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Rural Industries Research and  
Development Corporation

# Export Potential for Organics

*—opportunities and barriers—*



**RIRDC** Innovation for rural Australia



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**Rural Industries Research and  
Development Corporation**

# **Export potential for organics** *—opportunities and barriers—*

**A report for the Rural Industries Research and Development Corporation**

by David McKinna *et al* Pty Ltd

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# Foreword

Organic food and beverages are the fastest growing food categories worldwide. In virtually all developed economies, demand outstrips supply for organic products, with many markets experiencing growth rates of 10 - 30% p.a. The global organic market presents Australia with significant export opportunities. The objective of this study was to identify opportunities and to investigate impediments to the Australian organic industry in accessing export markets.

Through a process of market scoping, this report identifies the markets with the greatest export potential for Australian organic products. Australia's organic production and processing capability are also assessed and areas of significant competence identified.

Currently the top five prospective markets are Japan, Continental Europe, the United Kingdom, the United States and Southeast Asia, while the top products are beef and lamb, cereal based products, processed foods, juices, beverages, wine, jam, honey and condiments. In the longer term other markets and products will emerge. Perishable foods will be confined to closer markets such Southeast Asia.

This report provides information fundamental to anyone contemplating organics as an export opportunity.

This project was funded from RIRDC core funds which are provided by the Australian Government.

This report is an addition to RIRDC's diverse range of over 1500 research publications. It forms part of our Organic Systems R&D Program which aims to optimise the profitability of Australian organic production in both domestic and overseas markets and to promote the utilisation of organic farming systems as a means of enhancing the sustainability of Australian agricultural systems.

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

- downloads at [www.rirc.gov.au/fullreports/index.html](http://www.rirc.gov.au/fullreports/index.html)
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**Peter O'Brien**  
Managing Director  
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# Executive Summary

As part of an ongoing research program into Organic Systems, the Rural Industries Research and Development Corporation (RIRDC) commissioned a study to investigate the export potential for the Australian organic sector, particularly from the perspective of opportunities and barriers. The study was primarily a desk study, but was also able to draw on findings from another in-market analysis that was in progress. The related analysis included field research in key markets in Asia, Europe and the United States of America (US).

The resulting report concludes that for nearly all organic products, in virtually all the developed economies, demand outstrips supply. Also, the market potential for Australian organic products are likely to be greater in markets where:

- Australia is a globally competitive producer of the standard product category
- Australia has a greater reputation regarding capability and integrity in the supply chain
- Australia has seasonal products in a unique window of opportunity
- Australia has unique or differentiated products
- Australia has geographic proximity to the market (particularly in the case of perishable products).

Demand for organic foods is being driven by:

- growing consumer concern about chemicals in food and the environment
- health consciousness
- specific dietary and allergy conditions
- the perception of organic tasting better
- the desire to get 'back to basics'.

In terms of identifying market prospects, the report concludes that the key driving factors of demand are:- population; consumer affluence and sophistication; degree of environmental and health consciousness; the safety and integrity of local food supply; and the availability of a local organic industry supply chain.

The key constraints to the growth of the Australian organic export industry are:- lack of consistent product supply and year-round availability; the price premium, poor eye appeal and shelf presence; inconsistency of product quality; short shelf life; distance to market; and lack of consumer confidence in the authenticity of labels.

Demand for organics is more likely to be stronger for products within the following parameters:

- those which have heavy use of chemicals in their conventional production systems
- products eaten with a minimum of preparation
- products which have a distinct taste profile and are eaten for enjoyment
- products for infants and growing children
- products eaten primarily for their nutritional attributes.

The report concludes that the higher prospect markets for Australian organic exports are Japan, Continental Europe, the United Kingdom (UK), the US and Southeast Asia. In the longer term, China, Taiwan and South Korea will also emerge as growth markets.

