece, though recently Morocco and Israel have also emerged as important suppliers. Although the value of imported olive products has increased during the past 10 years, the increase in volume terms has not been as significant, as the unit value of the product has risen.

Exports of olive products from Australia totalled $1.25 million in 1996, the main overseas markets being in the Asia-Pacific region. Most products exported were re-exports originating in Italy and Spain.

Marketing Research

The marketing research identified four groups, or market segments, as being potential users of olive products in Australia: consumers, the food service sector, importers/exporters and food manufacturing industries. From the preliminary research price, quality and health benefits were found to be the main factors affecting olive oil usage among these four groups. Although brand loyalty has not been developed, consumers appear to be satisfied with the quality and price of imported olive oils. Thus, for an Australian olive industry to seize a share of the market, Australian products would need to match or improve upon the quality and price of imported products. Account also should be taken of the fact that the bulk of olive oil imported is 'pure' olive oil, while the Australian industry is geared to the production of extra-virgin olive oil. Extra-virgin olive oil is still perceived as a luxury oil used only in small quantities. Another relevant factor is that there are a great variety of edible oils in the market that have similar health benefits to those of olive oil (for example canola, grapeseed, sunflower and sunola oils). The prices of these oils are significantly less than that of olive oil.

Consumer Market

Research has identified a series of factors that could favour the development of an Australian olive industry:

- consumers' general recognition of olive products;
- knowledge of the health benefits associated with olive oil;
- the likelihood that consumption for olive products will increase as consumers become more 'cuisine educated';
- the absence so far of established loyalty for any particular brand of imported products, providing an opportunity for consumer loyalty to be developed amongst Australian brands.

However, there are also a number of less positive considerations which could affect the development of an Australian industry:

- the main factors influencing consumers' decision are quality and price, but consumers perceive imported products to be of better quality and competitively priced;
- competition in the oil market will be experienced not only from imported olive oils, but also from other oils such as canola oil, grapeseed oil and sunflowers oil;
- there is relatively low consumer awareness of Australian-produced olive products, olive production being associated with Mediterranean countries. However, this could provide an opportunity for an Australian industry to develop strategies to increase the awareness of Australian-produced products.

Food Service Market

It would appear that there is an opportunity for the Australian industry to supply olive oil products to the restaurant trade. The size of this market will depend on the price/quality characteristics of the Australian product. The restaurant trade is very competitive and price-conscious. Most restaurateurs will not compromise quality for price, and believe that imported olive oils are meeting their needs in terms of quality at a competitive price. Australian olive oils are perceived as of excellent quality but expensive.

This suggests that if the restaurant trade is to use more Australian olive oil, its price will need to be competitive relative to the imported product of similar quality. In the restaurant trade there is also competition from other vegetable oils such as grapeseed, canola and sunflower oils.

Importers and Exporters

The research suggests that most importers and exporters are prepared to distribute Australian olive products. They recognised a number of advantages in obtaining their products locally, such as lower administrative costs and greater control over quality. However, importers and exporters expressed concern at the high price of Australian products. They indicated that unless prices of the Australian products become more competitive in relation to quality, they would not risk their business arrangements with their existing clientele by promoting Australian products. Furthermore, importers and exporters need to be assured of a reliable supply of consistent quality before committing themselves to the distribution of Australian olive products.

Food Manufacturing

There are limited opportunities for Australian olive oils to be used in the manufacturing industry. Most firms surveyed believed that olive oil is not suitable for the products they are currently manufacturing, while firms using olive oil considered Australian olive oil to be too costly. The findings also suggest that most firms' needs for quality, availability and price are being met by the imported olive oil. For Australian olive products to replace imports, the industry will need to offer products that provide the same attributes as imported olive products.

Economic Analysis

In its economic analysis the report used the South Australian and Victorian olive oil industries as the basis for determining costs of production for oil and pickled olives. Results were obtained from an industry survey in those states. Limited data on pickled olives were available due to the small size of this industry and the diversity of the production methods used.

Import prices were obtained from the importers and from the International Olive Oil Council. These prices were compared with the Australian costs of production.

The report concluded that the costs of production of olive oil appear to be higher than the price of most similar imported olive oils. Pickled olive production, on the other hand, appears to be price competitive, but more work on Australian production costs is needed before any definitive conclusion can be reached.

Issues Affecting the Development of the Industry

The report has identified a number of factors which may affect the development of a viable Australian olive industry.

There is potential for exports into the Asian region, particularly in light of noticeable increases in imports of olive oil into Japan and Thailand and in imports of preserved olives into China, Japan and Hong Kong.

Research into the four market segments indicates that:

- consumers would purchase Australian products provided that their quality and price were similar to those of imported products;
- the food service industry is introducing more olive oil into its cuisine and restaurants are becoming more 'Australianised' by using Australian products. There may be an opportunity for the industry to capitalise on this favourable attitude among the new generation of chefs, but price will be an important factor;
- exporters are interested in developing export opportunities for Australian products, especially in the Asian region;

- wholesalers and retailers believe that there are opportunities for Australian products if prices are competitive and product quality assured;
- in general it will be more difficult to penetrate the food manufacturing industry as the strong flavour of olive oil is not suitable for many of its products. However, there are opportunities in some sections of the industry for the olive oil to be used in the enhancement of products.

Suggested Initiatives

The research found that consumers feel confused at the range of edible oils available in the market, and in particular the range of olive oils. To add to this confusion, consumers are faced with a large number of product brands of olive oils. For many consumers the differences between the types and uses of olive oils are not clearly understood. Thus, promotional policies should be implemented to educate consumers on how to use each type of olive oil.

The cost of production as assessed in this report is higher than what might be expected under a more developed olive industry structure. It is felt that the diseconomies of scale reflected in the current small and fragmented industry could be substantially reduced if larger throughputs could be achieved in both the production and manufacturing sectors. Economies of scale resulting in lower per unit costs could be achieved if the industry were to operate in a more cohesive and unified way.

The industry should also consider the following initiatives:

- co-operative action in the areas of production, processing, distribution and marketing;
- implementing quality assurance measures;
- product branding strategies.

Introduction

This project was initiated by the Queensland Department of Primary Industries in response to increasing client inquiries and a reported increase in the planting of olive trees Australia-wide. This renewed interest in the industry has occurred simultaneously with an increase in imports of olive products in recent years. The value of imported olive products into Australia rose from $30m in 1988 to $115m in 1996 (ABS 1997c). This dramatic increase over the last ten years has led to suggestions for developing an Australian industry based on import replacement strategies.

Traditionally the Mediterranean countries of Spain, Italy and Greece have been viewed as the major players in the international olive industry. This report reviews the extent to which those countries in fact dominate the industry, on the basis of an analysis of worldwide production figures, import/export data and trade flows from the major producing countries and in the Asia-Pacific region, along with the identification of new or emerging countries.

An investment in olives is viewed by many producers as an opportunity to diversify their current production practices, with some growers assuming they can capture a sizeable percentage of the domestic market and others contemplating export opportunities. Recent research has concentrated on production aspects, providing useful information on the agronomic and more technical aspects of the downstream processing of olives within Australia. However, little research has been conducted on consumers' attitudes and preferences when purchasing olive products. This report examines that area using qualitative research techniques such as focus groups, in-depths interviews and semi-structured questionnaires with final consumers, food service providers, importers/exporters and food processors and manufacturers. This is considered to be the first attempt by a public entity in Australia to study consumer reactions towards olive products.

The report investigates the cost of producing olive oil and pickled olives in Australia and compares it with the price of imported olive products. Information was collected from processors in Victoria and South Australia and has made possible a broad assessment of the comparative costs of olive production in Australia. Costs assessed in the analysis include contract processing costs, the purchase of fresh olives, and the marketing costs of Australian olive oil and pickled olives. The purpose of the economic analysis was to evaluate the competitive position of Australian olive products.

Whilst providing an insight into consumer's attitudes and beliefs, a review of international production and trade and an economic analysis, the report will also provide the foundation for further market research relevant to an expanded Australian olive industry.

Objectives

The overall purpose of this report is to assess the market potential for and the commercial viability of developing the Australian olive industry. The following objectives were formulated:

- to identify emerging trends in the global production of olive products, including production trends in both the major and emerging olive producing countries world-wide;
- to review the trade flows in olive products, the aim being to identify emerging importing and exporting countries;

- to identify the consumer segments that purchase olive products, and those product characteristics considered essential by each segment when deciding whether to purchase; and
- to determine the potential to further develop an Australian olive industry, using an economic analysis to ascertain whether Australia can compete with imported olive products.

Methodology

This report has been developed using secondary data obtained from a review of the literature and primary data collected using focus groups, in-depth interviews and semi-structured questionnaires.

To research the international production and trade in olive products a number of secondary data sources were used, including production figures, trade flow information and import/export data viewed from an Australian perspective. This material was obtained from the on-line databases of the Food and Agriculture Organization (FAO), Australian Bureau of Statistics (ABS) and from industry publications. A basic analysis was made of the data obtained.

For the consumer research, desk research and field research techniques were used. Desk research made use of a series of publications including *Olivæ*, RIRDC publications, ABS databases, *Oil World*, etc. Field research made use of qualitative research techniques. The views of the four segments identified (consumers, the food service industry, importers/exporters and the food manufacturing industry) were obtained from in-depth interviews, focus groups and semi-structured questionnaires. The field research was conducted in Queensland, Victoria and South Australia.

The methodology used for the economic analysis of the domestic industry centred on assessing the wholesale cost of olive oil and pickled olive production in Australia. This required interviewing eleven olive oil producers and/or processors and four pickled olive producers in Victoria and South Australia. Efforts were made to collect data on processing costs and the prices paid by consumers of olives and olive oil in the major producing countries (Spain and Italy), to compare these with the costs experienced in Australia. However it was found that such data are not readily available and that to obtain accurate data from these countries is expensive.

Limitations

Some difficulty was experienced collecting accurate international information for the report. Despite efforts to contact relevant foreign agencies only a limited number replied to the authors' requests, and some replies arrived late. There were also problems collecting accurate Australian information, especially since the Australian industry is quite small and therefore may not mirror the costs of a much larger industry able to take advantage of economies of scale. Moreover, the study is based on current industry information, not what could be achieved by an expanded Australian olive industry.

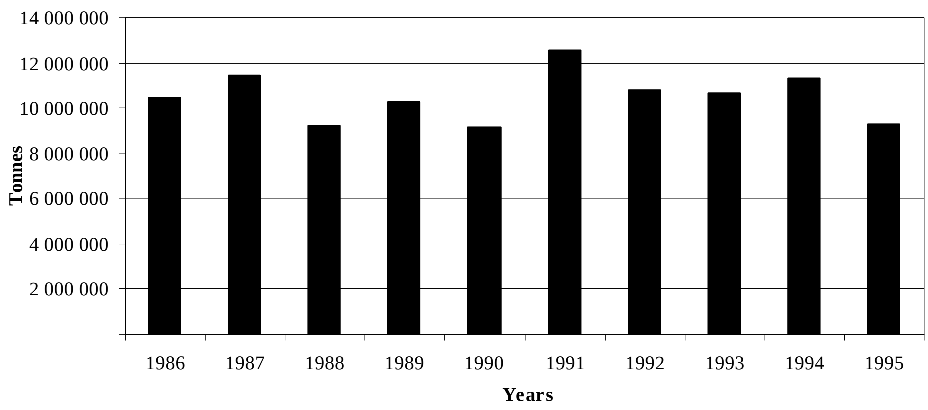
1. International Production and Trade in Olives and Olive Products

The objective of this section is to analyse world production of raw olives, to call attention to what is happening in the established olive producing countries, and to identify emerging producing countries which could be seen as competitors to a developing Australian industry.

1.1 Production

In the ten year period 1986 to 1995 world production of olives has remained relatively stable, albeit with some fluctuations. In 1986 production totalled 10 m tonnes while in 1995 it was about 9 m tonnes (see Figure 0.1). Production reached a peak of 12 m tonnes in 1991.

Figure 0.1: World Raw Olive Production, 1986-1995 (tonnes)



Source: Adapted from Food and Agriculture Organization 1996.

The two major olive producing countries are Italy and Spain, in each of which average annual production is in excess of 2 m tonnes. In the five year period 1991 to 1995, raw olive production in these countries averaged 2.997 m and 2.664 m tonnes respectively. Other significant producing countries were Greece, Turkey and Tunisia. In the same five year period Greece produced an annual average of 1.712 m tonnes and Turkey and Tunisia less than 1 m tonnes each.

Other countries making a significant contribution to world olive production include Morocco, Syria, Portugal and Algeria. In each of these countries production is less than 500 000 tonnes, and they have been treated as minor producers for the purposes of this report.

The following sections examine the production characteristics of selected major and minor producing countries, and of countries considered as emerging producers. To identify emerging producers, a comparison was made between cumulative production for the years 1986 to 1988 and for the years 1993 to 1995; emerging producing countries were considered to be those where production rose by 40 per cent over the period. In addition, recent trends in trade flows of olive oil and processed olives are analysed.

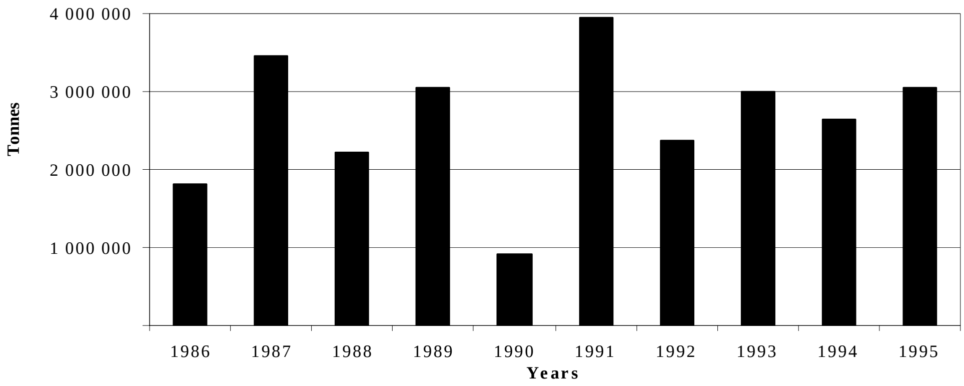
1.2 Major Olive Producing Countries

1.2.1 Italy

Olive production

In Italy production of olives during the ten years 1986-1995 was variable. For example, in 1990, output plummeted to 912 540 tonnes from 3 055 810 tonnes the previous year. In the following year production rose to a high of 3 945 830 tonnes (see Figure 0.2).

Figure 0.2: Italy Annual Raw Olive Production, 1986-1995 (tonnes)

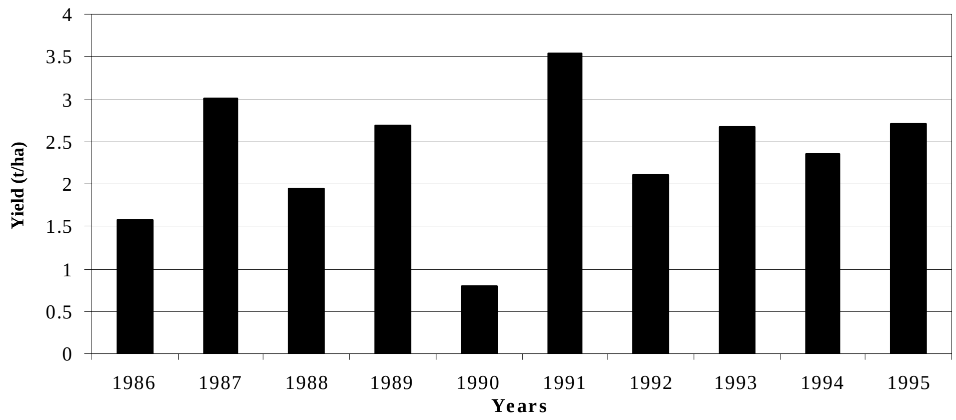


Source: Adapted from Food and Agriculture Organization 1996.

Olive yield

The area planted to olives was stable over the period 1986-1995 at around 1.1 million ha. During that period average annual yields (tonnes/ha) have been variable. For example, in 1990 a low of 0.8 tonnes/ha was obtained; the following year yield soared to 3.54 tonnes/ha (see Figure 0.3).

Figure 0.3: Italy Annual Raw Olive Yield, 1986-1995 (t/ha)



Source: Adapted from Food and Agriculture Organization 1996.

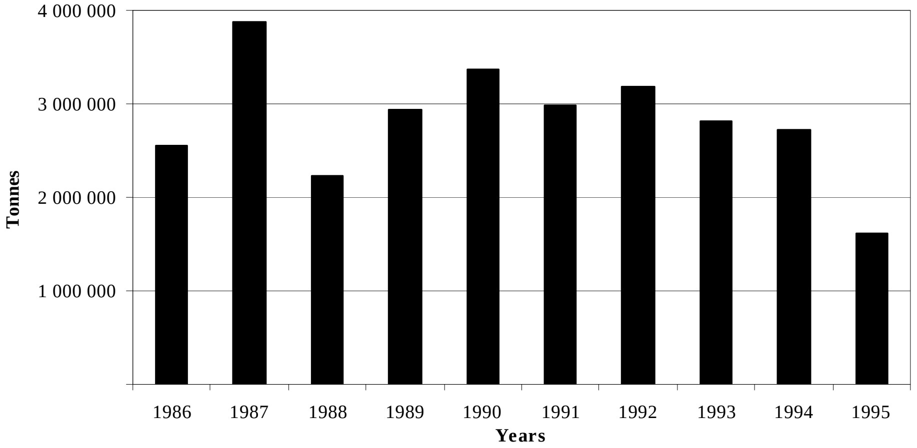
1.2.2

Spain

Olive production

Since 1990 olive production in Spain has shown a downward trend. From a peak of 3.88 m tonnes in 1987 output fell to a low of 1.61 m tonnes in 1995 (see Figure 0.4). Yield data for Spain was not available from FAO.

Figure 0.4: Spain Annual Raw Olive Production, 1986-1995 (tonnes)



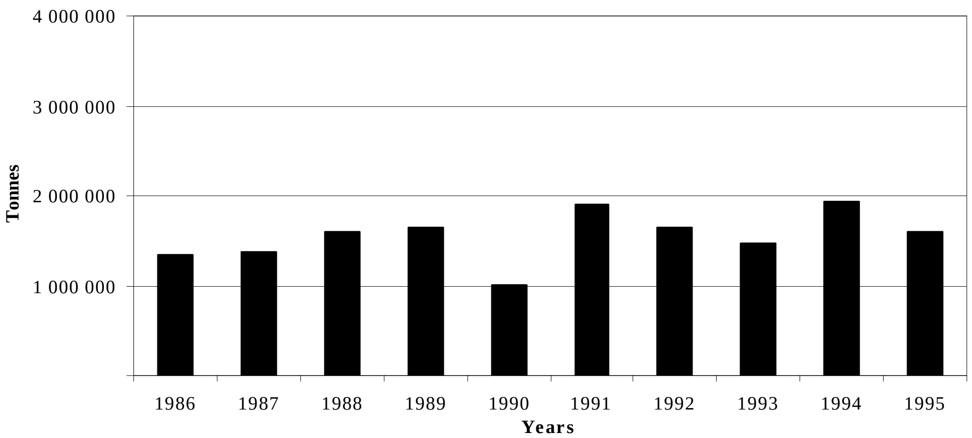
Source: Adapted from Food and Agriculture Organization 1996.

1.2.3 Greece

Olive production

In Greece, production of olives from 1986-1995 was relatively stable. With the exception of 1990, when it fell to 1 m tonnes, output ranged from 1.337 m tonnes in 1986 to 1.933 m tonnes in 1994 (see Figure 0.5). Yield data for Greece was not available.

Figure 0.5: Greece Annual Raw Olive Production, 1986-1995 (tonnes)



Source: Adapted from Food and Agriculture Organization 1996.

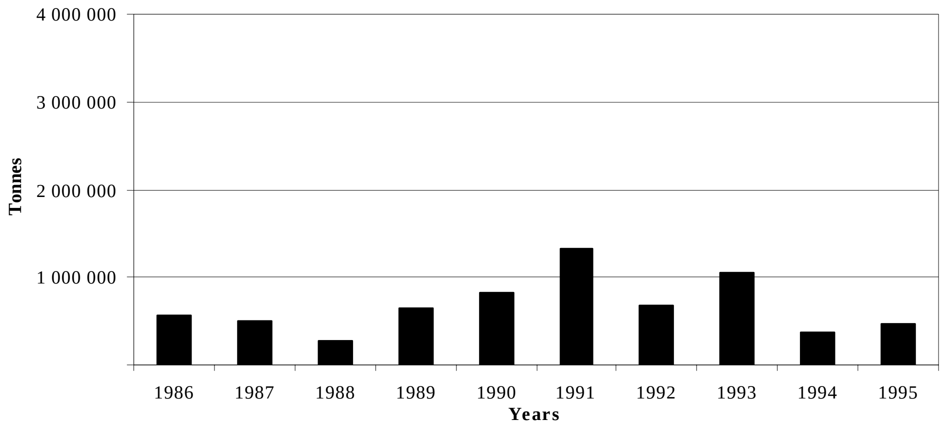
1.2.4

Tunisia

Olive production

Since 1990 exports of oil from Tunisia have shown an increasing trend, though production has been variable. For example, in 1991 recorded production reached a peak of 1.325 m tonnes. This was followed by another relative production high of 1.05 m tonnes in 1993. However, in 1988 and 1994 output was as low as 270 000 and 375 000 tonnes respectively (see Figure 0.6).

Figure 0.6: Tunisia Annual Raw Olive Production, 1986-1995 (tonnes)

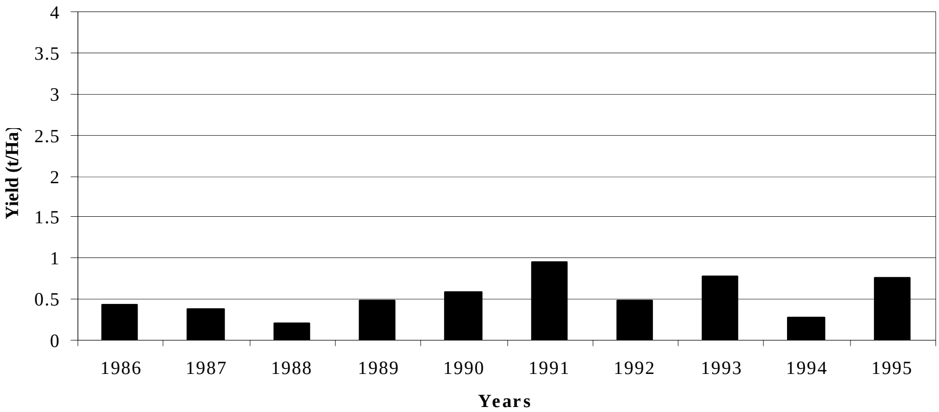


Source: Adapted from Food and Agriculture Organization 1996.

Olive yield

Apart from 1995, when it amounted to a low of 630 000 ha, the area harvested remained stable in the ten years to 1995, averaging 1 362 300 ha. However, annual yields were extremely variable: from a low of 0.2 tonnes/ha in 1988 to a high of 0.95 tonnes/ha in 1991 (see Figure 0.7).

Figure 0.7: Tunisia Annual Raw Olive Yield, 1986-1995 (t/ha)



Source: Adapted from Food and Agriculture Organization 1996.

1.3

Minor Olive Producing Countries

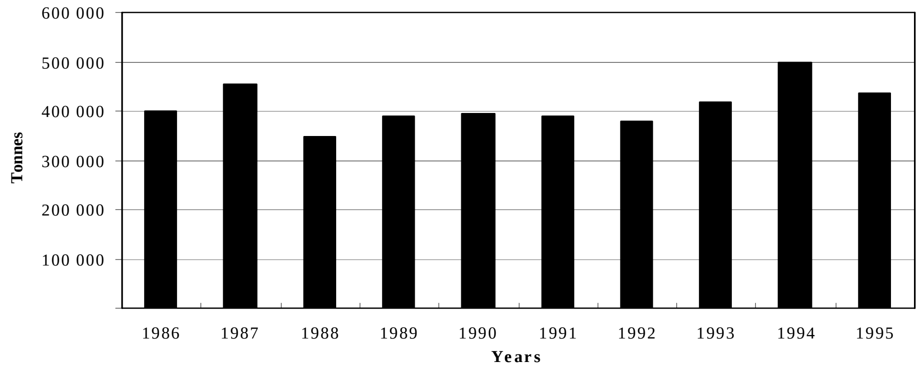
This section examines some of those countries considered to be in the minor producing category. Countries regarded as minor producers include Morocco, Syria and the United States.

1.3.1 Morocco

Olive production

Production of olives in Morocco for the ten years to 1995 is shown in Figure 0.8. As can be seen, output remained relatively stable, over the period, ranging from 350 000 tonnes in 1988 to 500 000 tonnes in 1994.

Figure 0.8: Morocco Annual Raw Olive Production, 1986-1995 (tonnes)

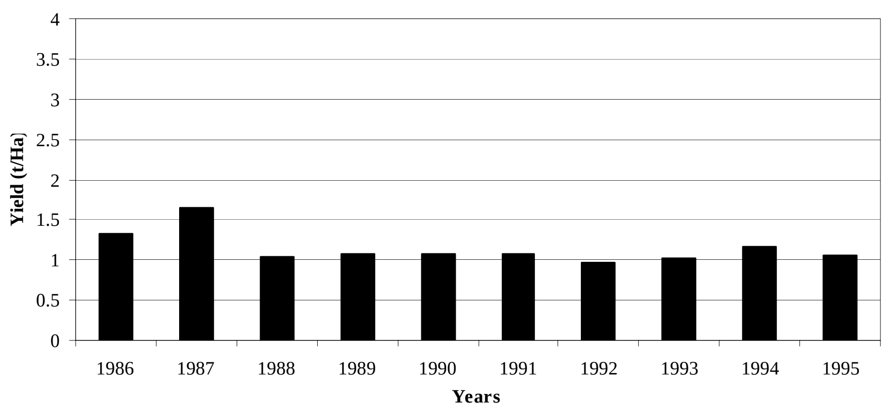


Source: Adapted from Food and Agriculture Organization 1996.

Olive yield

Relative to the yields obtained in such major olive producing countries, as Italy and Tunisia, yields in Morocco in the main varied little during the period 1986-1995, averaging 1.1 tonne/ha (see Figure 0.9).

Figure 0.9: Morocco Annual Raw Olive Yield, 1986-1995 (t/ha)



Source: Adapted from Food and Agriculture Organization 1996.

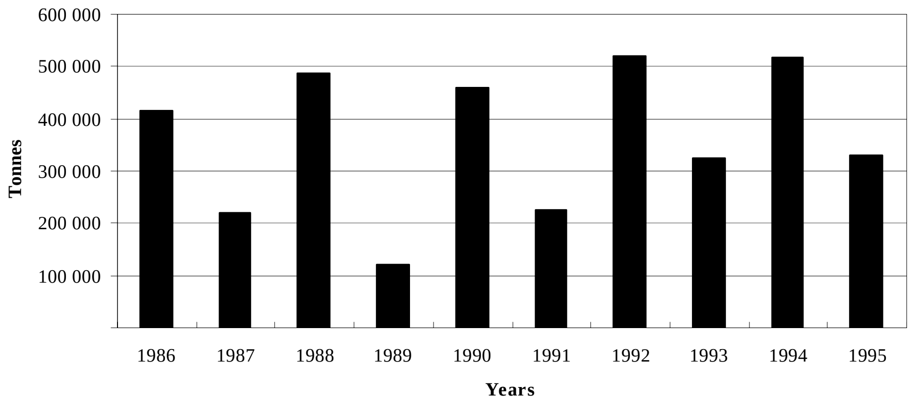
1.3.2

Syria

Olive production

The area harvested in Syria trended upwards in the ten year period to 1995 from 307 900 ha to 405 000 ha. During the period, production of olives reflected the biennial bearing nature of the crop (see Figure 0.10). As can be seen from the graph, output tended to stabilise during the four years 1992 to 1995.

Figure 0.10: Syria Annual Raw Olive Production, 1986-1995 (tonnes)

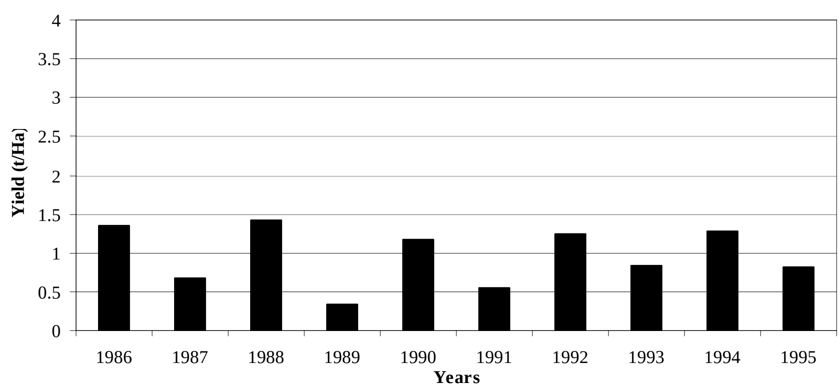


Source: Adapted from Food and Agriculture Organization 1996.

Olive yield

Olive yields in Syria have shown the biennial variation referred to above but have also been on average significantly below those achieved in Italy. The average for the period 1986-1995 was 0.96 tonnes/ha (see Figure 0.11). Compared with Italy it is noted that the biennial variation occurs in alternate years.

Figure 0.11: Syria Annual Raw Olive Yield, 1986-1995 (t/ha)



Source: Adapted from Food and Agriculture Organization 1996.

1.3.3

United States of America

Olive production

Production of olives in the United States tended to fluctuate during the ten year period examined. Areas harvested declined slightly, but yields have been high relative to those achieved in other countries (see Table 0.1).

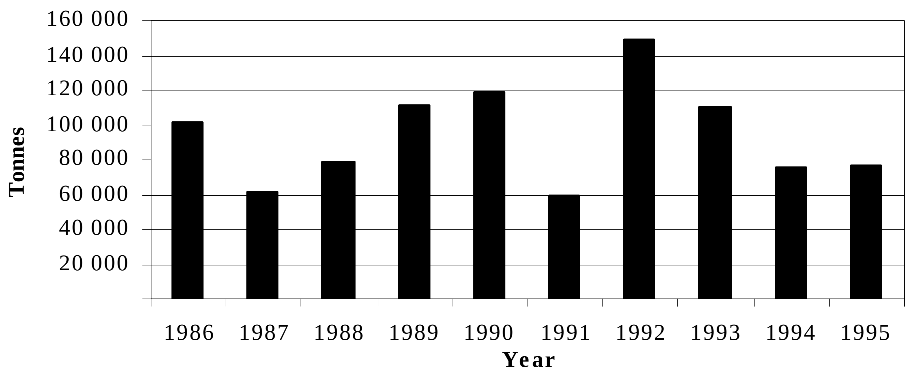
Table 0.1: United States - Area Harvested and Yield of Olives, 1986-1995

Year	Area harvested (ha)	Yield (t/ha)
1986	13 070	7.74
1987	12 780	4.79
1988	12 750	6.23
1989	12 060	9.25
1990	12 300	9.70
1991	12 020	4.91
1992	12 180	12.29
1993	12 180	9.09
1994	12 384	6.15
1995	9 300	8.29

Source: Adapted from Food and Agriculture Organization 1996.

United States production peaked in 1992 at 149 000 tonnes. This was associated with the highest average yield during the period of 12.29 tonnes/ha. In the previous year, the output of 58 970 tonnes was a ten year low (see Figure 0.12).

Figure 0.12: United States of America Annual Raw Olive Production, 1986-1995 (tonnes)



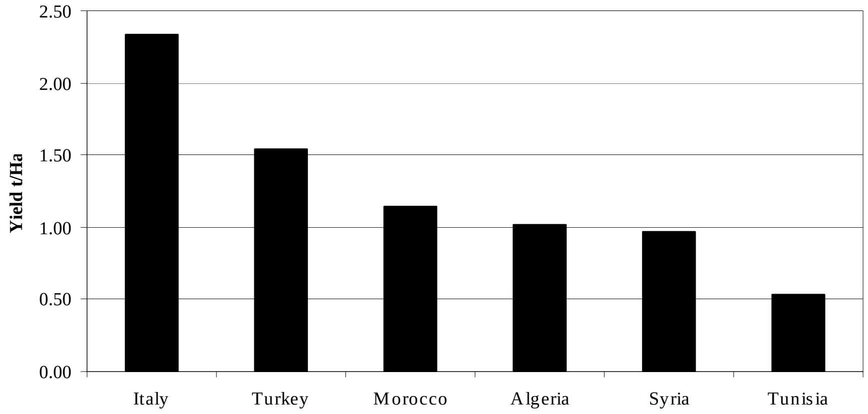
Source: Adapted from Food and Agriculture Organization 1996.

1.3.4

Comparison of Yields

Figure 0.13 below shows average yields for the ten year period to 1995 for a selection of olive producing countries. It can be seen that the highest yields were obtained in Italy, where the average was 2.34 tonnes/ha. This was followed by Turkey where the average yield was 1.55 tonnes/ha. Yields in other countries were significantly less. Yield data for Greece and Spain were not available at the time this report was prepared.

Figure 0.13: Average Raw Olive Yield for Selected Countries, 1986-1995 (t/ha)



Source: Adapted from Food and Agriculture Organization 1996.

1.4

Emerging Olive Producing Countries

This section reviews selected countries considered to be emerging olive producers. These are countries where the cumulative production for the years 1993-95 is greater than for the years 1986-1988.

1.4.1 Egypt

Olive production

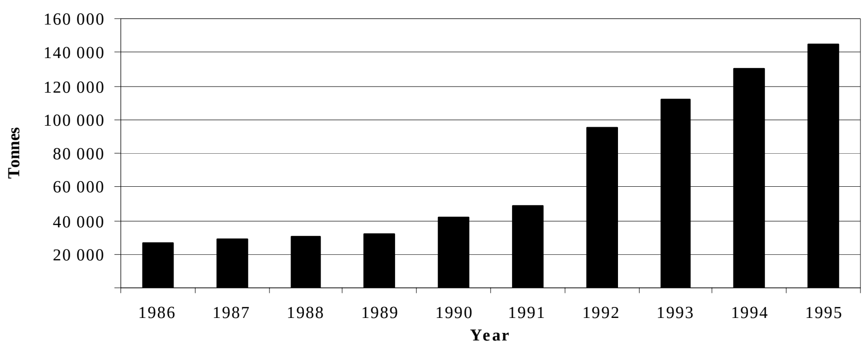
During the ten year period 1986 to 1995 the area of olives harvested in Egypt increased from 6 288 to 27 000 ha. This was associated with annual yields which trended upwards, resulting in a major increase in production (see Table 0.2 and Figure 0.14).

Table 0.2: Egypt Area Harvested and Yield of Olives, 1986-1995

Year	Area harvested (ha)	Yield (t/ha)
1986	6 288	4.29
1987	9 660	3.02
1988	9 240	3.31
1989	9 660	3.34
1990	9 050	4.64
1991	10 700	4.55
1992	22 683	4.19
1993	26 805	4.17
1994	20 121	6.48
1995	27 000	5.37

Source: Adapted from Food and Agriculture Organization 1996.

Figure 0.14: Egypt Annual Raw Olive Production, 1986 - 1995 (tonnes)



Source: Adapted from Food and Agriculture Organization 1996.

1.4.2

Jordan

Olive production

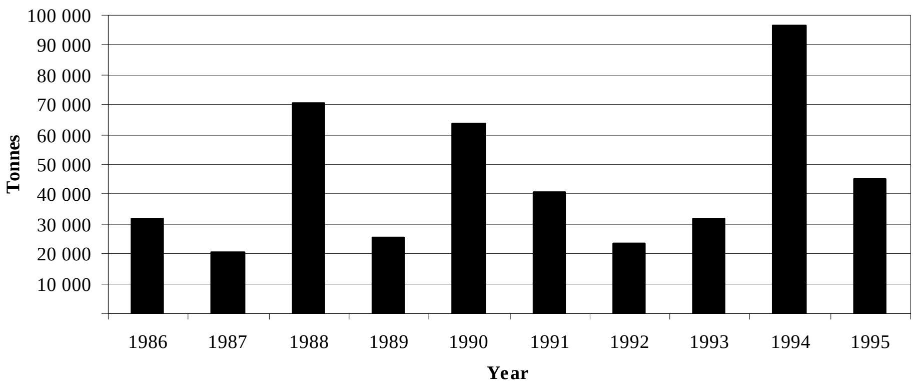
Although the area harvested in Jordan increased only slightly from 1986 to 1995, improved average yields were obtained, resulting in an increases in production, albeit with seasonal fluctuations (see Table 0.3 and Figure 0.15).

Table 0.3: Jordan Area Harvested and Yield, 1986-1995

Year	Area harvested (ha)	Yield (t/ha)
1986	34 493	0.92
1987	38 145	0.53
1988	36 276	1.95
1989	36 397	0.71
1990	36 457	1.75
1991	36 607	1.11
1992	39 215	0.60
1993	39 547	0.80
1994	39 200	2.46
1995	39 200	1.15

Source: Adapted from Food and Agriculture Organization 1996.

Figure 0.15: Jordan - Annual Raw Olive Production, 1986 - 1995 (tonnes)



Source: Adapted from Food and Agriculture Organization 1996.

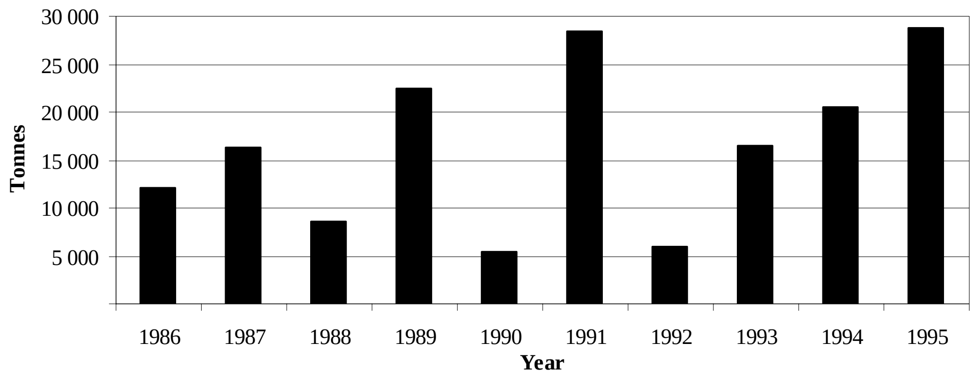
1.4.3

Peru

Olive production

At the time of preparing this report, information from FAO on areas harvested and yields was unavailable. Production is shown in Figure 0.16.

Figure 0.16: Peru Annual Raw Olive Production, 1986-1995 (tonnes)



Source: Adapted from Food and Agriculture Organization 1996.

1.4.4 France

Olive production

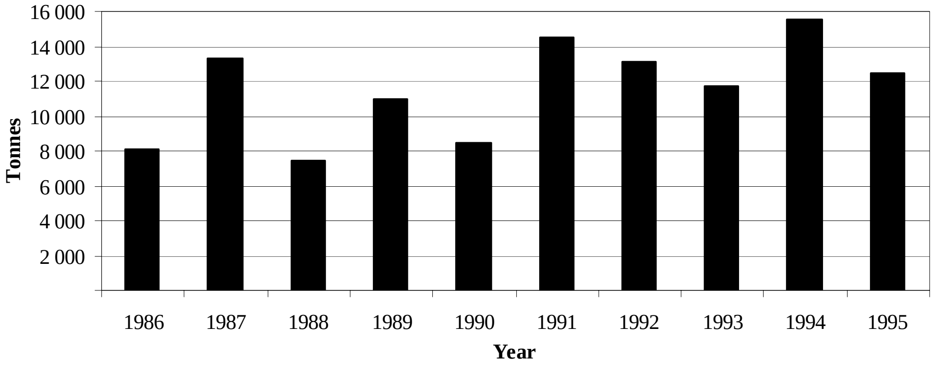
France has been included in the emerging countries category because although the area harvested declined from 1986 to 1995, the annual yield has trended upwards, resulting in higher production (see Table 0.4 and Figure 0.17).

Table 0.4: France Area Harvested and Yield, 1986-1995

Year	Area harvested (ha)	Yield (t/ha)
1986	17 542	0.46
1987	17 388	0.76
1988	15 915	0.47
1989	15 600	0.71
1990	15 412	0.55
1991	14 898	0.98
1992	14 636	0.89
1993	14 424	0.81
1994	14 314	1.09
1995	14 245	0.88

Source: Adapted from Food and Agriculture Organization 1996.

Figure 0.17: France Annual Raw Olive Production, 1986-1995 (tonnes)



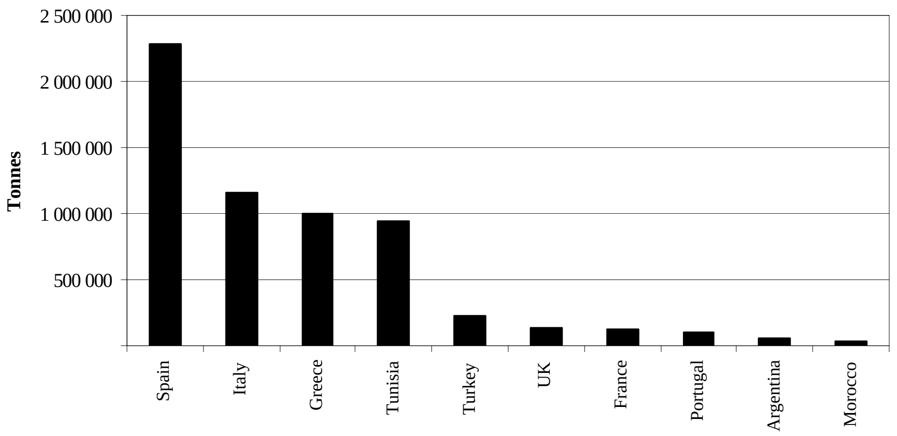
Source: Adapted from Food and Agriculture Organization 1996.

1.5 Trade in Olive Products

1.5.1 Olive Oil

World exports of olive oil are dominated by Spain, other significant exporters being Italy, Greece and Tunisia. Total export quantities for the eleven year period 1984 to 1994 for a number of countries are shown in Figure 0.18.

Figure 0.18: Ten Largest Olive Oil Exporting Countries by Volume, 1984-1994 (tonnes)



Source: Adapted from Food and Agriculture Organization 1996.

As can be seen, total exports of oil from Spain amounted to almost 2.3 m tonnes over the period, about twice as much as those of any other country. Important destinations for Spanish oil have included Italy, Portugal, the United States and Australia. Table 0.5 shows the quantities imported from Spain by the seven leading importers during the three year period 1992-1994. It should be noted that Japan, and to a lesser extent Thailand, have been importers of Spanish olive oil.

Table 0.5: Export Destinations of Spanish Olive Oil, 1992-1994 (tonnes)	
Destination	**Imports (tonnes)**
Italy	242 796
Portugal	68 216
USA	37 989
Australia	26 585
Japan	11 478
Canada	5 393
Thailand	2 163
Source: Adapted from Food and Agriculture Organization 1996.	

In comparison Italy, Greece and Tunisia exported a total of 1.2 m, 1 m and 0.94 m tonnes respectively during the period 1984-1994. Significant destinations for export from these countries are shown in Table 0.6. Both Japan and Thailand again appear as importers.

Table 0.6: Export Destinations of Olive Oil from Italy, Greece and Tunisia, 1992-1994 (tonnes)			
Destination	**Imports from**		
	Italy	**Greece**	**Tunisia**
Italy		293 441	203 901
Spain	10 505	16 239	110 770
USA	197 454	9 171	4 172
Australia	12 397	4 475	30
Canada	22 387	1 701	26
Romania	7 756	1 050	na
Denmark	1 107	1 024	na
Sweden	1 647	760	na
Japan	8 145	192	na
Norway	424	151	305
Poland	4 302	12	na
Greece	6 586		na
Thailand	694	na	na
na: Data not available from FAO databases			
Source: Adapted from Food and Agriculture Organization 1996.			

1.5.2

Preserved Olives

As in the case of olive oil, Spain dominates the international export trade in preserved olive products. For the eleven year period 1984 to 1994, its exports of preserved olives totalled almost 1.4 m tonnes, more than twice the volume of the second major exporting country, Greece. Exports from Spain increased, from 102 092 tonnes in 1984 to 159 309 tonnes in 1994. It is noted that the United Kingdom is also shown as a major exporter of olive oils. However, from an examination of the FAO data, no production figures have been recorded. As a result, the exports shown may be interpreted as being re-exports.

Apart from Spain, other major exporters of preserved olive products include Greece, Morocco, Argentina and Turkey. Interestingly, other non-traditional olive producing countries such as Mexico are also important exporting countries (see Table 0.7).

Table 0.7: Major Preserved Olive Exporting Countries, 1984-1994 (tonnes)

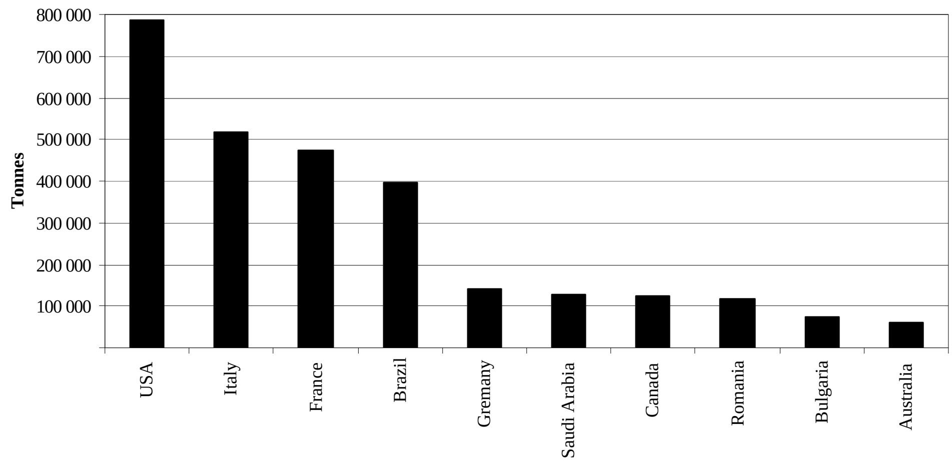
Country	Quantity (tonnes)
Spain	1 381 424
Greece	555 931
Morocco	438 760
Argentina	321 404
Turkey	113 965
Mexico	50 948
France	47 874
Portugal	38 036
USA	34 105
Israel	13 483

Source: Adapted from Food and Agriculture Organization 1996.

From, 1984 to 1994 the United States was the main importer of preserved olives. Its imports remained relatively stable during the period: they totalled 57 654 tonnes in 1984 and 65 309 tonnes in 1994, and reached a peak of 85 357 tonnes in 1992 (see Figure 0.19).

Other countries importing significant quantities of preserved olive products include Italy, France and Brazil. In terms of world ranking, over the eleven year period examined, Australia was the tenth largest importer of preserved olive products.

Figure 0.19: Ten Largest Preserved Olive Importing Countries, 1984-1994 (tonnes)



Source: Adapted from Food and Agriculture Organization 1996.

1.6 An Examination of the Asian Region

The purpose of examining the importation of olive products into the Asian region was to identify trends, both established and seen as emerging, which might indicate potential markets for a developing Australian olive industry in the future. For the purpose of this analysis the Asian region has been divided into four subregions (see Table 0.8). Data from the desk research show that imports of both olive oil and preserved olive products by some countries in the Asian region rose sometimes sharply, during the eleven year period 1984 to 1994. A brief discussion of the results is contained in the following sections.

Table 0.8: Asian Subregions

North East Asia	Oceania	South East Asia	Southern Asia
China	Australia	Malaysia	Pakistan
Japan	New Zealand	South Korea	India
Hong Kong	Papua New Guinea	Philippines	Bangladesh
Macau	Fiji	Indonesia	Maldives
		Thailand	Sri Lanka
			Nepal

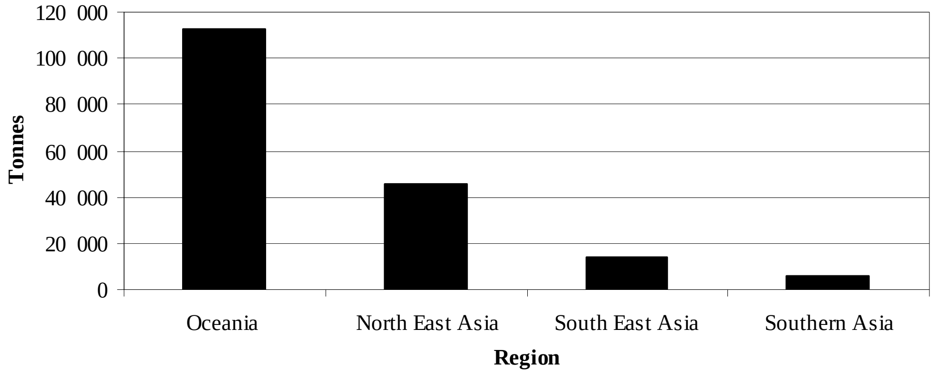
Source: Adapted from Food and Agriculture Organization 1996.

1.6.1 Olive Oil

Imports by Oceania during the eleven year period 1984 to 1994, dominated total imports of olive oil into the Asian region (see Figure 0.20), where Australia was the major importer. They totalled 112 598 tonnes, compared with 45 990 tonnes imported in North East Asia during the same period. During the period examined, Japan accounted for 88 per cent of imports into North East Asia.

In South East Asia imports of olive oil during the period amounted to 14 029 tonnes, of which Thailand accounted for 56 per cent and Singapore 17 per cent.

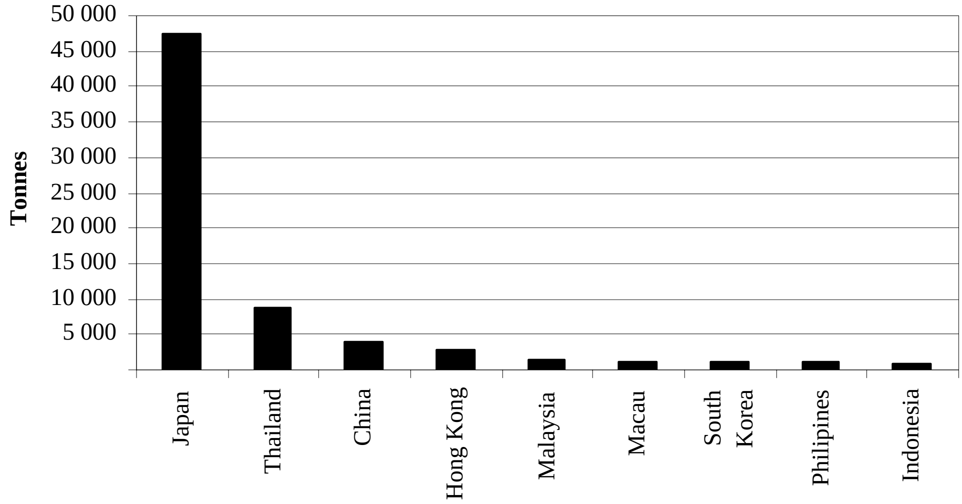
Figure 0.20: Imports of Olive Oil into the Asian Region, 1984-1994 (tonnes)



Source: Adapted from Food and Agriculture Organization 1996.

Among the countries of North East and South East Asia the major market for olive oil has been Japan (see Figure 0.21), which imported a total of 47 431 tonnes during the twelve years from 1984 to 1995.

Figure 0.21: North East and South East Asian Region Total Olive Oil Imports, 1984-1995 (tonnes)

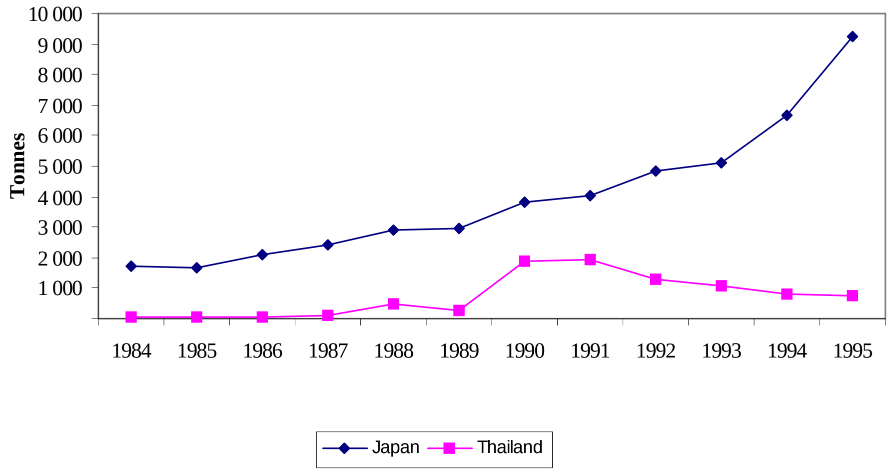


Source: Adapted from Food and Agriculture Organization 1996.