In terms of product categories, the best prospects for Australia are likely to be in beef and lamb, cereal based products, processed foods, juices, beverages, wine, jam, honey and condiments. Prospects for perishable products, such as fruit, vegetables and dairy products, are judged to be confined to closer markets, such as Southeast Asia.

The new knowledge generated from this study will be critical to anyone contemplating the export potential of Australian organic agriculture.

# Introduction

## Introduction

In recognition of the continued growth and market potential of the organic industry, RIRDC has administered a dedicated organic research and development program since 1996, in order to foster the industry's development. As a component of that broader body of research work, this report focuses on identifying global market opportunities for Australian organic products.

This report has been based largely on desk research and analysis. The limitation with the desk research has been the poor availability of literature and the questionable validity of data in this emerging export industry. Therefore, the analysis is also reliant on the experience of the lead consultant on the study, Dr David McKinna. David McKinna *et al* Pty Ltd draws on over 20 years experience in researching Australia's food and wine export markets.

Coincidentally, at the time of conducting the research, the David McKinna *et al* team was also undertaking a major overseas market study of Victorian food exports. This concurrent, 'in country' research included Australia's most significant food export markets in Asia and Europe.

The opportunity was taken during this concurrent study to conduct supplementary field research into organics involving interviews with agents or merchants in wholesale markets, trade officials, and both supermarkets and speciality retailers. The findings from these interviews were interwoven with the desk research.

The report is divided into the following five sections:-

## Introduction, objectives and methodology

### Broad spectrum country assessment

This section considers the key drivers and predictors of demand for organic foods, major regulations and standards for organic foods, and a broad review of potential export markets covering:

- i) current Australian exports to the country
- ii) consumer affluence and sophistication
- iii) retail market structure
- iv) market access
- v) market and labelling regulations
- vi) assessment of local organic industry
- vii) Australia's competitiveness.

Markets covered are the US, the UK, Continental Europe, Japan, Singapore, Hong Kong, China, Taiwan, Malaysia and New Zealand.

### Assessment of product/processing potential

This section presents the analysis of current activity in the major categories of the Australian organic industry. The key organic product categories are evaluated on the criteria of:

- production capacity
- planned expansion
- constraints to market expansion
- international competitiveness.

In addition, an overall assessment is made in regard to the market potential of each category.

## **High prospect markets**

This section cross-references the market data developed through the two previous stages to develop a detailed assessment of the top ranked countries and products. A 'country by product' matrix has been produced, with the top product prospects for each country identified.

## **Conclusions**

This section summarises the conclusions of the research in the form of numbered key points.

## **Objectives**

The central aim of this project is to identify opportunities for organic exports and to investigate impediments to the Australian organic industry in accessing export markets.

The terms of reference of the overall study are outlined clearly in the brief and are repeated below by way of acknowledgement.

- i) Market targets
- ii) Southeast Asia, particularly Hong Kong, South Korea, Japan, Singapore, Taiwan and China. - the potential growth markets for the Australian organic industry.
- iii) Product targets
- iv) Areas in which the industry has strong production and/or processing capability – e.g., beef, wine, dairy, horticulture (apples, mangoes, olive oil), grains (wheat, barley, pulses, oilseeds and oats) and meat. The project should also identify product categories in which Australia could have a competitive advantage, e.g., baby foods.
- v) Market Access
- vi) Market access issues to the target markets, e.g., phytosanitary requirements, tariffs, quotas.
- vii) Competition
- viii) Identification and characterisation of the main competition for target products into target markets.
- ix) Potential
- x) Identification of windows of opportunities, including the expansion of existing organic markets and new “stand-alone” markets. There is also a need to look at Australia’s conventional agricultural exports to target markets and, if there are no existing organic exports, to identify production and market access impediments as well as the “organic demand”. Opportunities could include products, commodities and services.
- xi) Supply chains
- xii) Identify and supply chain issues for the organic products.
- xiii) The project report will include recommendations on the key export opportunities for the Australian organic industry, indicating the priority opportunities for further investigation.