Imports by Japan and Thailand are analysed by year in Figure 0.22. In respect of Japan, it can be seen that for the twelve years from 1984 to 1995 oil imports maintained an upward trend, rising more that fivefold from 1 700 tonnes to 9 244 tonnes. During the two years to 1995 they rose by 80 per cent.

Thailand is the second largest importer of olive oil in the North East and South East Asian regions. Its imports rose sharply in 1990 to about 1900 tonnes, but since 1991 they have fallen back around the 1 000 tonne level, a figure still substantially higher than in the years 1984-1989.

Figure 0.22: Japan and Thailand Olive Oil Imports, 1984-1995 (tonnes)

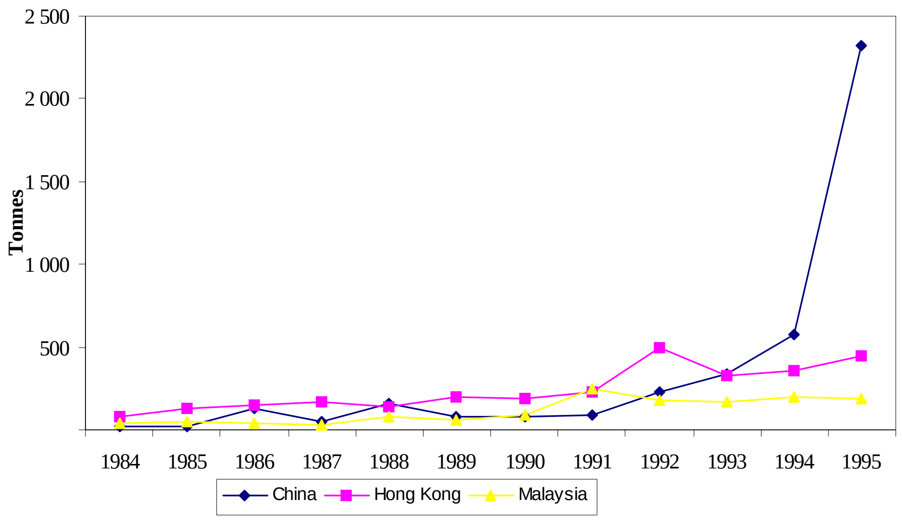


Source: Adapted from Food and Agriculture Organization 1996.

China, Hong Kong and Malaysia have been importing small but increasing quantities of olive oil (see Figure 0.23). For example, imports into China increased from 20 tonnes in 1985 to 575 tonnes in 1994. In the following year they soared to 2 318 tonnes. Imports to Hong Kong rose from 79 to 449 tonnes in the 12 years to 1995, and those to Malaysia from 46 to almost 190 tonnes.

Details of quantities imported for the above countries are contained in Appendix 2.

Figure 0.23: China, Hong Kong & Malaysia Olive Oil Imports, 1984-1995 (tonnes)



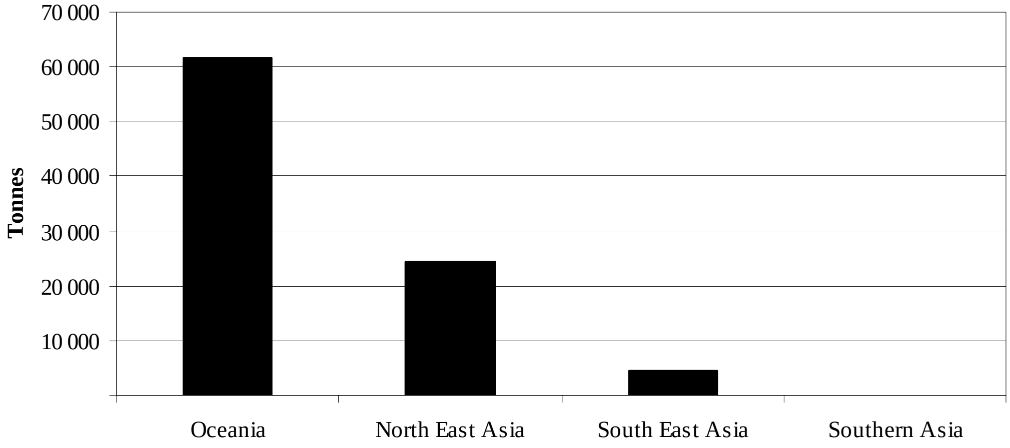
Source: Adapted from Food and Agriculture Organization 1996.

1.6.2

Preserved Olives

Import patterns for preserved olives in the four Asian subregions are similar to those for olive oil. As shown in Figure 0.24, imports of preserved olives by Oceania accounted for the bulk of imports to the Asian region during the eleven year period 1984 to 1994: 61 579 tonnes, compared with 24 374 tonnes for North East Asia.

Figure 0.24: Imports of Preserved Olives into the Asian Region, 1984-1994 (tonnes)

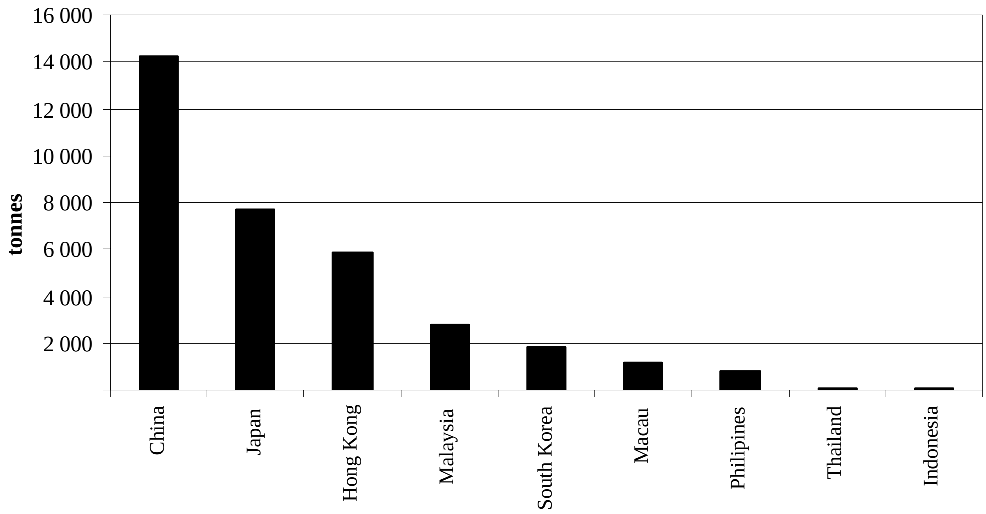


Source: Adapted from Food and Agriculture Organization 1996.

In South East Asia imports amounted to 4 337 tonnes, of which Malaysia accounted for 54 per cent.

For the Asian region excluding Oceania, China has been the main importer of preserved olives followed by Japan, Hong Kong and Malaysia (see Figure 0.25).

Figure 0.25: Asia Preserved Olives Imports, 1984-1995 (tonnes)



Source: Adapted from Food and Agriculture Organization 1996.

Imports of preserved olives to China have shown an irregular pattern as shown in Figure 1.26. According to the FAO trade database the first recorded imports were in 1989 when 2 016 tonnes were imported. The following year imports rose to a high of 2 900 tonnes. However, since 1990 imports have trended downwards, although in 1995 (the last available recorded data at the time of writing this report), they amounted to 1 877 tonnes.

Imports of preserved olives to Japan have been increasing. The FAO data records the first imports in 1988, when the quantity involved was 727 tonnes. In 1995 imports reached 1 390 tonnes.

Imports to Hong Kong have also been rising, and the quantities involved during the three year period 1993-1995 were similar to those for Japan. However, a significant proportion of imported olives has been re exported from Hong Kong. For example in 1992, when recorded imports totalled 1 985 tonnes, exports amounted to 1 235 tonnes (see Table 0.9).

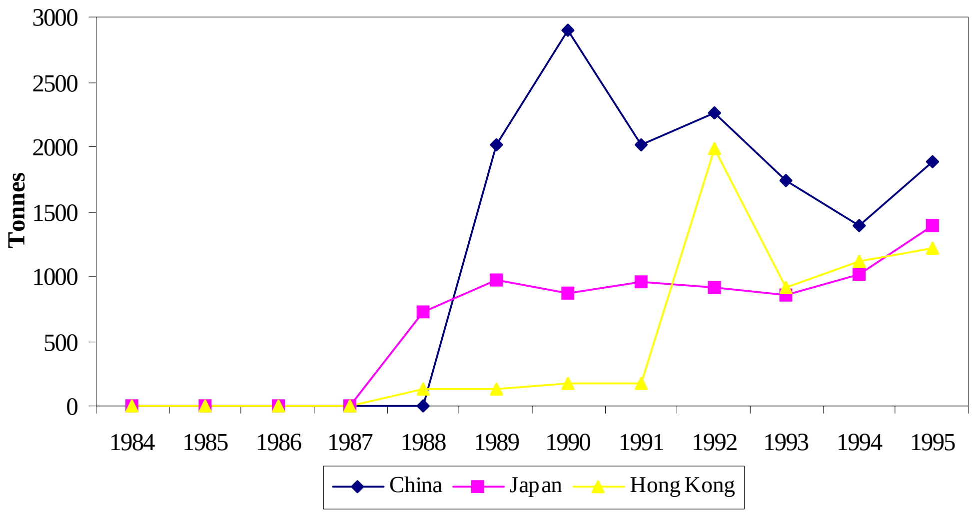
Table 0.9: Hong Kong Exports of Preserved Olives, 1988-1994 (tonnes)

	1988	1989	1990	1991	1992	1993	1994
Quantity	190	131	235	55	1235	779	1196

Source: Adapted from Food and Agriculture Organization 1996.

Other Asian countries recording imports of preserved olive products include Malaysia, South Korea, Macau, Philippines, Thailand and Indonesia. Imports to Malaysia generally rose during the period 1988 to 1995, and those for South Korea rose sharply in the four years 1992-1995. Details of the quantities imported by these and other Asian countries are shown in Appendix 2.

Figure 0.26: China, Japan & Hong Kong - Preserved Olives Imports, 1984-1995 (tonnes)



Source: Adapted from Food and Agriculture Organization 1996.

1.6.3

Sources of Olive Products

The FAO data (FAO 1997) indicates that the main sources of imports of olive oils and preserved products to the Asian region, have been Spain, Italy and Greece and to a small extent Tunisia. For example, for the period 1993 to 1995, imports of olive oil to North East Asia were mainly from Spain (12 485 tonnes) and Italy (13 165 tonnes); 284 tonnes were from Greece and only 1 tonne from Tunisia. For South East Asia, imports were predominantly from Spain and Italy, with only a small quantity from Greece.

1.6.4 Areas for Further Investigation

The desk research carried out for this report indicates that of the North East and South East Asian countries examined, all have imported olive products. All of them imported olive oil during the period from 1984, while most have been importing preserved olive products since 1988.

Those countries which might with advantage be the subject of more detailed investigations include:

Table 0.10: Hong Kong Exports of Preserved Olives, 1988-1994 (tonnes)

Olive Oil	Preserved Olives
Japan	China
Thailand	Japan
China	Hong Kong
	Malaysia
	South Korea

Source: Adapted from Food and Agriculture Organization 1996.

Although the desk research has identified trends in the importation of olive oil and preserved products to Asia, a more detailed examination of the respective markets to identify type of product and product specifications would be required. In addition, such research should be focused on identifying the most promising market sectors (e.g. retail, food service) in an endeavour to assess the size of the potential market sector in the various countries and the opportunity for an Australian industry.

1.7 Other International Issues

1.7.1 Aspects of Olive Industry in Mediterranean Countries

The European industry is highly fragmented. In 1994 there were approximately two million firms involved in the production of olive oil (Eurostat 1997). Most of these firms use traditional methods. Farms are not mechanised and are not very productive. For instance, in Andalucia - the largest olive oil producing area in Spain - figures suggest that 75 per cent of olive plantations are over 50 years old. Furthermore, productivity on average is only 25-30 per cent of the potential. Intensive plantations comprise only 2.5-3 per cent of Spanish plantations (Tardaquila et al. 1996).

The degree of industrialisation depends on the olive oil segment. For instance,

- The virgin oil segment is characterised by the existence of traditional methods in growing, harvesting and processing. In this segment there is a large number of small establishments.
- The standard pure olive oil segment is characterised by a greater degree of industrialisation. A centrifugal process is commonly used and some products require blending and refining. In this segment there are many medium to large enterprises.

Recently, the European industry has been undergoing a change. Rationalisation is occurring, resulting in the concentration of the smaller enterprises into large operations and improved efficiency through the adoption of advanced technologies. In Spain alone in 1992, 10 firms accounted for about 57 per cent of sales volume (Briz & de Felipe 1995). Furthermore, multinational companies such as Unilever, Feruzzi and Bunge have bought medium to large companies in Greece, Italy and Spain (Briz & de Felipe 1995). Other producing countries such as Morocco, Tunisia, Syria and Turkey are investing in machinery and equipment from European countries (Bonazzi 1997).

1.7.2 Government Intervention

The olive industry is protected in most Mediterranean countries. Some of the intervention policies involve:

- **Price** - target production prices, intervention price, representative market price, threshold price for the entry of foreign product (Eurostat 1997);
- **Aid toward production** - use of policies designed to support agricultural income;
- **Aid toward consumption** - assistance for olive processors and packagers. While this form of assistance has been reduced substantially, aid toward production has increased (Eurostat 1997);
- **Buying and selling operations** - policies for the development of buffer storage strategies (Briz & de Felipe 1995);
- **Foreign trade** - policies comprising import levies and export refunds which depend on existing market conditions (Briz & de Felipe 1995).

Some of the subsidy policies outlined above are expected to be attenuated in the future as a result of the GATT agreement. However, due to the political and social implications of reduced subsidies some countries, such as Spain, have expressed concerns at this situation. The European countries are still considering the most appropriate way of honouring the GATT agreement without adversely affecting their domestic industry.

1.7.3 Production

Olive production is heavily influenced by environmental conditions. For instance, world production was adversely affected due a severe drought in Spain. With the easing of that drought it was expected that production of olives would recover in 1996-97 (Oil World 1996). In 1996-97 European production of pressed olive oils was estimated at a record 1.56m tonnes (Oil World 1997).

1.

2. Australian Production and Markets

The section introduces an overview of the Australian production of and market for olive products. It presents domestic production figures, as well as data on imports and exports of olive products, and briefly details the position of olive oil in relation to other oils. The data used in this section were obtained from the ABS, Primary Industries of South Australia (PISA), *FoodWeek* publications and *Olivæ*.

2.1 Domestic Production

ABS figures on the extent of olive production in Australia are considered to be an under-estimation of the actual situation. According to ABS data, production of olives in Australia in 1994 was 936 tonnes (see Table 0.1). The figures indicate large fluctuations in production, including a sharp fall from 1 284 tonnes in 1986 to 486 tonnes in 1987. That change, however, was caused not by actual changes in production but by modifications to the Estimated Value of Agricultural Operations (EVAO).

Table 0.1: Production of Olives by State, 1983-1994 (kg)

Year	SA	Victoria	NSW	WA	Queensland	Total
1983	611 648	226 020	na	29 800	na	867 468
1984	437 060	934 757	46 870	48 250	8 160	1 475 097
1985	653 987	809 615	16 657	39 140	na	1 519 399
1986	494 272	689 977	17 228	83 401	na	1 284 878
1987	410 386	43 094	21 270	11 565	na	486 315
1988	464 917	110 717	11 509	9 569	100	596 812
1989	378 943	121 072	18 953	3 770	na	522 738
1990	340 990	182 571	10 008	508	na	534 077
1991	526 723	157 120	na	na	na	683 843
1992	581 256	351 806	na	na	na	933 062
1993	444 780	355 735	na	na	na	800 515
1994	526 497	409 914	na	na	na	936 411

na: not available

Source: ABS 1997a.

Inaccuracies in the data collected by ABS could be due to the fact that:

- data are collected only every third year and the most recent figures data from 1994;
- data are collected only from primary producers with estimated value of operations greater than $20 000/yr (this value has changed four times in the past 15 years); ABS does not record the production of many small producers.

In response to the perceived shortcoming of the ABS figures, PISA has commissioned a team to obtain an estimate of the numbers and varieties of trees being planted across Australia. The figures are being collected by interviewing nurseries across Australia and recording the number of trees sold and the number ordered. Although the project is still being implemented some figures have been provided by the team leader (see Table 0.2). These figures differ from the

ABS data; they indicate that New South Wales and Queensland are important players in the industry.

Table 0.2: Estimated Olive Trees Plantings (PISA)

State	Planted	Ordered	Total
NSW	242 000	381 500	623 500
SA	116 000	225 500	341 500
Qld	104 000	215 000	319 000
Vic.	40 700	83 600	124 300
WA	12 000	74 000	86 000
Tas.	28 000	28 500	56 500
NT	400	400	800
Total	543 100	1 008 500	1 551 600

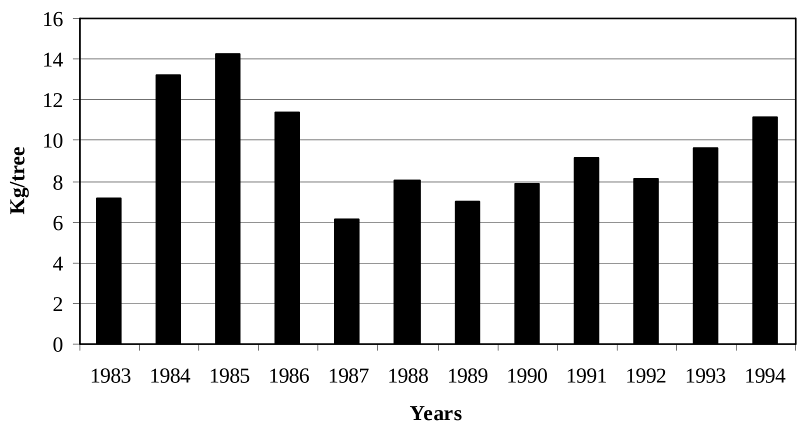
Source: PISA estimates.

Given this information it could be assumed that by the beginning of the century there will be more than 1.5 million olive trees in full production.

2.1.1 Yields

ABS data on olive production and the numbers of bearing trees are used to calculate average yield (see Figure 0.1). The figures indicate that for the years 1983-94 the annual yield has been less than 16 kg of olives per tree. Assuming a planting density of 250 trees/ha and an average of 10 kg/tree production per hectare would amount to 2.5 tonnes/ha.

Figure 0.1: Average Yield per Tree, 1983-1994



Source: ABS 1997a

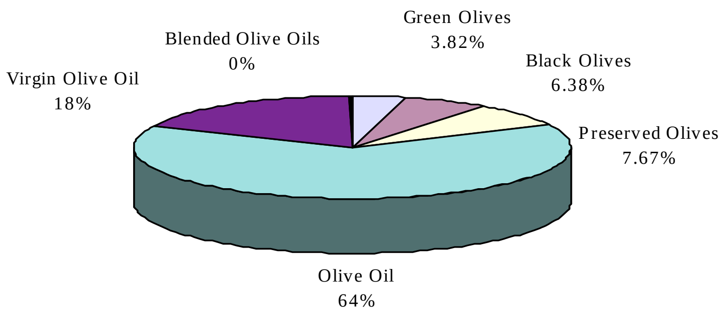
2.2

Australian Imports of Olive Products

In 1996 Australia imported $115.4 million worth of olive products. Olive oils accounted for $94.8 million of that figure and table olives for the remaining $20.6 million. In terms of value the oil imports were up 38.8 per cent and the table olive imports down by 13 per cent compared with 1995. In volume terms, Australia imported 6 540 tonnes of table olives and 15 722 tonnes of olive oils. Compared to the 1995 figures, imports by volume of olive oil were down by 5.83 per cent and of table olives by 20.05 per cent.

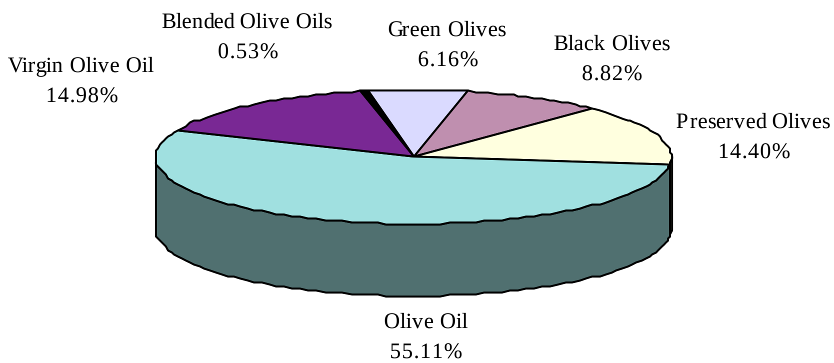
Figure 0.2 and Figure 0.3 show the categories of olive products imported by value and by volume. The figures indicate that 'pure' olive oil has by far the greatest share of the Australian market in both value and volume terms (see Appendix 1 for a classification of the different olive oils in the market).

Figure 0.2: Imports of Olive Products by Value, 1996



Source: ABS 1997c

Figure 0.3: Imports of Olive Products by Volume, 1996



Source: ABS 1997c

2.2.1

Countries of Origin

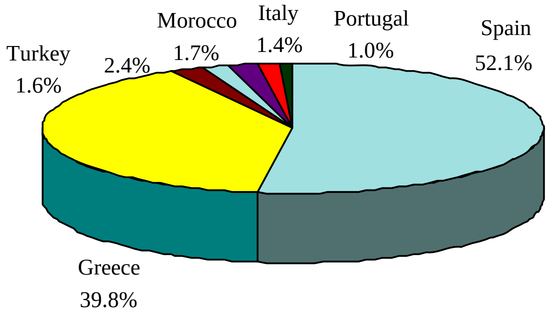
The main suppliers of olive products are Spain, Italy and Greece. Recently, other olive producing countries such as Morocco and Israel have also emerged as important suppliers to Australia. The following sections show the major suppliers of the different olive products for the years 1988-1996 and other import data. The categories of products analysed are based on the product classification used by ABS (see Appendix 3).

Black olives

Figure 0.4 shows the major suppliers of black olives into Australia for the years 1988-1996, based on a review of the individual black olive products imported. Imports of black olives by volume fell by 35.8 per cent from 1995 to 1996, and their value fell by 11.24 per cent.

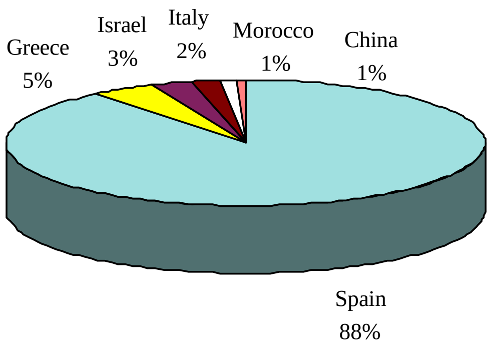
Figure 0.4: Imports of Black Olives by Country, 1988-1996

Whole Black Olives



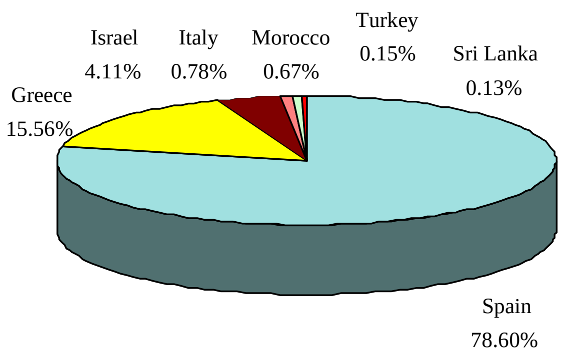
Imports of whole black olives have fallen by 36 per cent from 1995 to 1996. Spain and Greece are overwhelmingly the main suppliers, though recently Israel, Morocco and Turkey have also become important players in the market.

Pitted Black Olives



Imports of pitted black olives fell by 23 per cent from 1995 to 1996. Spain has been the major and most consistent supplier of pitted black olives. Greece and Italy also account for substantial quantities, and in recent years Morocco and Israel have become important suppliers.

Stuffed Black Olives



Spain, Greece and to a lesser extent Italy have been the more consistent suppliers of stuffed black olives. Imports from the other countries have been highly irregular.

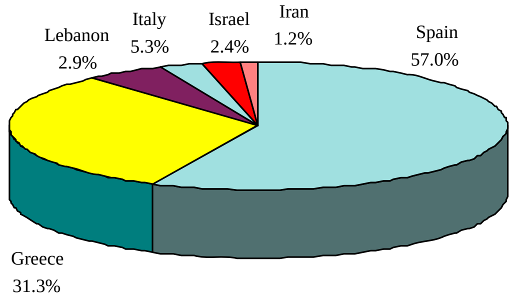
Source: ABS 1997c

Green olives

Figure 0.5 shows the major suppliers of green olives into Australia for the years 1988-1996, based on a review of the individual green olive products imported. Imports of green olives by volume have decreased by 22 per cent from 1995 to 1996. By value imports have decreased by 22 per cent during the same period.

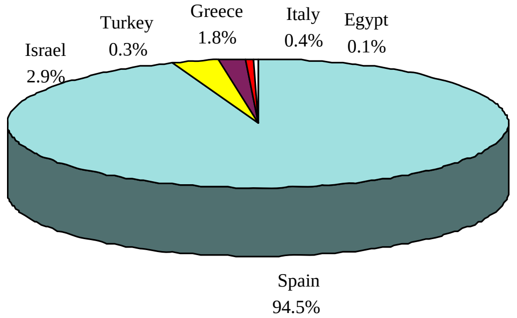
Figure 0.5: Imports of Green Olives by Country, 1988-1996

Whole Green Olives



Imports of whole green olives declined by 18.3 per cent from 1995 to 1996. Spain has been the dominant supplier. More recently Israel and Lebanon have also become significant suppliers.

Stuffed Green Olives



Imports of stuffed green olives fell by 23 per cent from 1995 to 1996. Spain has maintained its position as by far the main supplier for the period 1988-1996. For the past four years Israel has been a significant supplier.

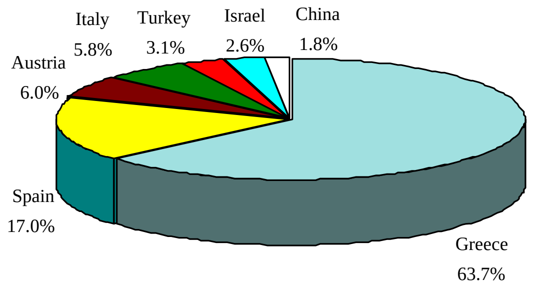
Source: ABS 1997c

Preserved olives

Figure 0.6 shows the major suppliers of preserved olives into Australia for the years 1988-1996, based on a review of the individual preserved olive products imported. Imports of preserved olives by volume decreased by 4.5 per cent from 1995 to 1996, but rose in value terms by 4.5 per cent.

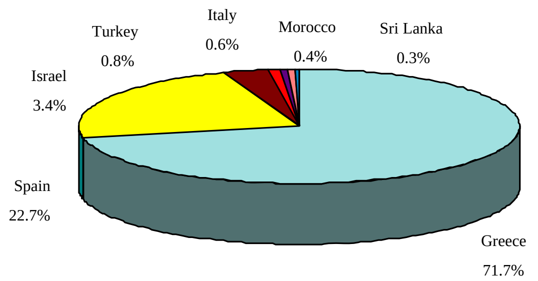
Figure 0.6: Imports of Preserved Olives by Country, 1988-1996

Olives Prepared or Preserved[1]



Imports of olives prepared or preserved fell by 28.4 per cent from 1995 to 1996. By far the major and more consistent supplier has been Greece. More recently, Italy has become one of the major suppliers. No imports from Austria have been recorded since 1992.

Preserved Olives[2]



Imports of preserved olives declined by 4 per cent from 1995 to 1996. Greece has been the major supplier, followed by Spain. Imports from Israel, Morocco and Sri Lanka have been highly irregular. Italy and Turkey are also significant suppliers.

[1] *Olives, provisionally preserved, but unsuitable in that state for immediate consumption.*

[2] *Olives prepared or preserved otherwise than by vinegar or acetic acid.*

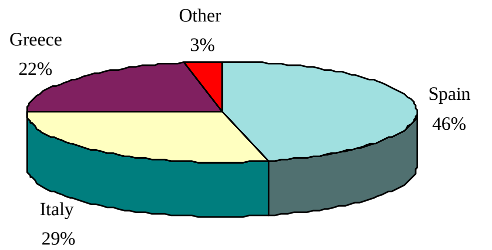
Source: ABS 1997c

Olive oils

Figure 0.7 shows the country of origin for the different types of olive oil imported into Australia for the years 1988-1996. The figures indicate that Spain has been by far the major and most consistent supplier.

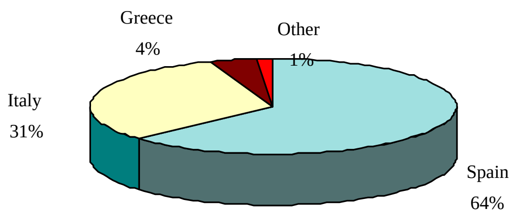
Figure 0.7: Imports of Olive Oils by Country, 1988-1996

Virgin Olive Oil



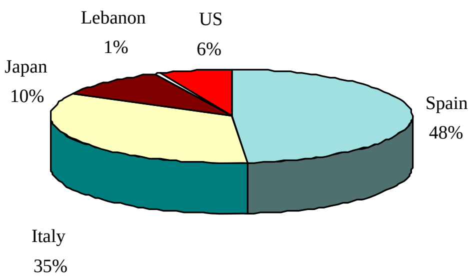
Imports of virgin olive oil decreased by 13.1 per cent from 1995 to 1996. Spain has been the major supplier, followed by Italy and to a lesser extent Greece.

'Pure' Olive Oil



Imports of 'pure' olive oil were down by 10.35 per cent from 1995 to 1996. Spain has been the dominant supplier, followed by Italy.

Blended Olive Oil



Imports of blended olive oils jumped 90 per cent from 1995 to 1996. Imports from the United States began only in the latter year. Spain and Italy have been the most consistent suppliers, though no figures are recorded for Spanish imports in 1996.

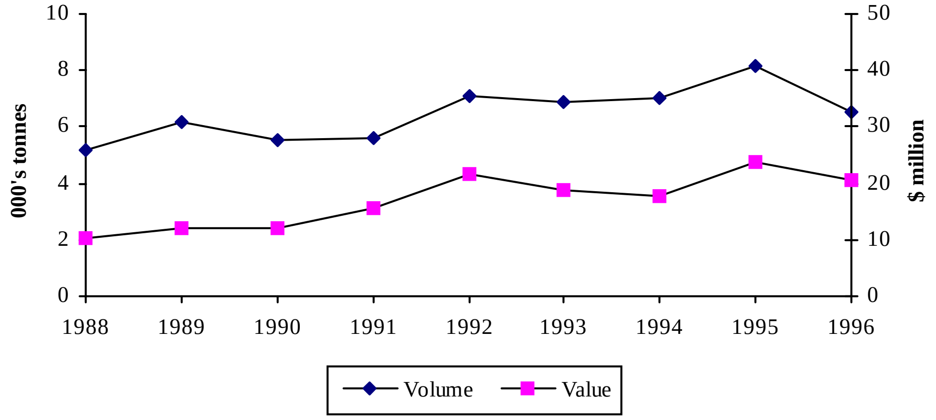
Source: ABS 1997c

2.2.2 Import Assessment

The figures show that Spain, Italy and Greece were the major suppliers of olive products during the period 1988-1996. They also indicate the emergence of non-traditional suppliers - such as Israel, Morocco and Turkey - for some products.

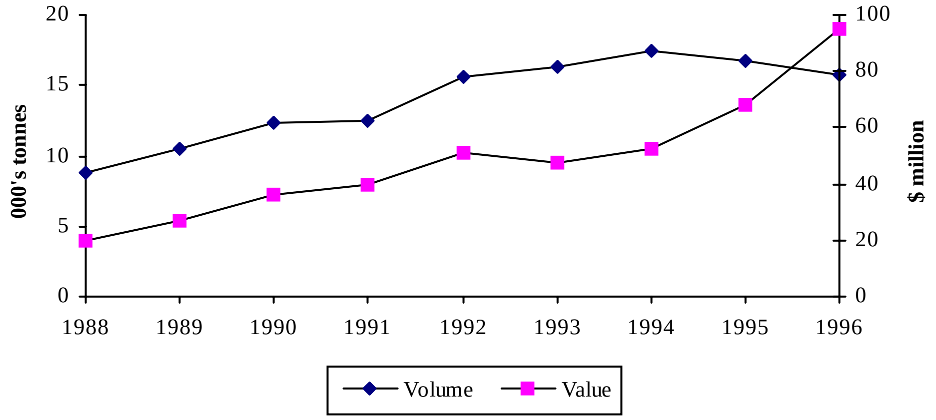
A closer look at imports for the period 1988-1996 shows that, although imports by volume have been fairly consistent, in value terms they have increased considerably (see Figure 0.8 and Figure 0.9). This is especially evident with olive oils. For example, from 1995 to 1996 the value of olive oil imports increased by 38.8 per cent, though their volume actually declined by 5.83 per cent. In fact, much of the apparent increase in imports of olive products to Australia could be accounted for by price increases due to changes in the world supply and demand equation.

Figure 0.8: Imports of Table Olive by Volume and Value, 1988 - 1996



Source: ABS 1997c

Figure 0.9: Imports Olive Oil by Volume and Value, 1988 - 1996



Source: ABS 1997c

2.3

Market Segmentation

2.3.1 Oil Segments

At the retail level, Australian sales of all cooking oils in 1996 amounted to $160.5 million (FoodWeek 1997), just 2 per cent more than in the previous year. Olive oil sales accounted for $64.20 million of that figure. Table 0.3 shows the retail market of oils by value and volume share for the two years. The figures indicate that, although the market share by value of olive oil is greater than that of other oils, by volume its market share is lower than that of vegetable oil and canola oil. Indeed, its share by volume fell from 1995 to 1996 though its share by value rose, reflecting higher prices.

Table 0.3: Retail Oil Segments

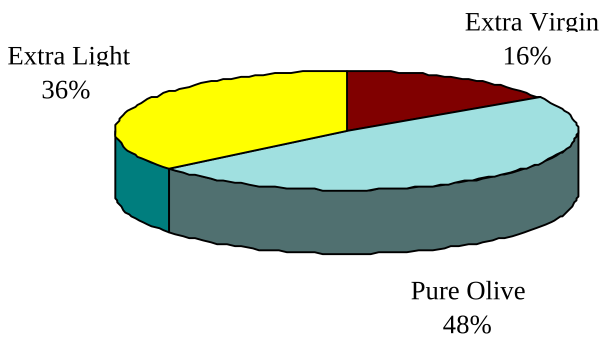
Segments	Value Share 1995 (%)	Value Share 1996 (%)	Volume Share 1995 (%)	Volume Share 1996 (%)
Olive Oil	40.4	42.5	21.9	19.4
Vegetable Oil	23.9	21.5	37.4	35.7
Canola Oil	18.7	19.3	23.4	26.8
Spray Oil	2.9	2.8	1.0	1.1
Pomace Oil	0.1	0.1	0.1	0.1
Other	13.9	13.7	16.2	16.8

Source: FoodWeek 1997

2.3.2 Olive Oil Segments

Figure 0.10 shows the market shares by value of the three major types of olive oils. 'Pure' olive oil accounts for almost half the market by value, whereas the market share of extra virgin oils, the type mostly produced in Australia, is only 16 per cent.

Figure 0.10: Olive Oil Segments by Retail Value Share



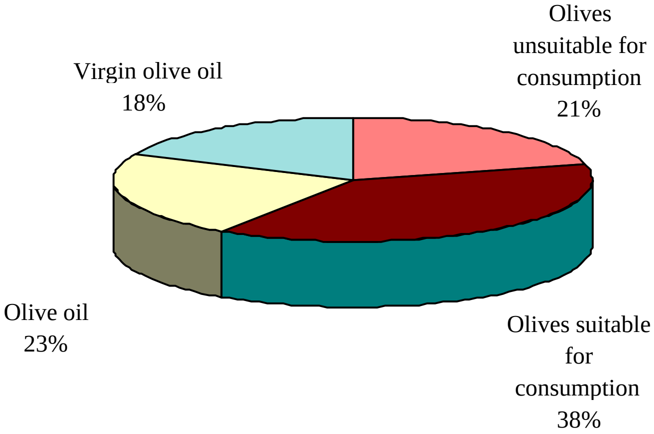
Source: FoodWeek 1996

2.4

Australian Exports of Olive Products

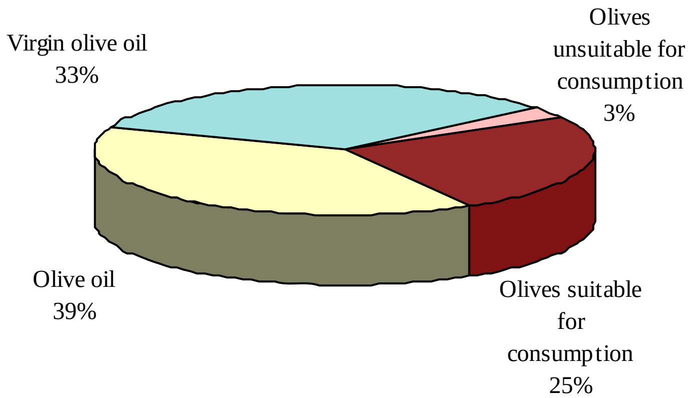
According to ABS figures, in 1996 Australia exported olive products valued at $1.047 million. Figure 0.11 and Figure 0.12 show the export categories by volume and value respectively. By volume 'olives suitable for consumption' was the main category exported, while by value 'olive oil' was the leading export.

Figure 0.11: Exports of Olive Products by Volume, 1996



Source: ABS 1997b

Figure 0.12: Exports of Olive Products by Value, 1996



Source: ABS 1997b

From personal communications with exporters in Adelaide and Melbourne it was revealed that most of Australia's exports are imports from Italy and Spain which are re-exported. Only a few firms are occasionally exporting Australian olive products.

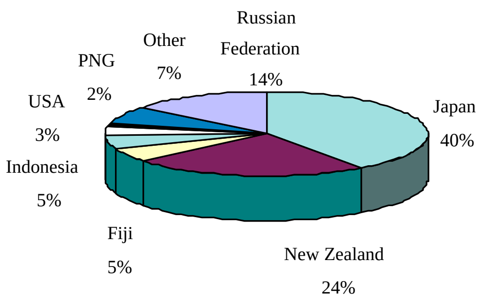
2.4.1

Export Markets

The main overseas markets for Australian exports of olive products are located in the Asia-Pacific region. Figure 0.13 and Figure 0.14 provide details for the main categories of olive products exported during the period 1988-1996.

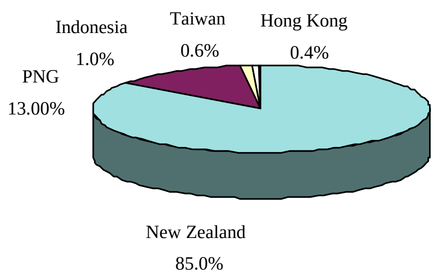
Figure 0.13: Olive Oil Exports by Volume Destinations, 1988-1996

Virgin Olive Oil



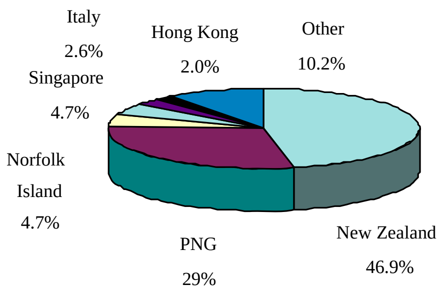
Exports of virgin olive oil by volume rose by 24 per cent from 1995 to 1996. The bulk of exports during the period 1988-1996 has gone to Japan. A closer look at the trade between Australia and Japan revealed that Japanese imports are highly irregular. New Zealand, Indonesia and Fiji have been importing consistently but in smaller quantities. In 1996 the Russian Federation imported almost 42 tonnes of virgin olive oil.

Olive Oil Solidified or Hardened



There has been inconsistency in exports in olive oil as lard from Australia. New Zealand stopped importing in 1989. In 1995 only Hong Kong imported, and in 1996 there were no recorded exports in this category.

Olive Oil

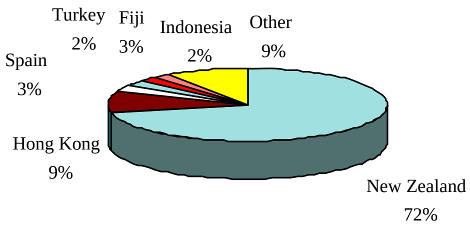


Exports of olive oil rose by 54 per cent from 1995 to 1996. New Zealand is the largest and most consistent market. Emerging markets are Singapore, Indonesia and to a lesser extent the Philippines. Papua New Guinea has not imported olive oil since 1994. Norfolk Island imported only once from Australia, in 1992.

Source: ABS 1997c

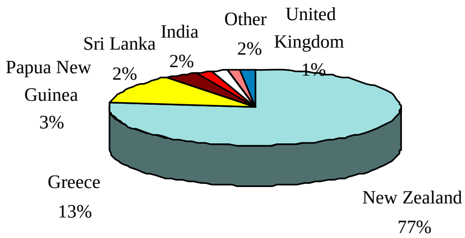
Figure 0.14: Table Olive Exports by Volume Destinations, 1988-1996

Olives Suitable for Consumption



Exports of olives suitable for consumption dropped by 56 per cent from 1995 to 1996. New Zealand has been the main market for preserved olives. Other important markets are Indonesia, Hong Kong, Fiji, and Papua New Guinea. More recently, Singapore and Taiwan have emerged as markets.

Olive Unsuitable for Consumption



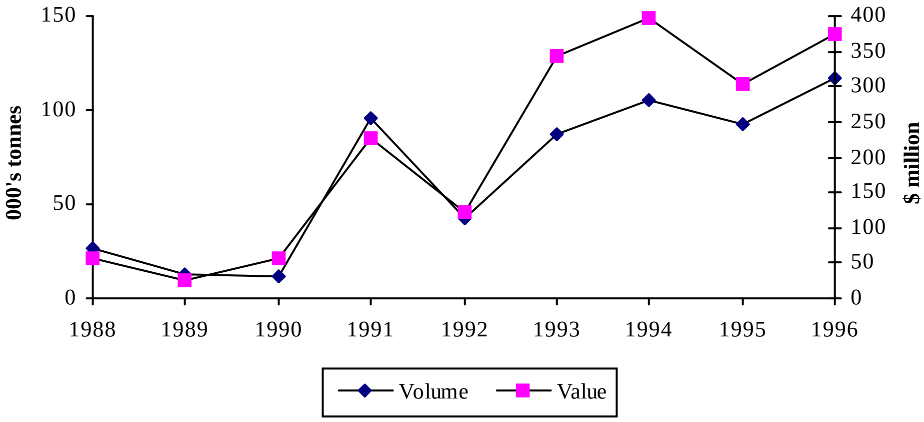
Exports of olives unsuitable for consumption have risen by 42 per cent from 1995 to 1996. Exports to Greece, the United Kingdom and Sri Lanka have been only occasional; New Zealand and India have been the most consistent markets.

Source: ABS 1997b

The figures show that volumes exported to different countries have been highly irregular, so it is difficult to identify a pattern or forecast future export trends. This irregularity in export activities may indicate that most exporters are only filling unsolicited orders or 'one-off' opportunities.

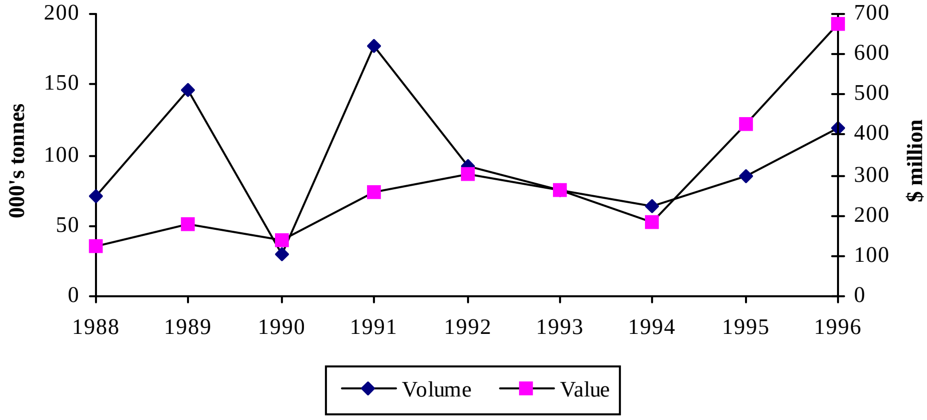
Figure 0.15 and Figure 0.16 show total table olives and olive oil exports by volume and value for the years 1988-1996. It is clear that there was no well-defined pattern of exports. Furthermore it appears that exports from Australia are highly dependent on world price fluctuations. For example exports of table olives and olive oils reached a peak in 1991 but plunged in 1992, mainly due to world price increases for olive products. From 1995 there has been a slight increase in exports by volume accompanied by considerable increases in prices.

Figure 0.15: Exports of Table Olives by Volume and Value, 1988-1996



Source: ABS 1997b

Figure 0.16: Exports of Olive Oil by Volume and Value, 1988-1996



Source: ABS 1997b

2.5 Export Assessment

Australian exports are extremely irregular and apparently subject to world price fluctuations. Furthermore, Australia is not taking advantage of its geographical proximity to Asian countries. Nevertheless, small advances have been made by entrepreneurial exporters. An opportunity may exist for the Australian olive industry to capitalise on the apparent potential opportunities in the Asian region. This is a possibility which could be the subject of further investigation.

1.

3. Consumer Marketing Research

3.1 Introduction

The overall aim of the consumer marketing research study is to identify potential target markets, determine market size and examine consumers' attitudes and perceptions of olive products. The study comprises two stages: a qualitative and a quantitative consumer research. In this pre-feasibility study only the qualitative section of the marketing study is presented. This stage provides a segmentation of the market, determines product characteristics and most importantly, provides direction for the subsequent stage.

For the purpose of this research the olive products examined were:

- Olive Oil: extra virgin olive oil
  pure olive oil
  extra light olive oil
- Olives: black olives
  green olives

3.2 Objectives

The objectives of the qualitative marketing research study are specified as follows:

- to understand the preferred characteristics of olive products;
- to determine the levels of acceptance of Australian-produced olive products;
- to determine the potential for the establishment of an Australian olive industry.

These objectives were accomplished by contacting potential users of Australian olive products and seeking their opinions on oil usage, particularly use of olive oil. For this stage of the study, four potential groups were identified:

- consumers
- food service firms (restaurant trade)
- importers/exporters of olive products
- food manufacturing firms.

For each group the following overall objectives were developed:

- Consumers:
  - to establish a basic profile of Australian consumers;
  - to understand the main factors influencing Australian consumers’ demand for olive products.
- Food service firms:
  - to identify the major issues for food service firms when purchasing oil products;
  - to determine whether there is an opportunity for olive producers to fulfil the needs of food service firms.

- Importers/exporters:
  > to identify importers'/exporters' perceptions of Australian olive products;
  > to assess their support for an emerging Australian industry.
- Food manufacturing firms:
  > to identify the major issues for food manufacturing firms when purchasing oil products;
  > to determine whether there is an opportunity for olive producers to fulfil the needs of food manufacturing firms.

3.3 Methodology

The principal methods of research used in this study were desk research and field research.

3.3.1 Desk Research

Publications were consulted to gain a background understanding of the main issues facing the olive industry. They included RIRDC publications, ABARE data, ABS data bases, FAO data, *Olivæ* magazine, industry media releases, *Oil World* magazine and *Food Retail* magazine. Extensive computer-based research was also used.

Before any primary data collection, search of the literature was conducted to identify any previous marketing studies. It was found that most literature has focused on the production aspects of olive products (cultural techniques, harvesting, irrigation, etc.). The Queensland Department of Primary Industries (QDPI 1996), Primary Industries South Australia (PISA 1995) and RIRDC (Hobman 1995a; Hobman 1996b) have conducted several economic studies to assess the profitability of an olive industry. However, major studies focusing on consumer research and the marketing of olive products were not identified.

3.3.2 Field Research

This stage of the consumer marketing research study makes use of qualitative research techniques only. The four potential segments (consumers, representatives of the food service industry, importers/exporters, and food manufacturing industries) were contacted across Australia. Different research designs and techniques were developed to examine each of the sectors and their use of Australian olive products. Primary data collection consisted of focus groups, in-depths interviews, informal discussions and semi-structured questionnaires. Due to time and financial constraints, personal interviews were conducted only in Queensland, Victoria and South Australia. A marketing specialist assisted with consumer research conducted in South Australia.

3.4 Consumer Research Findings

3.4.1 Methodology

As this was the first attempt to segment the market, consumers participating in the focus groups were tentatively selected according to their:

- level of awareness of Australian olive products; and
- ethnic background.

Tentatively segmenting the market is a procedure adopted in exploratory research to provide focus and direction when the segments have not been identified (Aaker & Day 1990; Zikmund 1997). In considering the above criteria the groups were divided into three categories: consumers exposed to olive products, those not exposed to olive products, and ethnic groups (see Table 0.1). Appendix 4 - Part A contains the focus group protocol.

Table 0.1: Market Segmentation

Group	**Reasons**	**Place**
Aware	exposed to Australian olive industry	Four groups in Adelaide
Not aware	not exposed to olive industry	Three groups in Toowoomba Two groups in Gippsland area
Ethnic	ethnic background associated with consumption of olive products	Italian Community Greek Community International Community[1]

[1] *Consisting of persons from India, Holland, England, South Africa, USA, Germany, Argentina, Peru and Colombia.*

Four focus groups were conducted in South Australia. As most commercial olive growers and processors are located in South Australia it was assumed that consumers in that region were more aware of the different olive oils and their uses. Focus groups were also conducted in Queensland (3) and Victoria (2), where the number of commercial olive plantations is limited. Their responses are believed to be more representative of mainstream Australia as respondents have not been exposed to an olive culture. To identify differences between the ‘mainstream’ and ‘ethnic’ communities, three focus groups comprising people from different ethnic backgrounds were conducted in Queensland. They contained representatives of the Italian community, the Greek community and a local international club representing nine nationalities.

3.4.2 Results

The findings presented in this section are the outcome of the 12 focus groups conducted in Queensland, South Australia and Victoria. Where possible the responses provided by the ethnic, exposed and non-exposed groups have been presented separately to clearly identify differences among the three groups. The focus group session was divided into four sections:

- edible oils
- olive oil
- olives
- Australian olive products

Edible oils

By way of introduction, respondents were asked to describe the different uses for edible oils in their kitchen. Some of the uses identified were barbecuing, frying, salad dressing, marinating and Mediterranean cooking. Respondents were then asked to name the oils they used in their everyday cooking. There were significant differences between the groups in the names listed when no aided recall was provided. Without any prompting the ethnic group automatically recalled ‘olive oil’ as the only oil used in their kitchen. The non-exposed and the exposed group mentioned olive oil among a series of oils such as canola, sunflower and grapeseed oils. The exposed group was also aware of less popular oils such as almond, apricot and soybean oils.

Use

At this stage respondents were presented with a variety of edible oils. With this aided recall respondents from the three groups recognised most of the oils presented. Olive, canola and sunflower oils were the most popular. Other oils mentioned frequently were safflower, vegetable and grapeseed oil. Macadamia and corn oils were the two least mentioned. Other oils mentioned but not introduced to the groups were peanut, sesame and soybean oils.

Use of oil was different among the three groups (see Table 0.2):

- For the ethnic group (mainly the Italian and Greek communities) the dilemma was not what variety of oil to use in a particular dish, but rather what type of olive oil to use. The ethnic group stated that the only time they would not use olive oil was when a dish required a particular oil taste (for example Chinese, Thai, Indian) or required large quantities of oil (for example for making chips).
- The exposed group were more ‘cuisine aware’. They could recognise different uses for the various oils. For them, pure olive oil should be used for daily cooking, while extra-virgin olive oils were preferred for preparing vegetables and salads. When larger quantities of oils were required (for example in deep frying) or when the food requires a subtle oil taste, respondents were prepared to use different oils such as canola, sunflower and grapeseed oils.
- The non-exposed group were more concerned with price and the volume of oil used than the other two groups. For them, vegetable and canola oils provided the same nutritional benefits as olive oil and were obtained at a lower price. Olive oil was used mostly by the non-exposed group for salads and some Mediterranean dishes in smaller quantities. The responses indicated that the non-exposed group perceived olive oil to be a luxury oil, to be used in lesser volumes for salads or when hosting friends for dinner.

Table 0.2: Typical Responses - Use of oil

Group	Typical Responses
Ethnic	‘Olive oil for almost anything. I don’t do a lot of frying but [for] the frying that I do I use olive oil.’ ‘I use canola oil and olive oil. Olive oils for salads, some cooking and vegetables, canola for everyday cooking.’
Exposed	‘I buy olive oil and use it mostly for everything. I keep a bottle of canola oil, just in case, when I don’t want the olive flavour in the food.’ ‘Basically I use olive oils for salads, canola oil for frying and sesame oil for Asian food.‘
Non-exposed	‘I use canola for most of my cooking and a bit of olive oil’ ‘We have a couple of olive oils for special things where the flavour is important, and canola and sunflower for everyday use’

Purchasing decision factors

Respondents were questioned on the factors they perceived as being important when purchasing oils. For the ethnic and exposed groups quality, flavour and health benefits were the main issues. These groups were prepared to pay a premium for their chosen oil. Although quality and flavour were also important for the non-exposed group, they ranked price as the main factor influencing their decisions. Typical responses are presented in Table 0.3.

Table 0.3: Main Issues when Buying Edible Oils

Group	Main Issue	Typical Responses
Ethnic	Quality (flavour, colour, smell, texture) Health benefits	'We don't only use olive oil because [it] is good for you, but because we are used to it and [it] is tastier.'
Exposed	Quality (flavour, colour, smell, texture) Health benefits	'Price is important when buying olive oil, but when I have the money I would prefer South Australian olive oil.' 'Basically I only use olive oil, fortunately price is not a problem for me. But I'm aware that there is an incredible price difference between olive oil and vegetable oils. For me the main issues will be flavour, quality and finally price.'
Non-exposed	Price Health benefits	'We use a lot of oil, so price is the main consideration.'

Health perceptions

Respondents were asked to recognise the healthiest oil from the oils presented. Olive oils were perceived as being one the healthiest oils in the market. However, when respondents were asked to provide an explanation as to why this was the case only a few could substantiate their answers. Respondents did not understand the differences between polyunsaturated and mono-unsaturated fats and why certain types of fat are detrimental to health. Most respondents were unable to identify to which category olive oil belongs (it is predominantly a mono-unsaturated fat). Canola and grapeseed oils were also perceived as being healthy, but again respondents did not know the reasons. Some respondents from the ethnic and exposed groups stated that olive oil was healthy because it was cold pressed, but did not fully understand the implications of this process.

Volumes used

Most respondents indicated that they used canola, vegetable and sunflower oils in larger volumes than the other oils. This aspect was particularly relevant for the non-exposed group. For deep frying, the three groups were inclined to use the cheapest oils (for example vegetable, canola). Respondents who in the past were likely to use lard or other animal fats have changed their habits for health reasons, and are now using vegetable oils. When cooking Mediterranean food or preparing salad dressings, most respondents tended to use olive oil. Macadamia oil has been used only by a few respondents, mainly out of curiosity. It should be noted that most respondents were very keen to taste macadamia oil when they had an opportunity. Peanut and sesame oils were being used mainly for Asian cooking. Grapeseed oil was used for the light taste. Interestingly, although only a minority had used grapeseed oil those who had were extremely pleased with its taste and said they would continue to use it.

Price

Generally, the larger the volume of oil used when cooking, the more concerned consumers were of the price. The ethnic and the exposed groups considered using a cheaper oil when preparing food requiring large quantities of oils. Price was particularly important for the non-exposed group.

Quality and flavour

Some respondents in the non-exposed group stated that they could not differentiate flavours among different oils, so 'why pay a higher price for some oils?'. Respondents from the exposed and ethnic groups were more concerned with quality, suggesting that flavour and colour were determinants of quality. They held the perception that any oil packaged in a plastic bottle could not be of good quality. Some even believed that plastic packaging affects the quality of the oil and the health of the user. For these two groups the light colour of vegetable oil was not appealing. 'It looks like water' said some respondents.

Other issues

- **Importance of labelling** - Respondents considered information on health attributes to be important when choosing a particular type of oil. Among the labels mentioned in the sessions were:

  > 'polyunsaturated' and 'mono-unsaturated' labels;

  > 'free of cholesterol label';

  > the Heart Foundation tick logo.

- **Education: cuisine and health** - Respondents who had been more exposed to different cuisine influences were more likely to know the type of oil suitable in a given dish. They were also more discerning consumers when eating out. Respondents were influenced by television shows (cooking/lifestyle programs) and magazines. Most respondents admitted that their knowledge of health issues had been acquired by watching television and reading magazines and health/diet books. Very few had consulted doctors, nutritionists or other health experts to gather information on the health benefits of different oils.

- **Multiculturalism** - There were some marked differences in cuisine knowledge between South Australian and Queensland groups. Some of these may be explained by the Mediterranean influence in South Australia.

Olive oil

At the beginning of this section, respondents were introduced to three different olive oils (extra-virgin, extra-light and pure olive oil). They were asked if they use or have used any of the three oils.

The responses of the exposed and ethnic groups were similar. Most in these two groups had used the three types of olive oils and considered extra-light olive oil to be of lesser quality. In the non-exposed group there were mixed responses. Some respondents use olive oils for special occasions, others keep a bottle of olive oil and use it only as a garnish for Mediterranean dishes, while others do not use olive oil at all.

Table 0.4: Use of Olive Oil

Group	Admitted using Olive oil	Most used	Less used
Ethnic	All have used olive oil - most for everyday cooking	Extra-virgin Pure olive oil	Extra-light
Exposed	All have used olive oil - for special occasions and everyday cooking	Extra-virgin Pure olive oil	Extra-light
Non-exposed	Mixed responses Some consider olive oil a luxury item	Extra-light Pure olive oil	Extra-virgin

Differences among olive oils

Respondents were asked to explain what they perceived as being the differences among the three types of olive oils. Few respondents from the non-exposed group could provide any answers. The exposed group had only a limited knowledge of the differences: some respondents believed it to be the processing techniques used in the extraction of oil, others to be the way olives were harvested, while others believed it to be the number of chemicals used in the processing of olives. Respondents from the ethnic group could not clearly explain the differences among the oils. Some suggested the difference to be the cold pressing technique used in the extraction of extra-virgin olive oil.

Table 0.5: Perceived Differences among Olive Oils

Group	Differences	Typical Responses
Ethnic	Only knew that extra-virgin is cold-pressed	'It goes through different steps, the first one is extra-virgin'
Exposed	Had a basic idea of differences in processing and plantation techniques	'Extra-virgin is the first pressing, anything that is virgin is subsequent press.' 'I think there is heat extraction and chemicals in the extra-light oil.'
Non-Exposed	Could not clearly explain the differences	'I don't have a clue.' 'I don't have any idea of what the labels mean.'

Purchasing decision factors

Respondents were asked the reasons why they used olive oil. Their answers varied from group to group. For the ethnic group it was *taste and tradition*, for the exposed group *quality and health benefits*, and for the non-exposed group *perceived health benefits* (due to media influence) and *price* (see Table 3.6).

Quality

There were differences in the responses provided by the three groups:

- It was evident that the ethnic group could detect differences in qualities among olive oils. For them a good quality olive oil would be dark in colour, thick in texture and with a bitter olive flavour. Respondents from the Italian group were more 'olive cultured' than members of the Greek or International groups.

- The exposed group were also well aware of the differences in quality among different oils. Those consumers who have been 'olive educated' do not enjoy the taste of extra-light olive oil. As one respondent said 'if you want the bland flavour of extra-light, why don't you buy grapeseed oil, which is cheaper and healthier?' It should be noted that for the ethnic group the olive taste has passed from generation to generation, while the exposed group had to acquire a taste for the oil. This is of relevance to an emerging industry, as the responses show that it is possible to educate consumers to develop a taste for good quality olive oil.
- It is not clear whether the non-exposed group was aware of the differences in quality among oils. It seems that price and media notions of quality were more important in shaping this group's perceptions of quality. Generally more respondents prefer the taste of 'extra-light' olive oil because it did not have the bitter olive taste of extra-virgin.

Price

As olive oil is one of the most expensive edible oils in the market, price concerns were rated as important by the three groups when purchasing olive oil. However**,** the importance of pricing varies between groups:

- For the ethnic group, price was not the main issue when buying olive oil as oils have been part of their diets for years. Even if prices increased, they would still consume olive oil, but they would be more careful with the volume used (less waste). Respondents would tend to choose a particular quality of olive oil and then seek the best value by buying the cheapest olive oil in that quality range.
- The exposed group were also concerned with price, but most said that they would not compromise quality for price. This group would tend to use South Australian extra-virgin olive oil for special occasions and salads, and imported olive oils for everyday cooking. For deep frying other oils were used, mainly because it was too expensive to use olive oil for bulk cooking.
- The non-exposed group were more concerned with price than the other groups and would be prepared to trade off quality for price. Although most were aware of the health benefits of olive oil, respondents perceived its price as too high for everyday cooking. Most still perceived olive oil as a luxury oil to be used in small quantities (for example in salad dressings).

Health

All three groups were aware of the health benefits of olive oil.

- For the ethnic group the fact that olive oil was healthy was just a 'plus' reinforcing their consumption. Thus, health was not the main or only reason for their use of olive oil.
- It seems that the exposed group's first reason for trying olive oil was 'health attributes', and later they became accustomed to the flavour. As indicated by one respondent 'maybe you buy it because it's healthy and then become accustomed to the taste, or you like the taste and then realise the health benefits of the oil'.

- The non-exposed group had a limited understanding of the health attributes of olive oil, with most of their knowledge obtained from the media, including magazines and television programs. Most realised that high fat levels in their diets should be reduced and were looking for alternatives. Vegetable oils and especially olive oil were perceived as being free of cholesterol, and therefore healthy. The majority believed that 'extra-light' was the healthiest of the three olive oils. The word 'light' was perceived as meaning 'no chemicals', 'no additives', 'no fat content' or 'fewer calories'. As consumers in this segment were not familiar with the taste of olive oil, marketing campaigns should reinforce the health benefits of the olive oils as a justification for their premium price.

Country of origin

The groups could identify Spain, Greece and Italy as the main producers of olive oil. The majority were also aware that Australia is planting some olives trees, but few had seen any Australian products in the market. It appeared from the responses given in the focus groups that country of origin was regarded as a minor issue when purchasing olive oil.

- Traditionally it has been assumed that Italian and Greek communities are likely to buy imported olive products. This was believed to be caused by their attachment to their home country. However, respondents in the ethnic group have made it clear that the reason is not country of origin *per se*, but the flavour and quality associated with the oils of those countries. If the same quality and price were obtained from different sources, consumers would be more prepared to buy them. The responses indicate that consumers' loyalty for a particular brand has not been developed: consumers will buy the cheapest brand in a given quality range. It is interesting to note that about 75 per cent of participants in the ethnic group were first generation migrants.

- Most respondents from the exposed group had tasted South Australian olive oil, and perceived it to be of good quality compared to commercial brands sold in supermarkets. They could identify certain South Australian olive oils brands such Coriole, Viva and Joseph. Joseph was perceived as top of the range, but too expensive for frequent consumption. This level of 'olive culture' meant that respondents could also recognise olive oils of inferior quality. For instance, various respondents stated that 'there is an awful South Australian olive oil in the market'. This problem raises the issue of the need for quality assurance programmes if the Australian olive industry is to fully develop.

- Some respondents from the non-exposed group believed that imported products were of better quality because southern European countries had centuries of olive tradition and advanced technology. However, they were prepared to purchase Australian products provided local products matched imports' tastes and prices. They would not pay a premium merely because they were Australian products.

Table 0.6: Important Issues when Buying Olive Oil - Typical Responses

Factor	Ethnic	Exposed	Non-exposed
Quality (flavour, colour)	'If you feel the taste of olives, then it has good quality.'	'The main reason why I use [olive oil] is because of its taste, health concerns are second ... It is just a lucky chance that it tastes better and is good for you.'	'We have olive oils for special things where the flavour is important, and canola and sunflower for everyday use.'
Price	'If we want to buy olive oil we buy it no matter what price it is. Last year it went up by about 15 per cent and we still bought it.'	'I would buy local oil for the good oil, and probably some Italian, Greek, or Spanish depending on the volume used.'	'I don't always buy olive oil because of the price.'
Health	'I think the healthiest oil would be olive oil.'	'I read stories of Mediterranean diets being more healthy.'	'You see the "extra-light" and you think it is healthier.'
Country of origin	'We would tend to use oil from Spain, because it tastes better.'	'If I could afford it I would buy South Australian oil, but because it's more expensive than the Italian or Spanish, I will buy the imported oil.'	'I would be inclined to go for Italian or Spanish oils.'

Other issues

- **Packaging** - The following issues were raised during the discussion:
  - > the importance of using glass bottles when packaging olive oil;
  - > the perception (mainly among ethnic and exposed groups) that the darker the colour of oil and bottle the better the quality of the oil;
  - > the fact that consumers using large quantities of olive oil buy it in 4 litre tins (consumers then bottle the olive oil in glass containers).
- **Promotion** - Most consumers have obtained their information on the health attributes of olive oils through the media (such as television, newspapers and magazines). Lifestyle television shows and women's magazines seemed to be important in shaping consumers' attitudes on health issues. Word-of-mouth was also identified as extremely important. Respondents from the ethnic group (mainly Italians and Greeks) stated that if a member of their community buys a good (or even bad) quality olive oil, in a matter of hours most of the community will know about it.
- **Place of purchase** - When respondents were asked to identify the outlets where they usually purchased their olive oil there were remarkable differences among the groups - see Table 0.7.

Table 0.7: Place of Purchase - Typical Responses		
Groups	**Place**	**Reasons**
Ethnic	Wholesalers Supermarkets when on special	‘Supermarkets do not have the variety [ethnic] wholesalers have.’ ‘Whenever something is on special in supermarkets we get it.’
Exposed	Markets in South Australia Producers Specialty food shops	‘People in the markets and food shops are prepared to share information and knowledge on ways of cooking.’
Non-exposed	Supermarkets	‘Delicatessen and specialty food shops are too expensive.’ ‘[supermarkets] because it is convenient to the shopping in only one place.’

Olives

Respondents were asked if they had previously tasted olives (green and black) and to state their preferences. Most people in the groups preferred the taste of black olives Some respondents mentioned that Kalamatas olives were the best in the market. Kalamatas were the only variety of olives known by respondents. Some people from the aware exposed and ethnic groups stated that they had bought raw olives. One or two respondents in each focus group did not like the taste of olives and were not prepared to taste the olives in the sessions. When these respondents were asked the reasons for the refusal they gave the following responses:

- ‘I don’t know why I don’t like them, it must be the bitter taste.’
- ‘The smell makes me sick.’
- ‘I don’t like the taste of them, don’t want to try them.’

Most respondents liked to eat olives directly from the jar. Some used olives as an ingredient in salads, pizzas, pasta and other Mediterranean dishes and others used them as savouries during receptions and formal dinners.

Factors influencing olive consumption

- **Taste** - was the major factor respondents considered when buying olives. Some respondents considered ‘home brand’ olives to have a salty taste. This salty taste gave the impression that the olives had undergone a series of chemical processes before bottling. The responses indicate that brand loyalty has not been developed: consumers select a particular flavour of olives and then choose the cheapest brand with that flavour.
- **Price** - Most consumers indicated that the price for olives has increased dramatically in the past years. However, consumers who use olive oils regularly have noticed this increase more than others. The higher price has not prevented those respondents from buying olives, but the volume of olives bought has decreased. Respondents who consume smaller quantities of olives stated that price was not a critical issue for them. At the moment olives are perceived by most groups (except for the Italian and Greek communities) as a delicacy, so they are prepared to pay a higher price.

- **Health benefits** - Most respondents were not aware of the health benefits associated with the consumption of olives. Some respondents stated that olives were 'good for the skin'. Others were concerned with the processing techniques and the brine used to preserve the olives.
- **Country of origin** - Country of origin was not an issue for most respondents. People buy olives for the taste - their origin is secondary. Although Greek olives were popular it was more the type of olives - Kalamatas - than the country of origin that was considered important by consumers.
- **Place of purchase** - Respondents purchase olives from a number of outlets. The ethnic group buy primarily from ethnic retailers and from supermarkets when they are on special. The exposed group prefer to buy olives from the markets, on the grounds that the bottled olives are over-processed. Both groups have also bought raw olives from food markets, to be used when preparing meals at home. The non-exposed group buy mostly from supermarkets and only occasionally from delicatessens as they regard delicatessens' prices as too high.
- **Multicultural influences** - Mediterranean influence has been a major factor affecting the consumption of olives. From discussions in the focus groups it was evident that consumers have become accustomed to the olive taste due mainly to the introduction of olives in pizzas and other Mediterranean dishes. In South Australia this influence has been more evident. As quoted by one respondent: 'the food industry and especially the South Australian food industry has been led by our ethnic community. Thanks to them, we have become accustomed to good cuisine'.

Australian olive products

This section sought to assess consumers' knowledge and perceptions of Australian olive products. Table 0.8 provides a summary of each group's responses.

Awareness and exposure

The awareness and exposure of respondents to Australian olive products varied considerably among the three groups:

- The ethnic group were aware that Australia is currently producing olive products. However, they could not identify types of olives/olive oils being produced, the brands, or the regions where olives are planted commercially. The Australian olive products they had tasted were obtained mainly through their own ethnic network in the Italian and Greek communities. Care should be taken when interpreting these responses as the ethnic groups interviewed were in Queensland. It is very likely that the ethnic groups in Victoria and South Australia have been more exposed to, or are involved in, the production of olive products in Australia.
- Most respondents from the exposed group had been in contact with Australian olive products. The role played by the Adelaide markets in introducing olive products to consumers should not be underestimated. Respondents had tasted commercial and non-commercial olives and olive oils. They could identify some of the main Australian brands in the market (Joseph, Viva, Coriole, Diana, South Australian Olive Oil).
- Most in the non-exposed group were not aware that Australia is producing olive products. Those who said they knew could vaguely identify regions of olive production. Some comments, for example, were 'in Mediterranean climate' and 'somewhere down south'. The majority of respondents had never tasted Australian products. It is interesting to note

that some respondents stated that they had tried Australian olive oil when referring to 'Vetta'.

Perceptions

Consumers' perceptions of Australian olive products were varied:

- As most people from the ethnic group had not tasted Australian products, they still perceived imported products as of better quality than local products. People who had tried Australian olive products believed that the taste still needed some 'maturity', a characteristic that only years of tradition could provide. However, they did not discard the possibility that Australian products might reach that level.
- The exposed group believed Australian olive products to be of excellent quality. They perceived these products as healthier than imports because they were fresh, had stricter quality controls and did not have to be transported for long periods. People concerned with the environment raised the issue of ocean pollution generated by transporting products from Europe. They held the belief that pollution could be reduced if products were supplied in Australia. The exposed group could also identify the differences in quality among the Australian olive oils. For them Joseph was at the top end of the market in terms of quality and price, followed by some of the other commercial brands and finally the oils bought at the markets and from some small food shops. The group was concerned that some Australian businesses were producing olive oil of poor quality and that this practice might hinder the development of the local industry.
- The non-exposed group did not have a well-developed perception of olive products. Some still perceived imported products to be of better quality than Australian products. This problem of perception had been aggravated, according to some, by the existence of poor quality Australian olive oil in the market. Poor quality products reinforced the notion that imported products were of better quality.

Adoption and usage

Most consumers in the focus groups were prepared to consume Australian products and were positive toward the development of this new industry in Australia. The ethnic community was more outspoken about the need for establishing industries - issues of employment levels and regional development were raised during the discussions. Generally, respondents agreed with the concept of an Australian olive industry but suggested that the following issues should be addressed before consumers could fully accept Australian olive products:

- **Price** - consumers will not purchase local products if they are much more expensive than imports;
- **Perceived quality** - if local products do not meet current quality of imported products, consumers will not purchase them;
- **Promotion** - consumers need to be constantly reminded of the reasons why they will pay a premium for cooking oil;
- **Consistency of supply** - before loyalty can be achieved consumers need to be confident that they can obtain their preferred products any time they need them.

Table 0.8: Australian Olive Products - Summary of Findings			
Group	Aspect	Typical Comments	Analysis
Ethnic	Awareness	'Yes we know Australia is producing some olive oil.'	Group knew of small local production of olive products. They could not identify areas of commercial production.
	Exposure	'We have tried olive oil, some friends send it from Melbourne.'	Group have never seen commercial brands of olive products. They have tasted some Australian products through the network of the ethnic community (friends and family).
	Perception	'South Australian olives do not have much flesh.'	Group do not have negative or positive attitudes toward Australian products. They know different brands of imported olive products and are able to compare quality levels among olive products. Some believe that local products can be of excellent quality if right techniques of cultivation and processing are used.
	Adoption	'If Australia is prepared to give people full time jobs, then we are prepared to back up the industry.' 'Price and quality are the main factors, country of origin will come last ... We only buy it once and then we compare.'	Group are prepared to support a local industry. This group is 'olive cultured'. As they are pleased with imported olive products, the local product will have to be of similar or superior quality at the same price.
Exposed	Awareness	'Yes, I know Australia is producing olive oil. I think there are olive plantations everywhere, even in Tasmania.'	Group are aware that Australia is producing olive products. Some could even mention specific locations in South Australia.
	Exposure	'We have tried olive products from the markets.'	Most respondents have been exposed to Australian olive products through the markets. Others have seen olive plantations around South Australia.
	Perception	'We know that South Australian olive oil is better, because it tastes better.'	Group believe that Australian olive products are of excellent quality and can compete with imported products. However, price differences are of major concern.
	Adoption	'Yes I would buy Australian olive oil, but price should be looked at.'	Group are prepared to support an Australian olive industry, but expect prices to fall once production increases.

Table 3.8 continued			
Group	Aspect	Typical Comments	Analysis
Non-exposed	Awareness	'It seems that there are some olive plantations here, but I don't know where.' 'No, I didn't know. I'm a bit ignorant. I always thought they would come from Greece, Spain or whatever.'	Some had a vague idea of small scale olive plantations, but did not know of commercial plantations. Most were surprised that Australia might be entering into this industry, where international competition was so intense.
	Exposure	'I don't know if I have tried them.'	The majority in group had never tasted Australian olive products. Some believed 'Vetta' to be an Australian product.
	Perception	'Australian olive products would have problems with perception of quality. Imported stuff is thought to be better. Marketing is important. They would have to convince the public that Australian products have the same qualities as imported.'	Most had not developed negative or positive attitudes toward Australian products. Group in general believed that imported products would be of better quality than domestic.
	Adoption	'You buy them once to see how they are, if they are too expensive but not much difference in quality, then you wouldn't buy them again.'	Group need to be convinced that Australian products are of better quality to what they are using now. Cannot use 'nationalistic' feelings to maintain demand for local products. Price will be a major determinant when deciding what oil to use.

3.4.3 Summary of Consumer Research Findings

Edible oils

- Lard and other animal fats are being replaced by vegetables oils and vegetable fats.
- The main issues when purchasing oils and fats are:
  - > price
  - > quality
  - > volume used
  - > perceived health benefits
  - > media influence (education/promotion).
- Vegetable oils, mainly canola and sunflower, are used by most consumers for regular cooking.
- Specialty oils are used for specific occasions.
- Grapeseed oil is used by more 'cuisine-educated' consumers when a light flavour is required, olive oil when a stronger flavour is desired.

Olive oil

- Consumers are aware of olive oils in the market.
- Consumers perceive olive oil to be the healthiest oil in the market.
- Quality, price and health attributes are the main issues when buying olive oils.
- No loyalty has been developed for any particular brand.

Olives

- Consumers are aware of different olive products in the market.
- Consumers prefer black olives to green olives.
- Kalamatas is the only variety of olives mentioned.
- The main issues when purchasing olives are:
  - > taste
  - > price.
- Olives are still perceived as a delicatessen item, but are slowly gaining acceptance as a mainstream food ingredient.

Australian olive products

- Consumers outside South Australia have limited knowledge of Australian olive production.
- Few consumers have been exposed to Australian olive products.
- Consumers who have been exposed to Australian olive products have a positive attitude toward them.
- Consumers who have not been exposed to Australian olive products believed imported products to be of better quality.
- Most consumers stated they would be prepared to purchase Australia olive products, provided price and quality are similar to those of imported products.
- Some consumers believe quality assurance programs are needed.

3.4.4 Market Outlook

From the responses provided in the focus group discussions a series of factors have been identified that could favour the establishment of an Australian olive industry. Firstly, the findings suggest that there is generic recognition for olive products. Hence, marketing efforts could be used to develop recognition of an Australian brand. Secondly, consumers have a basic knowledge of the health benefits associated with olive oil, implying that ~~. This implies that~~ olive oil can be easily differentiated from competing oils. Thirdly, consumption of olive products is likely to increase as consumers become more ‘cuisine educated’ and recognise the different health attributes of olive products. An increase in consumption indicates that there will be a greater market for both local and imported olive products. Finally, as there is as yet no~~t~~ loyalty for any particular brand of imported products, an opportunity exists for consumer loyalty to be developed amongst Australian brands. ~~thus consumer loyalty toward Australian brands could be developed.~~

However, there are a number of factors that could hinder the development of an industry. Firstly, as consumers have pre-existing expectations toward imported olive products, Australia olive products will be judged on ~~by~~ these expectations. Thus, for local products to compete with imports they will have to match or excel consumers' expectations. Secondly, the main issues for consumers when purchasing olive oils are quality and price, but still perceive imported products to be of a better quality and more affordable. Thirdly, competition does not come from imported olive products alone, but also from substitutes such as canola oil, grapeseed oil and sunflower oil. Finally, there is little ~~not~~ awareness amongst respondents that Australia is producing olive products, production being generally ~~. Moreover, olive products are~~ associated with Mediterranean countries. Promotional campaigns will be needed to alter this perceived association and to ensure that Australia will become recognised by consumers as a producer of olive products.~~shift this association and place Australian as an olive producer in consumers' minds.~~

In conclusion, the responses obtained in the focus groups suggest that there is an identifiable opportunity for locally produced olive products. The success of local products will depend on how well the industry makes use of the identified strengths and overcomes the identified threats.

3.5 Food Service Sector Research Findings~~Industry (IS THIS SECTOR OR INDUSTRY)~~

3.5.1 Methodology

Members of the food service sector contacted were chefs, restaurant purchasing officers and other persons involved in the catering trade. As the supply of Australian olives to the food service trade is limited, this research focused only on olive oils. The focus groups and informal interviews were conducted in Queensland, Victoria and South Australia. For a copy of the focus group protocol see Appendix 4 - Part B.

A focus group was conducted in South Australia, where restaurateurs have been more exposed to the olive industry than in other states. A professional marketing researcher was contracted to randomly select representatives of the food service industry to participate in the focus group. Participants ranged from owners of cooking schools to young people in apprenticeships.

Face-to-face informal interviews with restaurateurs were conducted in Queensland, Victoria and South Australia. During the interviews, the use of oil and reasons for choosing particular oils were discussed.

3.5.2 Focus Group Discussion

The focus group was made up of ~~group was made up of~~ seven food industry representatives: the owner of a cooking school, three chefs, one baker, a restaurant owner and a student in a chef apprenticeship program. Their places of work ranged from exclusive restaurants to coffee shops, with their clientele originating from a diversity of~~. Their clientele were from diverse~~ backgrounds. The focus group sessions were~~was~~ divided into two sections:

- general discussion
- Australian olive oil products discussion.

Edible oils

Use of oil

Members of the group were asked to list the oils used in their establishments, and to describe the way they were used. Most respondents were aware of the different oils in the market and the best cooking uses for each type of oil. The following points were made by most respondents:

- Use of animal fats is decreasing.
- Vegetable oils are used for deep frying or shallow frying.
- Sunflower and safflower oils are used as healthier substitutes for vegetable oils.
- Grapeseed oil or sunflower oils are used when a light taste is needed (for example with seafood).
- Peanut and sesame oils are used for certain flavours (for example with Chinese food).
- Olive oil is used for salads and marinating.
- Small quantities of extra-virgin olive oil are used for salad dressings.
- Extra-light olive oil is used for mayonnaise (other olive oils are considered too strong)
- Corn oil and palm oil are not widely used.
- Macadamia oil is used mostly for experimenting - out of curiosity.

Typical responses on the use of oil were:

> 'We use vegetable oil for deep frying, and olive oil for marinating, salads and that sort of stuff. We don't use animal fat at all except for sweets.'
>
> 'We use vegetable oil for deep frying and olive oil blends for marinating and dressings, extra-virgin olive oil for salad dressing.'
>
> 'If you don't want to add extra flavour to the dish you use grapeseed oil or sunflower oil. Seafood has such a delicate flavour, that you don't want to add flavoured oil.'

Volume used

Respondents were asked to estimate the volume of oil used in their cooking. The ~~two~~ different responses highlight the importance of cost-reducing strategies in the food service sector:

- Where frying of food is a major activity, respondents indicated a preference for vegetable oils over other ~~than other s~~types of oils.
- Respondents who do little frying tended to use sunflower, safflower and olive oils.
- In both groups olive oil is used regularly, but in smaller quantities than other oils.

Typical responses were:

> **Larger volumes**
>
> 'Vegetable oils, the type of oil we use for deep frying is an economic function.'
>
> 'We use more vegetable because it's cheaper and because of the amounts that we use we have to sort of look at the economics, we use olive oil in the kitchen for salads and marinating.'
>
> **Small volumes**
>
> 'I don't use much deep frying, so I'll probably say that sunflower, safflower and olive oil will be the main.'
>
> 'I don't use vegetable oils very much because I'm not doing big catering jobs. I probably use sunflower, safflower and olive oil.'

Reasons for using oils

Respondents were asked to explain the main attributes they look for when purchasing a particular type of oil. The following attributes were mentioned during the discussions (in order of importance):

- **Quality & Flavour -** The emergence of more demanding consumers has driven restaurateurs to be selective when choosing food ingredients. As consumers are becoming more 'cuisine educated' and more appreciative of the different tastes of fine food (including oils), restaurateurs believe that if they do not use quality ingredients consumers may select other food establishments. Thus, the main concern for restaurateurs is the good quality (flavour) of the oils.
- **Price -** After quality considerations are met, price is the main concern for most restaurateurs. Restaurateurs will look for the best quality/price combination available when selecting the oils for their kitchen. Price is particularly important for restaurateurs who use a large volume of oil in their cooking (for example, for ~~(eg.~~ deep and shallow frying)~~)~~. It seems that the more expensive oils are used only in small quantities, to add flavour.
- **Duration -** The break-down characteristics of an oil indicate how many times an oil can be re-used. It was stated that less expensive oils tend to break-down more easily, and so are soon discarded. Respondents stated that they would be prepared to purchase more expensive oils if they lasted longer.
- **Health benefits -** Restaurateurs are using less animal fat and are increasing their use~~e~~ of vegetable oils. This change is in part a response to consumers' demands for healthier foods. Most respondents believed that vegetable, sunflower and safflower oils provide excellent health benefits. Olive oil is perceived as not only healthy, but also the 'trendy' oil to use. Olive oil is used in small quantities in salads and Mediterranean dishes, mainly for its taste and its image. It appears that the health benefits of olive oil are a bonus that reinforces its use.
- **Aftertaste -** A good quality oil is believed not to retain the 'greasy' aftertaste found when cooking with other oils and fats such as lard, other animal fats, palm oil and coconut oil. Sunflower, grapeseed and olive oils were included ~~mentioned~~ in the category of good quality oils that do not leave an aftertaste.
- **Local or regional product -** New chefs are becoming more aware of the benefits of supporting local or regional industries. Respondents believed that the new generation of chefs are inclined to use more Australian products in their restaurants; some are even using this practice as a major selling point. This information was confirmed by subsequent informal discussions with restaurateurs. For instance, a very exclusive Italian restaurant in South Australia was using Australian olive oil in its salad dressings and was informing consumers that it supports South Australian producers.
- **Availability of supply -** There are some instances when restaurateurs are forced to use a particular brand or type of oil because their preferred oil was not available at the time of purchase. This problem was mentioned as particularly important when seeking to buy Australian products out of season, or when importing certain oils such as olive oils.

Table 0.9: Use of Oil - Typical Comments

Issue	Comment
Quality-Flavour	'Flavour and price, but we wouldn't compromise flavour ... especially in those things where the oil flavour has to dominate.'
Price	'price will be one of the main issues.'
Duration	'some [oils] last longer than others, so if one is cheaper, it may break down really quickly and you may be left out with nothing, so you have weigh up what is going to last you a little longer.'
Health benefits	'[health benefits] may be the reason why people are getting into olive oil besides flavour.'
After taste flavour	'if you eat chips in fast food outlets you can feel the fat in your mouth ... it doesn't happen with sunflower or with olive oil ... when you have chips cooked in good oil, you shouldn't have an aftertaste of the oil.'
Local or regional product	'we would tend to promote regional or local stuff. We try to cook with as much local stuff as possible.'
Availability of supply	'I would like to see more Australian oils out there, at the moment there is not enough supply.'

Australian olive oils

This section sought to understand respondent's knowledge and perception of Australian olive oils. Some typical answers are presented in Table 0.10.

Awareness

All respondents had a good knowledge of olive production in South Australia. Most of them could identify particular growing areas. ~~??.~~ However, care should be taken when generalising this response, as the focus group members have been more exposed to an olive culture than restaurateurs in other states.

Exposure

Most respondents believed Australian products to be of excellent quality. However, some were concerned that there are Australian olive products in the market that are of very poor quality and this may have damaging effects for the industry in the future. These concerns must be taken seriously by the developing industry, as they raise the urgent need for 'quality assurance' programs to be implemented before the image of the Australian olive industry is tarnished.

All respondents had used Australian olive oil in their cooking. Most had used South Australian extra-virgin olive oil in their restaurants and for personal use. The strong Mediterranean influence in Adelaide has played an important role in exposing individuals to the 'olive culture'. The Adelaide m~~M~~arkets, in particular, were identified as being responsible for introducing different South Australian olives and olive oils to the food service sector.

Perception

Prices for Australian products were considered to be too high for regular use. Joseph, for example, was believed to be extremely expensive, but was presented in an attractive package and accompanied by a clever marketing strategy. One respondent believed that there is little price difference between good quality Australian and good quality imported products.

Adoption and usage

Respondents stated that they would use more Australian products if they were competitively ~~more attractively~~ priced. They were using more imported olive oil than Australian oil mainly because of price considerations.

Table 0.10: Australian Olive Products - Typical Comments	
Aspect	**Typical responses**
Awareness	'yes we all know that South Australia is producing olive products.'
Exposure	'we have one supplier and we don't use much. We got some Australian, but it was too expensive.'
Perception	'I prefer Australian [olive products], the taste is more balanced. With the imported, it must be the shipping thing.' 'Australian olive oil is very pricey ... I still believe that all we'll be doing is niche marketing and boutique marketing.' 'I would buy [imported] olive oil from the supermarkets because of its price.'
Likelihood of purchase	'I think consumption of olive oil is going to increase in the next 5 years ... because we are becoming more olive oil aware and there is a lot more planting going on.'

Differences among oils

Australian olive oils were perceived as being of better quality than the imported commercial products. The focus group's members perceived the taste of Australian products to be more 'balanced', more 'fruity' or more 'Aussie'. As one respondent indicated: 'you can taste the banana flavour in some Australian oils'.

Care should be taken when analysing these responses, as restaurateurs were comparing premium quality Australian extra-virgin olive oil with commercial imported oils sold in supermarkets. This comparison has also been made by some potential producers of olive oils, when they have tended to make statements such as 'there is an awful lot of imported oil being sold in supermarkets; when compared to them, Australian oils are much ~~more~~ better'. A more appropriate comparison would be between premium quality Italian and Spanish olive oils and premium quality Australian olive oils.

Respondents also identified major price differences between imported and local oils. They believed that medium quality olive oil could be found in supermarkets at a reasonable price, but it was difficult to find the same quality Australian olive oils at a comparable price.

Typical comments on taste and flavour were:

> 'Australian products I think are better. Probably because I'm biased I think that we produce better olive oil.'
>
> 'There is a very remarkable difference between the Australian olive oils and imported olive oils, the difference is in taste.'
>
> 'Price plays an important role. If I use [olive oil] for a catering job, I would probably use imported.'

Dislikes

When respondents where asked to identify what they dislike about Australian oils, all of them said its price. Some expected that when production increases, costs will fall and prices will become more competitive. Others believed that Australia should not get into mass marketing because the costs associated with establishing and operating a commercial olive plantation are too high and growers would not see any returns on their investments. For them, Australia should target the niche and 'green' markets.

Ways of promoting olive products within the sector

Respondents were asked how an olive industry could promote its products in the food service sector. The following suggestions were made:

Education

- hold olive oil tastings with chefs to introduce good quality olive oils;
- educate chefs on ~~as to~~ what type of Australian olive oil is suitable for ~~d~~each particular dish or cooking variation; ~~which occasion~~
- introduce cooking schools and TAFE colleges to the new Australian olive products.

Promotion

- supply sample ~~trial purchase~~ packages to chefs, purchasing officers and others in the restaurant trade so that they can taste the flavour of good quality Australian olive products. Chefs complained that on many occasions they are offered olive oils but do not have the opportunity to taste them before purchasing;
- make use of the various food festivals held in South Australia by displaying different oils and their uses in cooking.

Typical comments on education and promotion were:

> '… by education, holding olive oil tastings, so that the chefs can be educated on what taste good and what goes with what.'
>
> 'They should allow chefs to taste the olive oils when they come, and promote it. Now they only ask us to buy, without us knowing what kind of product it is.'
>
> 'The producers will have to pull together, because your distributor is not as enthusiastic as the producer or grower will be. The growers will have to get out there and push their product. The grower and the marketeers will have to do it.'

The last of the above comments embodies what restaurateurs thought as the best way of promoting an olive industry in Australia.

3.5.3 Interviews with Food Service Sector

Interviews in Queensland

Informal interviews in Queensland with chefs and purchasing managers of fast-food chains, coffee shops and take-away shops indicated price as their major concern when purchasing oils and fats. For instance, a trendy coffee shop in a higher socio-economic level suburb in Brisbane stated that it used extra-virgin olive oil in salads in minimum quantities, but its major cooking needs would normally be met by vegetable oils and animal fats.

Healthy cooking was perceived to be of great importance as consumers become more health conscious. Healthier cooking involves moving away from or reducing consumption of animal fats and increasing ~~changing to~~ the use of vegetable oils. It seems that vegetable oils are meeting the need for nutritive ingredients demanded by the food service industry, and that the use of olive oil is more a matter of taste and fashion, with less attention being placed on its nutritional benefits.

In take-away shops and fast-food outlets price remains the main consideration; health concerns are a secondary issue. From the informal conversations held it was understood that cotton and palm oil are the main oils used in those establishments, although even those oils were considered too costly.

Differences between South Australians and Queenslanders

During the discussions with restaurateurs in Queensland and South Australia the following differences were identified~~found~~:

- South Australian chefs appeared to be more 'olive educated' than Queenslanders. One explanation is that South Australians have been exposed to olive products in the markets, in food festivals and through the Mediterranean influence in that state.
- South Australian chefs have a greater knowledge of Australian olive products. In Queensland, chefs had only a vague idea of olive production in Australia and were not very often presented with Australian olive oil products.
- Consumers in South Australian restaurants appeared to be more demanding in the quality aspects of food. This may help explain why the South Australian restaurateurs have used or were prepared to use Australian olive oil.

Other restaurants

Exploratory research has shown that other ethnic restaurants (for example ~~(eg.~~ Indian, Chinese and Thai) ~~)~~ do not use olive oil. It seems that the strong flavour of olive oil interferes with the traditional taste of their food. If a healthier choice is required such restaurants will tend to used blended vegetable oils. From the restaurateurs interviewed in Queensland only one exclusive Italian restaurant was using South Australian olive oil in its cooking. It is possible that the restaurateur's suppliers were contacted through the 'ethnic network' and~~,~~ not through traditional suppliers.

3.5.4 Market Outlook

From the responses provided in the focus group discussions it could be concluded that there is an opportunity for Australian producers to supply olive products to the food service sector. The size of the market that can be supplied will depend on the combination of price/quality that can be offered. The food service industry is very competitive and price-conscious. For this industry, quality and price are paramount when choosing ingredients, and most restaurateurs will not compromise quality for price. Most restaurateurs believe that imported olive products are meeting their quality needs at an affordable price.

Australian olive oil is seen as a high-priced product of an excellent quality. This high price has led restaurateurs to use it only infrequently and in small quantities. If ~~This indicates~~ Australian olive oil is to be used in large volumes, prices will need to be more competitive. With the current price structure, only a limited number of restaurants will be able to use Australian olive oil, and only in small volumes.

As competition is also coming from other vegetable oils (for example grapeseed, canola, sunflower), restaurateurs need to be reminded of the benefits and attributes of olive oil. They also have to be educated about the various types of olive oils and the ways of using each type. Chefs need to be introduced to the unique flavour of Australian olive oil. The olive industry should take advantage of the ‘cook Australian’ sentiment (in support of local and regional products) that new chefs are promoting.

3.6 Importers and Exporters Sector Research Findings

3.6.1 Methodology

In-depth interviews and a semi-structured questionnaire were the techniques employed to collect information from importers/exporters.

In-depth interviews were conduced with importers/exporters of olive products in Queensland, South Australia and Victoria. Most of the importers interviewed are also major wholesalers supplying main supermarket chains. Other importers supply to niche markets, such as ethnic and gourmet food shops. Several importers/exporters distribute olive products under their own trade names.

The design of the questionnaire was based on the responses obtained from the in-depth interviews and information collected during the literature review (see Appendix 4 - Part C for a copy of the questionnaire). An academic specialising in consumer research and an importer/exporter pre-tested the questionnaire, which was then sent to all 17 members of the Australian Olive Oil Association (AOOA). This association represents the main importers/exporters of olive products in Australia. Other importers/exporters not members of the association were also contacted. Importers/exporters who did not respond to the questionnaire the first time were sent a second questionnaire. Of the 25 questionnaires distributed, 17 were answered.

3.6.2 Discussion of Questionnaire Findings

Section 1 of the questionnaire was answered by both importers and exporters, sections 2, 3 and 4 by importers and section 5 by exporters.

General questions

The aim of this section was to identify the activities in which the interviewed firms are involved. Of the 17 firms that responded, two were engaged in export activities only~~;~~, four in both import and export activities ~~,~~and nine in imports only~~,~~; one firm was currently neither importing or exporting and one did not answer this section. With the exception of one, all firms supply other products in addition to olive products. Such goods include cheese, tomato products, pasta, vinegar and biscuits.

Imports of olive products

This section aimed to identify the olive products imported and their country or region ~~source~~ of origin. It was completed by 13 importers. Some questions were not answered by some respondents as they were concerned with the confidentially of the information.

Country of origin

Table 0.11 shows the number of firms that acknowledged importing olive products from each of the countries listed. The responses indicate that Spain, Italy and Greece are the major sources of supply of both olive oil and table olives. Access to the Australian market by non-traditional olive exporting countries such as Morocco and Turkey is also relevant. The fact that Singapore does not produce olive products but is currently exporting could indicate that some of the Mediterranean countries are using Singapore as a springboard for the Asian region. These findings are validated by ABS data on imports (see Section 2.0).

Table 0.11: Country of Origin of Imported Olive Products

Olive Oil		Olives	
Origin	**Importers[1]**	**Origin**	**Importers[2]**
Spain	8	Spain	9
Italy	7	Greece	7
Greece	4	Italy	4
Turkey	1	Morocco	2
Morocco	1	France	1
		Singapore	1

[1] number surveyed = 12 *[2] number surveyed = 9*

Suppliers

Most respondents indicated that they obtained their products directly from producers, with only two using a combination of producers and agents (see Table 0.12).

Table 0.12: Overseas Suppliers of Olive Products

Supplier	**Olive Oil[1]**	**Olives[2]**
P~~p~~roducer	10	10
A~~a~~gent	2	2

[1] number surveyed = 11

[2] number surveyed = 10

Products

Table 0.13 depicts the products imported by the firms surveyed. Extra-virgin, extra light and ‘pure’ olive oils are the major oils imported. Whole black, stuffed and whole green olives are the main table olive varieties imported. These responses were also validated by ABS data (see Section 2).

Table 0.13: Types of Olive Products Imported			
Olive Oil		**Olives**	
Product	**Importers[1]**	**Product**	**Importers[2]**
Extra-virgin	12	Whole black	9
Olive oil	11	Stuffed	9
Extra-light	10	Whole green	8
Virgin	6	Pitted black	7
Pomace	3	Sliced	7
Blended (vegetable & olive)	1	Crushed	5
		Pitted green	4
[1] number surveyed = 12		*[2] number surveyed = 9*	

Wholesaling

The aim of this section was to identify the extent of the wholesaling and retailing operations being undertaken by importers. Most questions were of such as to avoid any confidentiality issues.

Businesses supplied

Table 0.14 shows a detailed breakdown of the sectors being supplied by importers. According to these responses the majority of products pass directly to retailers. The importers also distribute to wholesalers and the food service sector.

Table 0.14: Sectors Supplied by Importers		
Sectors	**Olive Oil Importers[1]**	**Olive Importers[2]**
Retailers	12	9
Wholesalers	10	7
Food service industry	9	6
Manufacturing industry	4	2
Food processing industry	3	2
[1] number surveyed = 12		
[2] number surveyed = 9		

Retailers

The firms surveyed distribute to the three major types of retailers (see Table 0.15). It should be noted that in interpreting the responses, the numbers of outlets supplied do not necessarily translate into volume supplied.

Table 0.15: Sectors Supplied by Importers		
Sectors	**Olive Oil Importers[1]**	**Olive Importers[2]**
Ethnic based	10	8
Specialist gourmet	10	8
Major supermarkets	10	6
[1] number surveyed = 12		
[2] number surveyed = 9		

Australian olive products

This section sought information about the current distribution of Australian olive products by importers, and their perception of those products.

Olive products distribution

Table 0.16 shows that most importers have distributed Australian olive products. However, not all importers were distributing olive products at the time the survey was conducted. Only a limited number of importers are distributing the products, and on a small scale.

Table 0.16: Distribution of Australian Olive Products		
Have you distributed Australian olive products?	**Olive Oils**	**Olives**
Yes~~ES~~	9	7
No~~O~~	4	6

Reasons for not distributing Australian olive products

Using a closed-ended question, importers who were not distributing Australian olive products were asked why (see Table 0.17). Price considerations and lack of consistent supply were identified as being the two main factors. Interestingly, considerations of quality and country of origin were seen as less important factors~~aforementioned factors~~.

Table 0.17: Types of Olive Products Imported			
Olive Oil		**Olives**	
Reason	**Importers[1]**	**Reason**	**Importers[2]**
Price considerations	9	Lack of consistent supply	5
Lack of consistent supply	7	Price considerations	4
Low consumer demand	4	Don’t know the producers	2
Don’t know the producers	2	Quality considerations	1
Problems with distribution	2	Negative image of Australian products	1
Negative image of Australian products	2	Low consumer demand	0
Quality considerations	1	Problems with distribution	0
[1] number surveyed = 11		*[2] number surveyed = 9*	

Likelihood of distribution

The importers were asked the likelihood of distributing Australian olive products if the problems identified in the previous section ~~eg~~were solved. Table 0.18 provides a summary of their responses.

Table 0.18: Likelihood of Distribution by Importers

Likelihood of distributing	Olive Oils[1]	Olives[2]
V~~v~~ery likely	1	1
L~~l~~ikely	4	6
D~~d~~on't know	2	2
U~~u~~nlikely	2	2
V~~v~~ery unlikely	0	0

[1] *number surveyed = 9*

[2] *number surveyed = 11*

When considering olive oils and table olives, more than half the respondents indicated that they would be likely or very likely to distribute Australian olive products if the problems were addressed.

Perceptions

Respondents provided comments on the state of the olive industry and their perception of Australian olive products. Most ~~of~~ importers had a negative image of the industry, believing it to be ~~. They believed that industry was~~ too small and fragmented. There was a suggestion that the industry needs to address processing and marketing issues to establish credibility in the market.

Australian olive products were seen as of reasonably good quality given the fact that this industry is a young one. However, the importers believed that the prices producers are currently charging are too high in relation to the quality of the available product. Lack of volume was also a major issue as importers believed that inconsistency of supply was impeding the development of the industry.

Main issues associated with Australian olive products

Importers identified a number of industry and product problems. They considered that industry self-regulation would assist in the development of the industry, which otherwise ran the risk of growing in a disorderly way, without clear objectives or strategies. On the product side, importers recognised that for the industry to expand, prices would need to fall. They believed that producers could not afford the luxury of charging premium prices for a lower quality product when there were many substitutes in the market. The following are some comments:

on the industry:

'For the industry to flourish in the long term needs government or semi-government support in order to provide … needed infrastructure.'

'Main problem is that areas of production are spread … too wide … from South Australia to Queensland, [so] costs of harvesting are very high.'

on products:

'Poor quality, low quantity and high prices compared to overseas products.'

'Price would be the number one issue, or rather the lack of price competitiveness.'

'Limited supply, poor quality compared to imported varieties and significantly higher priced.'

State of Australian market for olive products

Increasing demand

Most respondents believed that demand for olive products had increased in the last five years, and that this increase was likely to continue. This response implies that there is an opportunity for both overseas and local producers to supply the growing Australian market.

Decreasing demand

Only one importer indicated that the Australian market for olive products was becoming saturated. If this were in fact the case the domestic industry would experience strong competition from imported products. Given that Australia~~n~~ presently cannot compete on price or image, other strategies would need to be developed.

Future of Australian demand for olive products

Importers' views on the future demand for olive products pointed two scenarios. ~~h~~ The majority believed that as consumption is increasing there will be opportunities for an Australian industry. The other group considered that as consumption is beginning to plateau, local producers will not be competitive with established imports.

Positive outlook

Despite the problems identified, most importers had a positive outlook for an Australian olive industry. If quality, price and of supply issues were addressed, there was an opportunity for Australian olive products to ~~can gain~~ gain ~~to~~ a portion of the Australian market. Comments included:

'The demand for olive products in Australia will double in the next 10-15 years. If Australian can produce good value-for-money products, then the industry will be successful.'

Negative outlook

Several importers questioned the future of the industry. One believed that as consumption is beginning to stabilise, local producers will not be able to enter the market. Another importer commented on the risks of distributing expensive products of inconsistent quality. Comments included:

> ‘Very young industry, but consumption overall of olive products is flattening.’
>
> ‘Why buy a litre of Aussie o~~O~~live o~~O~~il at $14 if you can buy a bottle of imported o~~O~~live o~~O~~il for $6~~s~~, and you are assured of quality?’

Exports of olive products

The~~is~~ aim of this section of the questionnaire was to gain an understanding of exporter’s perceptions of Australian products. It also sought to identify the issues exporters consider to be important for establishing Australia as a significant olive exporting country.   The section was answered by exporters only. Only two of the five firms that answered this section were currently exporting olive products. The others were exporting other Australian products, and expressed interest in exporting Australian olive products.

Source

The two exporters of olive products were sourcing their products from overseas.   One was importing directly from Europe and then re-exporting to the Asian markets. The other was buying olive products in Australia from importers. This exporter was also exporting Australian olive oil to Asia, but was sourcing it from wholesalers. The exporters claimed that they had tried to obtain Australian olive products in the past, but quality and supply had been inconsistent.

Export markets

The questionnaire indicated that Australia exports small quantities of olive products~~ to the export~~ to the Asian region (see Table 0.19), as reflected by ~~validated~~ABS data (see Section 2). From these responses it could be assumed that access to the Asian market can be obtained through the exporters who already have well-developed trade networks.

Table 0.19: Exporters Involved in Exports to Asia

Olive Oil		Olives	
Destination	**Exporters Involved**	**Destination**	**Exporters Involved**
Malaysia	2	Malaysia	2
Indonesia	2	Indonesia	2
Hong Kong	1	Hong Kong	1
Thailand	1	Thailand	1
Sri-Lanka	1	Sri-Lanka	1
Vietnam	1	Vietnam	1
Philippines	1	Philippines	1

Retailing operations

The two exporters of olive producers are supplying mainly to ethnic retailers implying that ~~. This response implies~~ that there are marketing channels available in Asian countries for selling Mediterranean olive products. Table 0.20 lists the business types that exporters are supplying.

Table 0.20: Asian Retail Sectors Supplied by Exporters	
Retail Sectors	**Exporters Involved**
Ethnic retailers	2
Wholesalers	1
Retailers	1
Food service	1

Products exported

Table 0.21 shows the products currently being distributed by the two exporters. It should be noted that figures do not represent volume exported.

Table 0.21: Exporters Involved in Exports to Asia			
Olive Oil		**Olives**	
Product	**Exporters Involved**	**Product**	**Exporters Involved**
Extra-virgin	2	Whole green	2
Virgin	2	Whole black	2
Olive	2	Stuffed	2
Extra-light	1	Spicy	2
		Pitted black	1
		Pitted green	1
		Sliced	1

Future demand for olive products in Asia

Exporters were asked their views on the future demand for olive products in the countries they export to. Those who responded believed that demand for olive products in the Asian region will continue to increase. Some comments were:

> 'Market is growing and demand is increasing.'
>
> 'We perceive the demand for olive oils to increase in the major South East Asian countries.'
>
> 'We will export olives and oil to Japan, demand should be increasing.'

Opportunities for Australian products in Asian markets

All exporters recognised the problems that Australian firms may encounter when entering the Asian market. Australian products are not well known and their prices are high. However, exporters also recognised that there is an opportunity for the Australian industry if quality, price and supply issues are ~~were~~ addressed. The following comments were provided:

on price and quality:

'The price is very high. It's not competitive with Italian and Spanish olives and oil.'

'If some professionalism is there, price and quality are there, the opportunities are there.'

'Australian producers must become more competitive in price by achieving cost efficiency in production and overheads.'

on reputation:

'I have no idea where the Asian market is, but if it has not been tapped into by the European markets, then an opportunity is possible. However, Australian olive products have European products as a major threat.'

'Australian olive products are not well known and need to be marketed more widely and aggressively.'

Main issues for establishing Australia as a major olive producer

Price, quality, reliability of supply and reputation were perceived as being the major issues for the Australian industry. These issues will need to be addressed if the industry is intent on becoming a major olive producer.

Comments included:

'Price factors No. 1, quality and reputation No. 2 as Spain and Italy are renowned for world market leaders in olive oil.'

'Reliability of supply, price and quality are important.'

Further comments

Several of the exporters interviewed were interested in exporting Australian products to Asia. They were prepared to take some risks provided producers understoo~~an~~d that export is a long-term investment that may not be profitable in the short term:

'We are very interest in exporting olives and olive oil. We can try exporting Australian olive oil, when you are ready, contact me.'

'We need to get the price right and market aggressively.'

3.6.3 Discussion of In-depth Interviews

In depth-interviews were conducted with eight major importers or wholesalers, including~~.~~ s~~S~~ome importers ~~were~~ engaged in exporting. Telephone interviews were also conducted with firms engaging solely in the importation of olive products. During the interviews a series of issues were identified as impacting on the development of an olive industry in Australia.

Labour issues

- **High labour costs -** At present, most Australian olive production is labour intensive. The high labour costs associated with harvesting are a main factor affecting the price of the end product.

- **Skills in harvesting and processing -** It is believed that most producers are lacking the skills and expertise~~s~~ needed to harvest and process the products. Poor processing techniques are believed to be responsible for the low quality of some Australian olive products.

Industry issues

- **Industry is fragmented -** Most importers interviewed perceived the olive industry as fragmented and without industry strategies or quality assurance programs. They said that Australian producers should imitate European producers who have developed~~oined in~~ cooperatives (mainly in Italy) to process and promote their products.

- **Industry is using outdated machinery -** Some of the importers believed that the machinery being used could affect the quality of the olive oil produced. They also believed that there are problems with the harvesting techniques being used by some producers.

- **There is some friction among members -** Friction between certain groups based on geographical location (for example, NSW and QLD)~~)~~ and ethnic backgrounds is believed to be causing some difficulty within the emerging industry.

Marketing issues

- **Oversupply in up-market segment -** Most importers believed that the boutique market is currently saturated. This implies ~~This implies~~ that any increases in production will enter the mass market, which is predominantly price driven.

- **Products are not being marketed -** Importers believed that the industry should place more emphasis on marketing issues in order to make it attractive for ~~is needed before importers and wholesalers opt for~~ importers and wholesalers to distribute~~ing~~ Australian olive products. Incentives are also essential, as the risks of distributing Australian products are higher than for imported products. Importers expressed concerns about the lack of marketing skills and business acumen of some producers who disregard the importance of marketing in the success of their industry.~~the success of their industry.~~

- **Problems with the image of Australian products -** Importers who have distributed Australian products in the past were dissatisfied with the inconsistency of quality and reliability of supply. They were also disappointed by the seemingly unprofessional business practices of those who in some instances increased prices after they had been agreed.~~the first business arrangement has been made~~

International issues

- **Commodity market -** Olive oil and olives have become a commodity - i.e. the market is price driven - and where t~~T~~he country - or producers - that can supply products at the lowest price will gain greater market share. Australian producers, therefore, need to understand that they will have to compete basically on price with the traditional exporting countries and any new entrants.

- **Spain, Greece and Italy have competitive advantage in all aspects -** The importers interviewed believed that the traditional olive producing countries have advantages in all areas of the olive trade - for example ~~(eg.~~ planting, production and marketing~~)~~. Additionally, these countries have the advantage that consumers tend to associate the Mediterranean countries with the use of olive products.

- **Overseas supply is changing -** Seasonal changes in supplying countries, mainly in Spain, have led to fluctuation in prices and supply~~ies~~. Furthermore, newly emerging producing countries are entering the market, ~~that will~~ increasing~~e~~ the volume of products available. An increasing supply will probably lead to lower prices for olive products. ~~and probably lead to a decrease in prices.~~

Product issues

- **Quality -** All importers believed that Australian products are too expensive in relation to their quality. As one interviewee said, 'we are producing a Holden, but trying to sell it as a Mercedes'~~z'~~. For them, the quality of Australian products is higher than that of commercial brands but not higher than that of the premium Italian and Spanish olive products.

- **Price -** Importers stated that although product quality is reasonably~~e~~ good, producers are charging an unreasonable premium price. They believed that such prices cannot be justified when promoting products to retailers, given that imported products are much less expensive and of a similar or better quality. When one importer was asked his views of Australian products he ~~just~~ replied: 'They are expensive, who would want to buy them?'

Packaging issues

- **Costs of bottles -** Importers who bottle imported olive oil in Australia have recognised that the price of a bottle can considerably increase the price of the final product. For instance, one importing firm bottles its products in Spain because the low quality of Australian bottles, the costs of labelling and the high costs of labour made it uneconomical~~ly~~ to bottle in Australia. Importers believe that the ~~the~~ monopoly existing in the bottle manufacturing industry causes unduly high bottle prices; these seriously jeopardise~~of the bottling company may jeopardise~~ the development of any industry where glass packaging is an important component. Some importers are sourcing ~~applying~~ their premium bottles from Italy and their mass market bottles from Korea. These remarks were also confirmed by olive processors.

- **Importance of packaging -** In a new and competitive industry such as the olive industry, importers believed that packaging plays a very important role in introducing the product to potential cu~~o~~sto~~u~~mers. For instance, one of the most successful South Australian olive oil producers owes its success (according to the manager and importers interviewed) to the quality of the packaging used. As one interviewee commented: 'Nobody has made any comments on the quality of the oil, but everybody comments on the nice bottle'.

Retailing issues

- **Expenses of getting products onto shelves -** Importers acknowledged the difficulties in securing access to supermarkets' shelves and ~~or~~ gourmet shops. They stated that they cannot jeopardise their credibility by supplying olive products because the olive industry cannot supply the quantities sought by retailers.

- **Profits the main issue for supermarket chains -** Importers believed that profit is the main factor when a supermarket chain decides to stock ~~carry~~ a product. ~~. Patriotic~~ Feelings such as ~~(~~'buy Australian'~~)~~ are considered to be secondary. To obtain acceptable profit~~s~~ margins, supermarkets will have to sell Australian olive products at considerably higher prices than ~~compared with~~ imported products, and consumers will be discouraged from buying.

3.6.4 Word of Caution

Importers who engaged in wholesaling activities were interested in assisting with the research and felt optimistic at the potential of developing an industry in Australia. All of them said they would support a local industry provided some problems (such as ~~(eg.~~ supply, price and quality)~~)~~ were solved. They identified a series of advantages gained from having local supplies: fewer administration tasks, avoidance of exchange rate risks, no forward contracting, no high transport costs, some degree of control over quality, and so on. However, some businesses whose sole activities were imports (i.e. not including ~~(eg~~either wholesaling or retailing)~~)~~ were less helpful with the investigation. It appears that importers could feel threatened by this research and by the development of an Australian olive industry. Among the comments were:

> 'Importers have spent more than a million dollars in promotion, and now the industry just wants to come and take it away from us.'
>
> 'Do you think Spain and Italy will stay still while somebody else takes over their market? Spain has got a record production this year and can saturate the market.'

The above comments are significant~~have significant applications fo~~, as they imply that exporting countries might adopt competitive tactics aimed at disrupting the development of an Australian olive industry. Should the ~~is developing.~~ major exporting countries in fact adopt competitive strategies, the following scenarios are possible:~~Two scenarios may rise from this situation:~~

- first, a cooperative alliance between overseas and local producers. This could include ~~imply~~ the development of a strategic alliance with exporting countries through international trade agreements and organisations such as the International Olive Oil Council (IOOC). Joint initiatives in marketing and educational activities could cause domestic market demand for olive products to increase, which would provide greater opportunities for both imported and locally produced products.

- second, an antagonistic relationship between overseas and local producers. In the long term, the local industry could pursue an import substitution strategy where demand for olive products would be met mainly by local suppliers. Such a strategy might entice major exporting countries - with product knowledge and economies of scale - to saturate the local market with cheaper products, putting further pressure on the development of the ~~and destroy the~~ local industry.

3.6.5 Market Outlook

Based on the responses provided in the interviews and the semi-structured questionnaires, most importers and exporters appear prepared to distribute Australian olive products. For importers/exporters there are a number of advantages in sourcing their products from local producers, such as lower administrative costs and greater control over quality. However, importers/exporters are concerned at the high prices that local producers are charging for their olive products. Unless prices become more competitive, importers and exporters will not risk their existing clientele and reputation by pushing onto the market Australian olive products of uncertain quality. Importers/exporters need to be assured of a consistent supply of quality products ~~reassured of the consistency of supply and quality of the products~~ before they can commit themselves to distribute Australian olive products.

Importers who do not become involved in wholesaling or retailing activities may feel threatened by the development of an Australian olive industry, and local producers could expect intense competition from the import sector. They t~~in Australia. Producers should expect intense~~

~~competition from them.~~ herefore need to develop strategies to confront~~face~~ this threat, possibly through s~~S~~trategic alliances or other forms of commercial arrangements. ~~ing~~

3.7

~~are some of the strategies that producers can undertake.~~ Food Manufacturing Industry Research Findings

3.7.1 Methodology

In-depth interviews and a semi-structured questionnaire were used to collect information from the food service industry (see Appendix 4 - Part D for an example of the questionnaire).

The design of the semi-structured questionnaire was based on in-depth interviews held with food specialists and representatives of the food manufacturing industry. One food specialist working in the industry assisted in pre-testing the questionnaire, which was then sent to ten major food manufacturers in Australia. Those that did not answer the questionnaire the first time were sent a second copy. Eight of the firms contacted completed the questionnaire, a response rate of 80 per cent.

3.7.2 Research Findings

Edible oils

An open-ended question was used to determine the oils most commonly used by the firms in their manufacturing processes. The question also sought to determine the use of each type of oil. ~~mentioned.~~ Table 3.22 shows a list of the oils and uses reported.

Manufacturers indicated that animal fats are not used extensively, while vegetable oils and vegetable fats are gaining in popularity. This shift is in part a response to consumers' demands for ingredients considered to be healthy and less fattening. Of the vegetable oils, palm oil was mentioned by the majority of respondents. Olive oil was listed by only one manufacturer as a minor ingredient in the manufacturing process.

Table 0.22: Oils and U~~u~~ses Reported by Manufacturers

Oils	Usages	
Vegetable oils	Bread manufacturing Bread shortening	Batter mixes
Vegetable fats	Bread manufacturing	Bread shortening
Palm oil	Filling Frying	Baking Cream filling
Coconut oil	Baking	Cream filling
Soy oil	Shortening Baking	Cream filling
Vegetable s~~s~~hortening	Baking mixes	
Cocoa butter	Biscuit filling	
Margarine/butter	Baking mixes	Homemade flours
Peanut o~~o~~il	Lubricant	
Sunflower	Salad dressing	
Canola	Unspecified	
Extra virgin olive oil	Unspecified	

Main issues when deciding what type of oils to use

Respondents were asked in an open-ended question the factors considered most important when selecting an oil. Their responses are listed ~~depicted~~ in Table 0.23.

Table 0.23: Main F~~f~~actors for M~~m~~anufacturers in Selecting Oils

Factor	Number of responses
Price	6
Performance	6
Flavour	5
Nutrition	3
Functionality	2
Availability	1
Quality	1

number surveyed = 7

Price and performance were the two main factors cited by respondents (85.7 per cent of respondents). This could well explain why palm oil is the oil used by most processors: it is relatively inexpensive and can be used in various processes. It could also explain why olive oil is not used by many manufacturers: it is expensive and its uses are considered limited.

Olive oils

This section sought information on the use of olive oil by the firms surveyed. Only two of the eight firms that replied used olive oil in their manufacturing process. These firms later confirmed that they use olive oil in very small quantities.

Reasons for not using olive oil

A closed-ended question was used to determine respondents' reasons for not using olive oil. All respondents who answered this question indicated that olive oil was 'not suitable for the products produced' (see Table 0.24). After conversations held with food technologists, it was understood that the bitter taste of olive oil affects the taste of most fried foods, therefore making it unsuitable as an ingredient in the manufacture of most value-added products. ~~for most products.~~ Furthermore, production managers believed that olive oil is not suitable for repeated heating processes. It appears that ~~at the moment~~ palm oil is meeting the needs of most manufacturers at a reasonable price, whereas, olive oil was perceived as being too expensive to use in large volumes.

Table 0.24: Manufacturers' Reasons for Not U~~u~~sing Olive Oil	
Reasons	**Number of responses**
Not suitable for products produced	7
Use a different oil	5
Price considerations	4
Unaware it existed in the market	0
Not enough supply	0
Problems with distributions channels	0
Poor performance	0
number surveyed = 7	

Reasons for using olive oil

One firm indicated that it used ~~using~~ o~~o~~live oil only ~~and this was~~ in ~~-~~small quantities as a product enhancement ingredient. It was using a combination of sunflower oil and olive oil in salad dressings. The other firm indicated that it uses olive oil because of its unique characteristics~~(eg.~~ (taste, colour~~,~~ and odour~~smell)~~).

Olive oils used

The firms using o~~o~~live oil use only imported extra-virgin oil in small volumes compared with ~~the~~ other oils used ~~they use~~ (see Table 0.25). One of the firms considered it essential that manufacturers have pack sizes of 200 litres~~ts~~.

Table 0.25: Manufacturers' Uses for Olive Oil	
Oil	**Uses**
Extra-virgin	nutritional properties product differentiation flavour texture flavour balance consumer attraction appearance

Differences between the olive oils

Most of the firms surveyed could not identify the differences among the three varieties of olive oils. This lack of knowledge also ~~manifested~~ applied to the firms using extra-virgin olive oil. ~~-~~ O~~O~~nly one firm was able to explain ~~indicate~~ that extra-virgin oil is a product of the first pressing of the raw product.~~is the first press.~~

Australian olive oil

This section sought to determine current and potential use of Australian olive oil.

Reasons for not using Australian olive oil

The ~~stof the~~ firms that do not use Australian olive oil were questioned on their reasoning for not choosing Australian oils. ~~asked their reasons. The~~ R~~r~~esponses are provided in Table 0.26.~~:~~

Table 0.26: Manufacturers' Reasons for Not U~~u~~sing Australian Olive Oil	
Reason	**Number of responses**
Use a different oil	4
Not suitable for products produced	3
Price	2
Don't know	1
number surveyed = 6	

Likelihood of using Australian olive oil

A closed-ended question was used to determine manufacturers' likelihood of using ~~to use~~ Australian olive oil in the future (see Table 0.27). One respondent did not answer this question. Most of the firms surveyed believed that they are unlikely or very unlikely to use Australian olive products. Only one firm suggested ~~believed~~ that it would be very likely to use Australian olive oil. These responses indicate that there are very limited opportunities for an Australian industry to supply olive oil to food manufacturing firms.

Table 0.27: Likelihood of P~~p~~urchase of Australian Olive Oil	
Reason	**Number of responses**
V~~v~~ery l~~l~~ikely	1
L~~l~~ikely	0
D~~d~~on't k~~k~~now	2
U~~u~~nlikely	2
V~~v~~ery u~~u~~nlikely	2
number surveyed = 7	

Perception toward Australian olive products

When respondents were asked their perception of Australian olive products three out of the eight manufacturers surveyed did not provide any answers. ~~T~~The remaining firms replied that~~ed~~ they had not formed a negative or positive perception toward Australian products as their exposure to the products had been minimal. One firm perceived the quality of Australian olive oil to be similar to or better than imported olive oil, but believe it to be too expensive to be used in the manufacturing industry. Some of the comments provided were as follows:

> 'Don't know a lot about it. I currently buy it for home use. Quite acceptable as an oil.'
>
> 'Personally would tend to buy European olive oils for use in European cooking. Just haven't really considered Australian olive oils in the same way. I expect they would be of comparable quality.'
>
> 'Flavour better but too expensive.'

Differences between imported and local olive products

As most manufacturers have not been in contact with Australian olive products, they could not identify tangible differences between imported and local olive products. Some expected imported products to be more expensive because they were perceived to be of better quality than local products.

The following comments were provided when respondents were asked to identify the differences between imported and local olive oil products:

> 'Probably price, expect European olive oils to be more expensive.'
>
> 'Don't know.'
>
> 'The brand and trade names when considering use by families.'
>
> 'Price.'

Main issues for establishing Australia as a major olive producer

When asked to identify the ~~main~~ issues that needed to be addressed to establish Australia as a major olive producer, manufacturers named competitive prices, promotional issues and functionality of olive products as the key elements for a successful industry. The following are some of the responses:

> 'Price. It should be competitively priced for similar functionality and flavour.'
>
> 'Comparable price to the productions already in the market.'
>
> 'Marketing.'
>
> 'For personal use, the establishing of quality brand names perhaps with a European name to capture the attention of Europeans in Australia.'
>
> 'Versatility of application to industry. Comparable performance.'

3.7.3 Market Outlook

From the responses provided in the semi-structured questionnaire it could be concluded that there are very limited opportunities for Australian olive oils to be used in the manufacturing industry. Most firms surveyed believed that olive oil is not suitable for the products they are currently manufacturing. This attitude is to be expected, as most firms are not aware of the unique properties of olive oils, nor have they been introduced to the different olive oils in the market. Furthermore, there is lack of information on differences between the types of olive oil and the uses for each type. The findings indicate that the manufacturing industry will need to be educated about the benefits of using olive oil in its manufacturing processes, before it will consider using the Australian product.

The firms using olive oil considered Australian olive oil to be too costly, compared with imports. The findings also suggest that at the moment most ~~of the~~ firms' needs for quality, availability of supply and price are being met by imports. Therefore, if Australian olive products are to replace olive imports producers will need to offer products that possess at least the same attributes as imported olive products.

1.

4. Economic Analysis of Olive Oil and Pickled Olive Production

This section analyses the costs of producing olive oil and pickled olives in Australia and compares these costs with the prices of comparable imported products. The report is based on information collected from processors in Victoria and South Australia. Costs used in the analysis include the purchase of fresh olives, contract processing, and marketing Australian olive oil and pickled olives. The purpose was to evaluate the competitive position of Australian olive products based on the costs of producing and marketing these products in Australia relative to the prices paid for imported product.

4.1 Methodology

4.1.1 Australian Data

To assess the wholesale cost of olive oil and pickled olive production in Australia, eleven olive oil producers and/or processors and four pickled olive producers, in Victoria and South Australia, were interviewed. The data obtained were averaged for the stages of olive oil and pickled olive production. These producers were identified through industry contacts and were the only producers known to be active at the time of the survey in South Australia and Victoria. ABS data were used to obtain information on the production of olives in South Australia and Victoria.

Oil production

The stages of oil production costed in this analysis were:

- purchasing olives
- transport to processor
- contract processing
- contract bottling
- transport to wholesaler

The costs of each of these stages, as obtained from interviews, were averaged across the eleven producers to calculate an average cost of producing olive oil.

Pickled olive production

The stages of pickled olive production for which data were collected were:

- purchasing olives
- transport to processor
- contract processing
- contract bottling costs
- transport to wholesaler

The cost of these stages were averaged to determine a wholesale cost of production.

Wholesale prices

The prices paid by retailers purchasing from the wholesaler (wholesale prices) for Australian oil and pickled olives were obtained from four wholesalers selected on the basis of the processor survey and identified as distributors of the Australian made products.

4.1.2 Overseas Data

Wholesale costs and prices

Efforts were made to collect data on processing costs and the prices paid by consumers of olive oil and pickled olives in the major producing countries, Spain and Italy. However to obtain accurate data from these countries would have been costly as the data were not readily available. Despite the use of the Internet to contact processors and research organisations, letters to two Spanish researchers who have some knowledge of the Australian industry, and a search of *Olivæ*, no useful, reliable data were obtained.

Import prices

The Australian Olive Oil Association (AOOA) collates data from the International Olive Oil Council (IOOC) on prices of imported olive oil. Prices for imported olives could be collected only from importers; no generic data for average import prices for olives could be obtained. Wholesale prices for the imported product were also collected from importers. These data were used in the analysis as the basis for comparison with the wholesale cost of the Australian product.

4.2 Scope and Limitations of the Economic Analysis

- The Australian industry is small. The results of the analysis might have been different if there were a larger industry with more raw product available and larger processing plants.
- An accurate average costing of pickled/preserved olive production in Australia cannot be reported in this study. This is due to the limited number of pickled/preserved olive processors (only four were identified at the time of surveying) all of which have different methods of processing. Consequently a meaningful average could not be arrived at, and any other reporting of the data could compromise the confidentiality of the information obtained.
- To undertake a detailed benchmark study of the olive industry and to identify the strengths and weaknesses of the domestic industry, it would be ideal to make a comparison between Australian production at each stage and the production process at each stage for the major competing countries. However meaningful data could not be collected and included in this report as the information from overseas was not readily available.
- Even for the Australian industry, only limited data were available. Contract rates at the different stages of production, and not actual costs, were used in the analysis as the processors did not have detailed information available at this level. Contract rates included a margin for the contractor at each production stage.
- The study is based on current industry information, not what could be achieved by an expanded Australian olive industry.

4.3 Research Results - Olive Oil

4.3.1 Background

- All of the olive groves surveyed were in or near wine growing regions. Growers said that wine grape production was a better option than olives, given the boom the wine industry was experiencing and the associated high land values.
- The wine growing is complementary to the olive groves as most of the product from some groves is sold through gift shops frequented by tourists visiting the wineries.
- Olives are harvested from groves as well as from ‘wild’ trees. Although the flavour of the wild olives is different, it is still of a high quality, according to the processors.
- All producers agreed that picking was their major cost. Some growers/processors would use only hand-picked olives, although most agreed that mechanical harvesting using tree shakers was the most cost-effective option for olives to be used in oil production.
- Olives are sprayed for pests and diseases in most cases, although a few producers practise organic farming and therefore do not use chemicals. Pests and diseases are not a major problem for olive growers in southern Australia.
- Olives are delivered to processors by a number or methods ranging from wooden bins to hessian bags. On arrival at the processing plant, the olives are cleaned and made ready for processing.
- Most of the oil produced is either virgin or extra-virgin grade.
- Oil processed under contract is delivered from the factory in 18 litre stainless steel drums.
- The most recent olive production figures published by ABS put annual production in 1994 in Australia at 936 tonnes. All of the recorded production was in South Australia and Victoria.

4.3.2 Domestic Wholesale Costing

Table 0.1: Costing for Olive Oil

Item		Average cost	Range	
			Low	High
Price paid for olives for oil production		$640/t	$350/t	$750/t
Contract pressing olives (including 18 litre container)		$207/t	$182/t	$226/t
Freight from grove to oil press		$30/t	$30/t estimate only	
Bottles (including bottle, cork, cap, carton per dozen and dividers)	(750ml) (375ml)	$1.53 $1.12	$1.01 $0.81	$2.08 $1.58
Freight from Melbourne to Sydney		$1.80/dozen	$1.41	$2.00
Oil content of olives		13.5%	9.5%	16%

Source: Processor survey

The wholesale cost of olive oil per litre landed in Sydney, was equal to the cost per tonne of olives divided by the number of litres of oil produced per tonne. Based on the data in Table 0.1, at an average oil content of 13.5%, one tonne of olives yielded 135 kg of oil. One hundred kilograms of oil was equivalent to 109 litres. Therefore 1 tonne of olives produced 147.15 litres of oil. The cost of bulk olive oil per litre, prior to bottling, was $5.96 ($877 ÷ 147.15). This is comprised of $4.35 to purchase the olives, $0.20 freight and $1.41 pressing cost. Including the cost of the bottling and freight to Sydney, the wholesale costs were $6.15 and $3.51 per 750 ml and 375 ml bottle respectively (see Table 0.2).

4.3.3 Domestic Prices

Table 0.2: Comparison of wholesale cost and wholesale price of Australian olive oil (based on prices as at 14 March 1997)

Olive oil	Wholesale cost[1]	Wholesale price[2]	Mark-up on wholesale cost
Bulk containers (price/litre)	$5.96	$11.50	92.9%
750 ml bottle	$6.15	$13.61	121.3%
375 ml bottle	$3.51	$6.70	90.88%

[1] - Wholesale cost is the cost of producing the oil, not including any mark-up to account for profit for the producer.

[2] - Wholesale price is the price to the retailer, including profit for the producer and the wholesaler.

Source: Processor survey

Table 0.2 above compares the wholesale cost and wholesale price of the Australian product. Australian oil was sold by wholesalers at average wholesale prices of $11.50 for bulk oil, $13.61 and $6.70 for 750 ml and 375 ml bottles respectively. This represented mark-ups on the wholesale cost of 92.9 per cent, 121 per cent and 90.88 per cent for the bulk oil, 750 ml and 375 ml bottles respectively. These mark-ups included the profit the oil producer and the wholesaler make. Australian and imported wholesale prices for extra-virgin olive oil are set out in Table 0.3.

4.3.4 Imported Product

Spain and Italy are the main sources of Australia's imports of olive oil. Many types of olive oil are imported. To allow ready comparison between the Australian and imported oils, only those olive oils which resemble the Australian product were included in the analysis. Australia has no tariff or duty on imported olive oil.

The price of imported oil (and olives) can change dramatically, depending on world stocks and production in the main producing countries. The latest AOOA (Australian Olive Oil Association) market report stated that the import price for bulk extra-virgin olive oil in February 1997 was $4.62 per litre. The price of pure olive oil was $4.43 per litre at the beginning of February and it fell to $3.95 per litre by the middle of February. The predictions were for lower prices later in the year due to an expected record crop in most Mediterranean countries. These prices were between $1.34 and $2.01 per litre cheaper than the Australian wholesale cost of production, and that was before any provision for profit by the olive oil producer or wholesaler.

The bulk of the olive oil imported into Australia is pure olive oil, although the market is changing. The percentage of extra-virgin olive oil is increasing.

Table 0.3: Wholesale prices for extra-virgin olive oil (based on prices as at 4 June 1997)				
	Size of package			
Brand of oil	**375 mL**	**500 mL**	**750 mL**	**1 litre**
Australian				
Joseph	$10.95		$19.95	
Coriole	$8.95		$15.00	
Toscana				$15.75
Imported				
Olivoro		$5.00		$9.95
Pietro Coricelli		$7.50		$9.95
Solon			$6.50	
Eden		$29.50	$39.95	
Petrolo			$27.95	
Benza Primuruggiu			$27.95	
Mancianti Affiorato			$31.00	
Umbria			$28.95	
Salvagno	$12.85			$25.95
Simon Johnston (Spain)	$14.50			
Source: Processor survey				

As can be seen from Table 0.3, the imported oil is generally more expensive than the Australian product. However, these oils are sold into niche markets. Discussions with importers suggested that at the current rate of increase in olive production in countries that supply Australia's imports, world prices for olive oil will decline, making it more difficult for Australian producers to compete on price. Sales volumes were not available from wholesalers.

4.4 Research Results - Pickled Olives

4.4.1 Background

- The main varieties of olives used for pickling were Verdale and Kalamata. However, Spanish Queen, Manzanillo, UC13A6 and Barouni were also used.
- Olives were cleaned, graded and washed before being processed.
- Most pickled olives were processed in brine (salt and water). However, some were preserved in sodium hydroxide. The olives may be stored in brine for three to twelve months. Olives may be mechanically cracked to hasten the process, or to assist in the flavouring.
- All four processors involved in the study used different methods of processing and sold different end products.
- Most of the olives used for processing were grown by those processors. A small percentage were purchased from other growers.

- Australian-grown pickled olives have only recently been sold in supermarkets. Previously, they had been sold only in delicatessens and gourmet food outlets.

4.4.2 Domestic Wholesale Costings

The wholesale cost of production of the four processors could not be averaged because their production methods were not uniform. The costs of buying the fresh olives for processing and the costs of bottling and marketing are reported below. The average cost of buying the olives and the freight costs were derived from the survey, as these costs were consistent across the four processors; however, the bottling costs were supplied by a contract bottling company in Adelaide.

Table 0.4: Wholesale costing obtained from survey for pickled olives (based on prices as at 4 June 1997)

Item	Average[1]
Cost of buying olives for pickling	$2 450/t
Cost of contract bottling (including bottle, cap, carton per dozen and labels)	$1.02/500g
Freight from Melbourne to Sydney	$1.80/dozen

[1] *The number of participants in the survey is too small to report the range of results*

4.4.3 Domestic Wholesale Prices

The range of package sizes and types differed too much for a useful average wholesale price to be calculated for the four processors. Wholesale prices for pickled olives available from importers who also sold Australian products illustrated the difference between the prices of imported pickled olives and the prices of Australian pickled olives for retailers who bought from wholesalers/importers. The prices for different types of pickled olives are shown in Table 0.5 below.

Table 0.5: Wholesale prices of pickled olives

	Size of package			
Brand	**150 gm**	**500 gm**	**7 kg**	**13 kg**
Australian Olives				
McLaren Vale Kalamata	$3.45			
Verdale small green olives (South Australia)			$39.95	
Maroudas Olives	$3.50			$70.00
Imported Olives				
Taggiasche		$5.95		
Jumbo Kalamata				$85.00
Tiny Ligurian Olives			$110.00	
Kalamata Jumbo Olives				$70.59
Black Marinated		$3.45		
Riviera Olives	$5.96			

The prices of pickled olives varied a great deal, depending on brands and varieties. The prices of Australian-produced olives appeared to be competitive with those of imported products. However, these prices were gourmet market prices, not supermarket prices, therefore price was not the only factor affecting competitiveness. Factors such as packaging and brand loyalty play an important role in the competitiveness of products in the gourmet market.

4.4.4 Imported Product

Most Australian pickled/preserved olives are imported from Spain, Greece and Italy. There are many different types of packaging and types of olives imported. Australia has a 5 per cent tariff on imported preserved olives. The price of imported olives could change dramatically, depending on production in the main producing countries and on world stocks. Owing to the biennial bearing nature of the olive tree, production tends to fluctuate widely from year to year.

4.5 Discussion

4.5.1 Economies of Scale

The Australian olive industry is very small. Processors with small production capacity are supplying niche markets. The capacity of the processing machines used by the companies in the survey varied from 300 kg per hour to 2 tonnes per hour. Production is limited by the quantity of olives available and the size of the machinery. With the rapid expansion in olive production taking place, this may change.

According to ABS olive production in Australia in 1996 was 936 tonnes. If all this production were processed for oil, at an average extraction rate of 13.5 per cent, the yield would be 126.36 tonnes of oil. In the 6 months to December 1996, 7 134 tonnes of olive oil were imported, 1 662 tonnes being extra-virgin. Thus Australia’s current production represents only a tiny proportion of total domestic consumption. If olive production in Australia were on a larger scale, economies of scale in processing might be achievable, thus enabling Australian producers to be more competitive with producers overseas.

4.5.2 Cost Competitiveness

Australia is not the only country currently expanding its olive production to take advantage of the high price of olive oil on the world market. Increases in world stocks are likely to put pressure on world prices if demand for oil does not increase at the same rate.

Australian olive oil production will need to be competitive with imported pure olive oil and extra-virgin olive oil, as it is unlikely that all the oil produced in Australia will be extra-virgin as it currently is. Increased production and larger factories will mean that olives will not be processed quickly. Consequently, lower quality oil may be extracted with extra pressings. Therefore the higher prices currently received by producers for extra-virgin oil would not be sustainable as pure olive oil is unlikely to cost less to produce than extra-virgin or virgin olive oil, and therefore this will make it harder to compete with the pure olive oil imports.

4.5.3 Oil Content

The oil content of the olives produced has a large impact on the resulting cost per litre of oil. In this analysis the average oil content of the olives used by processors surveyed was 13.5 per cent. This oil content may be much lower than that of olives used for oil in competing countries. Overseas research suggests that oil content of olives varies from less than 15 per cent to 27 per cent, the higher content olives being used for oil (Ferguson, Sibbett and Martin 1994). If the oil content of Australian olives was 20 per cent on average, the estimated wholesale cost per litre (bulk) could fall to $4.02 from $5.96, a reduction of $1.94.

Australian production of olive oil is limited by the mature varieties of olives that are presently available. These may not be the most suitable for oil production. If the varieties being planted are more suitable for oil production, the oil content of their olives may be higher and therefore could significantly lower the cost of oil production.

4.5.4 Operating Costs

Pest and disease control is a small component of operating costs in southern Australia. In other areas of Australia, pests and diseases may be a greater problem and therefore the cost of control more expensive.

Improvements in mechanical harvesting could lower the cost of harvesting, which is the major operating cost of olive production.

4.5.5 Economic Assessment

The cost of producing Australian olive oil is higher than the wholesale price of most similar imported products. Pickled olive production appears to be price competitive, though more work on Australian production costs is needed before any accurate conclusions could be reached. Australian olives from one company have only just become available on the supermarket shelf. Previously all Australian pickled olives were sold in gourmet delicatessens and department stores, where they compete not only on price but on non-price factors such as packaging and the novelty of being an Australian product.

4.5.6 Areas for Further Research

Detailed analysis of olive processing on a large scale needs to be completed to assess the likely competitiveness of producing olive oil in Australia. Overseas processing costs need to be benchmarked, so that the potential cost of production in Australia can be compared to the costs of efficient olive producers elsewhere.

References

Aaker, D. and Day, G. 1990, *Marketing Research*, 4th edn, John Wiley & Sons, Brisbane.

Australian Bureau of Statistics 1997(a), *Australian Olive Production Databases*, 1983-1994.

Australian Bureau of Statistics 1997(b), *Exports of Olives and Olive Oil Databases*, 1984-1996.

Australian Bureau of Statistics 1997(c), *Imports of Olives and Olive Oil Databases*, 1984-1996.

Australian Olive Oil Association Inc. (AOOA) 1997, *Market Report*, Melbourne.

Bonazzi, M. 1997, 'Euro-Mediterranean Policies and Olive Oil: Competition vs. Job-Sharing', *Olivæ*, No. 65, February.

Briz, J. and de Felipe, I. 1995, 'The Olive Oil Market and Marketing in Spain', *Olivæ*, No. 59, December.

Eurostat 1997, *Panorama of EU Industry 97 - The Key to European Industries*, European Commission, Vol. 1, Luxembourg.

Ferguson, L., Sibbett, G. and Martin, G. 1994, *Olive Production Manual*, University of California, Division of Agriculture and natural Resources, Oakland, Publication 3353.

Food and Agriculture Organization of the United Nations 1996, *Production Databases*, Internet, http://www.fao.org/.

Food and Agriculture Organization of the United Nations 1997, *Trade Databases*, Internet, http://www.fao.org/.

FoodWeek 1996, 'Industry Yearbook and Directory of Suppliers', *FoodWeek and Liquor Week*, Ian Huntly Pty Ltd, Cremorne.

FoodWeek 1997, 'Industry Yearbook and Directory of Suppliers', *FoodWeek and Liquor Week*, Ian Huntly Pty Ltd, Cremorne.

Hobman, F. 1995(a), *An Economic Study into Irrigated Olive Growing and Oil Processing in Southern Australia*, RIRDC, Research Paper 95/5, Canberra.

Hobman, F. 1995(b), *An Economic Study into Dryland Olive Growing and Oil Processing in Southern Australia*, RIRDC, Research Paper 95/17, Canberra.

International Olive Oil Council (IOOC), *The Olive Tree, The Oil, The Olive*, IOOC, Madrid.

Inform 1996, 'Olive Oil - Mediterranean Product Consumed Worldwide', *Inform*, Vol. 7, no. 9, pp. 890-900.

Tardaquila, J., Montero, F., Olmeda, M., Alba, J. and Bernabeu, R. 1996, 'Anàlisis del Sector del Aceite de Oliva, Alimentación', *Equipos y Tecnología*, Abril.

Oil World 1996, *Oil World Annual*, ISTA Mielke Embh, Hamburg.

Oil World 1997, 'EU Olive Crop Damaged', *Quarterly Oil World*, Iss. 1, Vol. 40.

Primary Industries South Australia (PISA) 1995, *An Introduction to Olive Growing in Southern Australia*, Primary Industries South Australia, Adelaide.

Queensland Department of Primary Industries (QDPI) 1996, 'Olives into South West Queensland', *Profit Focus*, Queensland Department of Primary Industries, Brisbane.

Zikmund, W. 1997, *Business Research Methods*, 5th edn, The Dryden Press, Sydney.

Appendix 1: Classification of Olive Oils

The following comments have been extracted from *The Olive Tree, The Oil, The Olive,* a publication of the International Olive Oil Council (IOOC):

The Term Olive Oil means the oil obtained solely from the fruit of the olive tree, to the exclusion of oils obtained by using solvents or re-esterification processes. It also excludes mixtures with oils of other kinds and Olive-pomace oils. Olive Oil may be called by one of any of the following designations provided it complies with the relevant criteria:

- **Virgin olive oil** - the oil obtained from the fruit of the olive tree solely by mechanical or other physical means under conditions, particularly thermal conditions, that do not lead to the deterioration of the oil. It has not undergone any treatment of other than washing, decantation, centrifugation and filtration. When virgin olive oils is intended for consumption it its natural state, it is called by one of the following names:
  - > **Extra virgin olive oil -** a virgin olive oil that has an organoleptic rating of 6.5 or more and a free acidity, expressed as oleic acid, of not more than 1 gram per 100 grams.
  - > **Fine virgin olive oil** - a virgin olive oil that has an organoleptic rating of 5.5 or more and a free acidity, expressed as oleic acid, of not more than 1.5 grams per 100 grams.
  - > **Semi-fine or ordinary virgin olive oil** - a virgin olive oil that has an organoleptic rating of 3.5 or more and a free acidity, expressed as oleic acid, of not more than 3.3 grams per 100 grams.
- **Refined olive oil** - the oil obtained from virgin olive oils by refining methods that to not lead to alterations in the initial glyceridic structure of the oils
- **Olive oil** - the oil consisting of a blend of refined olive oil and virgin olive oil fit for consumption as it is.
- **Extra-light olive oil -** a blend of refined olive oils and extra virgin olive oils.   Oils are targeted for non-traditional consumers of extra virgin olive oils. Oils are obtained by filtering the olive oil to remove the strong flavour and odour (Inform 1996).

Appendix 2: East Asia - Imports of Olive Oil and Preserved Table Olives

East Asia - Imports of Olive Oil

Country	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	Total
Japan	1 703	1 642	2 111	2 414	2 903	2 938	3 816	4 038	4 860	5 114	6 648	9 244	47 431
Thailand	30	41	36	87	470	286	1 858	1 942	1 277	1 095	800	760	8 682
China	16	20	133	49	160	77	83	93	224	342	575	2 318	4 090
Hong Kong	79	128	147	173	140	198	188	229	500	331	355	449	2 917
Malaysia	42	46	41	31	76	56	89	248	176	164	196	187	1 352
Macau	202	57	37	184	55	54	71	81	63	180	111	103	1 198
South Korea	29	41	42	53	25	56	74	111	115	146	227	234	1 153
Philippines	11	15	20	58	61	124	179	91	137	153	116	187	1 152
Indonesia	33	22	14	23	57	30	67	77	79	96	106	132	736

Source: Food and Agriculture Organization

East Asia - Imports of Preserved Table Olives

Country	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	Total
China	6	0	5	0	0	2 016	2 900	2 021	2 255	1 732	1 398	1 877	14 210
Japan	0	0	0	0	727	969	865	955	909	857	1 013	1 390	7 685
Hong Kong	0	0	0	0	135	128	167	175	1985	919	1 122	1 212	5 843
Malaysia	0	0	0	0	249	323	317	438	229	510	298	422	2 786
South Korea	1	6	4	9	78	61	121	147	193	222	340	658	1 840
Macau	22	37	23	39	723	5	37	56	61	46	66	41	1 156
Philippines	2	15	37	43	72	46	124	75	69	92	103	102	780
Thailand	0	0	0	0	0	0	1	0	0	33	17	25	76
Indonesia	0	0	0	0	0	11	1	4	12	8	26	7	69

Source: Food and Agriculture Organization

Appendix 3: ABS Classification of Olive Products

East Asia - Imports of Olive Oil	
Code	**Product**
Olive Oil	
1509100016	Olive oil, virgin
1509900017	Olive oil (excl. virgin) and its fractions, not chemically modified
1510000018	Other oils and their factions obtained solely from olives (inc. blends of these oils or fractions with oils or fractions of 1509), not chemically modified
Olives	
711200016	Olives, provisionally preserved, but unsuitable in that state for immediate consumption
2001900032	Olives, prepared or preserved by vinegar or acetic acid
2005700047	Pitted black olives, not stuffed, prepared or preserved otherwise than by vinegar or acetic acid, not frozen
2005700048	Black olives, other than pitted or stuffed black olives, prepared or preserved other than by vinegar, acetic acid or sugar, not frozen
2005700049	Stuffed black olive prepared or preserved otherwise than by vinegar, acetic acid or sugar, not frozen
2005700050	Green olives (excl. stuffed) prepared or preserved otherwise than by vinegar, acetic acid, or sugar, not frozen
2005700051	Green olives, prepared or preserved otherwise than by vinegar, acetic acid or sugar, not frozen.

Appendix 4 - Focus Group and Survey Questions

Part A - Consumer Focus Group Protocol

Thanks for coming to this session. The information you provide us will not only be relevant to our organisation, but also to the Queensland olive industry. As you should be aware the QDPI conducts a series of marketing research projects for different industries. Discussions such as this are the starting point for most of our research. The main goal of this session is to understand your perceptions of oil products. Please feel free to express your opinions.

General Discussion

- Oil usage in the kitchen - for cooking or salads?
- Are you aware of the different types of oils in the market? - mention some of them
- What are the most important issues for you when purchasing oils?
- Do you know some of the healthiest oils in the market? - introduce some oils

Specific Discussion - Olive Oils

- Have your ever used olive oil? Are you currently using olive oil?
- Why don't you use olive oil? Do you use a another type of oil?
- Why do you use olive oil? Why do you use the oil of your choice?
- Do you consider some of the following issues when consuming olive products?
  - > health benefits
  - > price
  - > quality
  - > country of origin
  - > image
  - > taste
  - > aroma
- When do you use olive oils?
  - > everyday cooking
  - > salads
  - > important occasions
  - > eating out
- Where do you get your olive oil from?
  - > deli
  - > supermarket
  - > other

Specific Discussion - Olives

- Have you tried olives before? green or black?
- Do you know how to prepare (consume) them?
- Do you consume them regularly? When do you consume them? - eating out, with friends, at parties or on pizza
- Do you eat olives by themselves or do you use them as ingredients?
- What do you think of their…?
  - > taste
  - > aroma
  - > health benefits
  - > price
- Where do you usually get them from? - supermarkets or delis

Specific Discussion - Australian Products

- Are you aware of the origin of olive products? - name some countries
- Do you know Australia produces some olive products?
- Have you ever tasted Australian olives?
- If Australian olive products were in the market are you prepare to consume them?
- Besides being an Australian products, what other factors may influence you when purchasing Australian olives?

Part B - Food Service Industry Focus Group

Thanks for coming to this session. We are interested in studying the edible oil industry in Australian. The main goal of this session is to understand your perceptions of oil products. Please feel free to express your opinions.

General Oils Usage

- How do you use oils in your kitchen - describe the usages - compare with other chefs
- Name some of the main cooking oils and fats used in your restaurant (show them the oils)
- Describe the different usages for the oils you have mentioned before
- Why have you chosen that particular oil?

Olive Oil usage

- Who uses Olive oil in the restaurant?
- Describe some of the uses of olive oil
- Can you explain the differences between olive oils?
- Name some of the main reasons why you are using olive oils
- Do consumers demand olive oil in your restaurant?
  - > do you think customers are aware of health benefits?
  - > do you think country of origin may influence them?
  - > is it trendy for consumers to ask for olive oil?

Australian Olive Oil

- Have you used Australian olive oil before? Why? Why not?
- Describe the Australian oils
- How do they compare to imported olive oils? Do you find many differences? explain
- Where do you get you oil from?
- Any problems with supplies?
- Is there anything you don't like about Australian olive oils?
- Has the usage of olive oil increased in the past 5 years? Do you think it would continue increasing in the next 5 years?
- Other comments?

Chefs Advice

- If you could make any changes to the way Australian olive oils are processed, supplied and marketed what would you do?
- Do you have any advises for growers/processors?
- How would you promote Australian olive products to the food service industry?
- Any comments?

Part C - Importers/Exporters Quantitative Survey

Thanks for allowing us to interview you. We are aware of your time limitations and again we appreciate your assistance. The answers you provide us with will be treated confidentially. Please feel free to express your opinions. If you have any questions do not hesitate to fax at (076) 881-199 or call at (076) 881-329.

As you should be aware the DPI conducts a series of marketing research projects for different industries. At the moment we are interested in studying the feasibility of an Olive Industry in Australia. This survey is a major component of our study. Your comments will help us to understand the main issues that need to be addressed in the development of a strategic plan for the industry.

The questionnaire is divided in five sections. Section 1 is to be answered by importers and exporters. Section 2, 3 and 4 should be answered by importers. Section 5 is to be answered by exporters.

Section 1: General Questions (to be answered by importers/exporters)

1.1 How long have you been in the import/export business?

1.2 Do you import/export any more products besides Olive products?

1.3 If yes, What other products do you import/export?

1.4 Approximately what is your total level of import/export per year of Olive Oil and/or Olives

(Exporters refer to section 5; Importers complete sections 2, 3 and 4)

Section 2 - Products (to be answered by importers)

2.1. From which of the following countries do you import Olive products (number in order of importance):

	Olives	Olive Oils	Other Oils
Spain			
France			
Greece			
Italy			
Morocco			
Portugal			
Turkey			
Israel			
Other (please specify)			

2.2. Do you import:

	Olives	Olive Oils	Other Oils
Directly from producer			
From producer's agent			
Other (please specify)			

2.3. Which of the following olive products are your currently importing?

Olive Oils	**Olives**
Virgin Olive Oil	Whole green
Extra Virgin	Whole black
Extra Light	Pitted green
Olive Pomace	Pitted black
Other (please specify)	Stuffed olives
	Spicy olives
	Sliced olives
	Crushed olives
	Olive pate
	Other (please specify)

Section 3 - Wholesaling and Retailing Operations (importers)

3.1 Do you distribute olive products to:

	Olive	**% of total**	**Olive Oils**	**% of total**
Wholesalers				
Retailers (refer to Q3.2)				
Manufacturing industries				
Food processing industries				
Food service industry				
Other (please specify)				

3.2 Do you distribute olive products to the following retailers:

	Olive	**Olive Oils**
Ethnic based retailers		
Specialists gourmet		
Major supermarkets		
Other (please specify)		

Section 4 - Australian Olive Products Perception (importers)

4.1 Have you ever distributed Australian olives?

4.2 If no, indicate your reasons **<u>for not distributing</u>** Australian olive products:

	Olive Oil	**Olives**
Not enough supply		
Don't know the producers		
Price Considerations		
Negative image of Australian Produce		
Low consumer demand		
Problems with distribution		
Quality considerations (please specify)		
aroma		
flavour		
size		
colour		
Other		

4.3 If problems encountered in question 4.2 were solved how likely would you be to distribute Australian olive products:

a) very likely

b) likely

c) don't know

d) unlikely

e) very unlikely

4.4 What are *your* perceptions of Australian olive products?

4.5 What do *you* consider are the main issues associated with Australian olive products?

4. 6 What are your thoughts on the level of saturation of the Australian market for olive products?

4.7 Finally, what are *your* perceptions on the future of Australian demand for olives products? (eg. price, quality, flavour, aroma, price)

4.8 Further comments:

Section 5 - Exports (to be answered by exporters)

5.1 Where do you source your olive products for exportation?

	Olive Oil	Olives
Overseas		
Small Australian producers		
Own production		
Other		

5.2 Which countries do you export to:

	Olive Oil	Olives
New Zealand		
Papua New Guinea		
Fiji		
Malaysia		
United Kingdom		
Hong Kong		
Indonesia		
Other		

5.3 Do you export olive products to:

	Olive Oil	Olives
Importers		
Wholesalers		
Retailers		
Ethnic based supermarkets		
Other		

5.4 Which of the following olive products do you export:

Olive Oils	Olives
Virgin Olive Oil	Whole green
Extra Virgin	Whole black
Extra Light	Pitted green
Olive Pomace	Pitted black
Other (please specify)	Stuffed olives
All of the above	Spicy olives
None of the above	Sliced olives
	Crushed olives
	Olive pate

	Other (please specify)
	All of the above
	None of the above

5.5 What are *your* perceptions on future demand for Olive Oils in the countries you export to?

5.6 What are your perceptions on the opportunities in the Asian region for Australian Olive products?

5.7 Finally, what do *you* perceived are the main issues for establishing Australia as a major Olive producer? (eg. price, quality, flavour, colour)

5.8 Further comments:

Pact D - Food Manufacturing Industries Quantitative Survey

Thanks for allowing us to interview you. We are aware of your time limitations and again we appreciate your assistance. The answers you provide us with will be treated confidentially. Please feel free to express your opinions. If you have any questions do not hesitate to fax me at (076) 88 1199 or call me at (076) 88-1329.

As you should be aware the DPI conducts a series of marketing research projects for different industries. At the moment we are interested in studying the feasibility of an Olive Industry in Australia. This survey is a major component of our study. Your comments will help us to understand the main issues that need to be addressed in the development of a strategic plan for the industry.

Section 1 - Oil Usage

1.1 Name the main oils and fats you use (in order of volume used) and the different uses (eg. baking mixes, flavouring, shortening, nutritional values) of each oil used in your manufacturing process:

1.2 What are the main issues for you when deciding what types of oils to use in your manufacturing process (eg. flavour, nutrition, performance, aroma, price): (list in order of importance)

1.3 Further comments on cooking oil usage in your manufacturing process:

Section 2 - Olive Oils

2.1 Do you use olive oils in your manufacturing process?

2.2 If no, Indicate your reasons **for *not* using** olive oils (tick your preferences):

a) Unaware it existed in the market

b) Not enough supply

c) Price considerations

d) Problems with distribution channels

e) Not suitable for products produced

f) Poor performance

g) Use a different oil

h) Others

2.3 If yes, Indicate your reasons for using olive oils (tick your preferences):

a) Flavouring attributes

b) Unique aroma

c) Nutritional properties

d) Price

e) Availability in market

f) Australian product

g) Performance

h) Product enhancement

i) Others(please specify)

2.4 Indicate which of following olive oils you use:

a) Extra Virgin

b) Virgin

c) Olive Oil

d) Extra light

e) Others:

2.5 Identify the different applications for each type of olive oils you use in your manufacturing process (eg. flavouring, shortening, additives, nutritional values):

a) Extra Virgin

b) Virgin

c) Olive Oil

d) Extra light

2.6 Briefly explain what you consider to be the differences between the various olive oils (eg. differences between extra virgin and virgin olive oils):

2.7 Further comments on olive oil usage in your manufacturing process:

Section 3 - Australian Olive Oil

3.1 Have you ever used Australian olive oil in your manufacturing process?

3.2 If no, Indicate your reasons for *not* using Australian olive oil:

a) Unaware it existed in the market

b) Not enough supply

c) Price considerations

d) Problems with distribution channels

e) Not suitable for products produced

f) Poor performance

g) Use a different oil

h) Others

3.3 If problems encountered in question 3.2 were addressed how likely would you be to use Australian olive oils:

a) very likely

b) likely

c) don't know

d) unlikely

e) very unlikely

3.4 If yes, Indicate your reasons **for using** Australian olive oils (tick your preferences):

a) Flavouring attributes

b) Unique aroma

c) Nutritional properties

d) Price

e) Convenient usage size

f) Australian product

g) Performance

h) Product enhancement

i) Others (please specify)

3.5 What type of Australian olive oil have you used:

a) Extra Virgin

b) Virgin

c) Olive Oil

d) Extra Light

e) Others (please specify)

3.6 Indicate some of your uses of Australian olive oils (eg. baking mix, flavouring, shortening, nutritional value)?

3.7 Where do get your Australian olive oil from (supplier and state)?

3.8 What are *your* perceptions of Australian olive oils?

3.9 What do you consider to be the major difference between Australian olive oils and European olive oils?

3.10 Do you have any further comments on Australian olive oil usage in your manufacturing process?

3.11 Finally, what do *you* perceived are the main issues for establishing Australia as a major olive producer? (eg. price, performance, flavour)?