## **Methodology**

The research for this report has been primarily desk based. Information has been sourced from global industry associations, domestic industry reports, the international media, and market data. In addition to this, ‘in country’ studies have been conducted in France, Spain, Singapore, Hong Kong, China and Taiwan. This ‘in country’ research involved visits to markets, retail outlets and food service companies to view the types of organic products on offer and to see how organic products are presented to the consumer overseas.

As stated in the introduction, the data limitations encountered during this research mean that the findings are heavily reliant on the additional learnings gleaned from the small amount of field research and the experience and knowledge of the consultants.

# Broad spectrum country assessment

## 1. Introduction

This section involves a broad-spectrum country assessment of all countries/regions which have been identified as potential export markets for Australian organic food and beverage products. The assessment considers the current state of the organic market, consumer profile, retail market structure, market access, certification and labelling requirements, assessment of any local organic industry, current Australian exports to the market, and Australia's competitiveness.

In the terms of reference of the study, it was suggested that the best prospects were likely to be in Southeast Asia, with particular focus on Hong Kong, South Korea, Japan, Singapore, Taiwan and China. However, based on previous work conducted by this consultancy, we consider it important to also include the US, the UK, Continental Europe, Malaysia and New Zealand in order to provide a broader perspective of the current status of the global market for organic products.

The US and the UK/Europe are by far the largest markets for organic food and beverage products and account for 97% of revenues from organics globally. As such, an assessment of these markets provides important insights with regard to the key drivers of sales for organic products, organic standards and regulations, and the market conditions in which organic products succeed.

## 2. Predictors of demand for organic foods

In the course of researching market opportunities for organic foods, a number of patterns and themes have emerged regarding the factors that drive demand for organic food and beverages. These factors explain why some markets have a greater propensity to consume organic products than others.

### 2.1 Overview

Organics is one of the fastest growing sectors in the food industry overall, experiencing double digit growth in most developed markets compared with 1-2% growth rate for conventional food products. Both the field research and literature search confirm that there is a large amount of latent unsatisfied demand for organic foods. The key constraining factors to industry growth are:- the lack of availability of suitable quality food on a year-round basis; the lack of critical mass to develop strong organic supply chains; and the premium prices being commanded. As availability improves and organics become more affordable, the supply chains will improve and the market will grow exponentially.

Most large format supermarkets in developed countries now stock at least a minimum organic range. This usually includes leafy vegetables and some organic processed foods and dairy products. In some cases, in the more developed countries, organics is now becoming established as a mainstream category in its own right. The organic range is expanding dramatically driven by manifest consumer demand. Typically, supermarkets devote a whole area to the shelf stable organics as well as a section within the fresh food areas for organic fruit and vegetables, and other perishables. The demand for organics started with vegetables and fruits, but in recent times has expanded into meat, dairy products, processed foods, wine, cereals, etc. Another indicator of the consumer demand for organics is the dedicated organic stores or boutique supermarkets emerging with an extended organic range.

As societies become more affluent and their discretionary income increases, they tend to buy higher quality and differentiated food products. This increased affluence is a strong driver of demand in the UK, the US and Europe.

## 2.2 Key drivers of demand for organics

Essentially, demand for organics is driven by two sets of factors - the emotional and the rational.

### ***Emotional factors***

To a large extent, the demand for organics is driven by emotional factors, which include:

- **Perceptions of naturalness:** Avid buyers of organic foods claim strongly that organic foods have a much better taste and are much healthier in a nutritional sense.
- **Getting back to basics:** There is a strong emotion among people in developed countries, particularly in urban areas, to get back to basics and get in touch with the natural ways of life. The spiritual and emotional aspects of food are becoming more important, e.g. being able to say 'I grew it myself'.
- **Environmental sustainability and environmental friendliness:** There is a growing concern about the environment and sustainability of farming practices. This is particularly true amongst younger people who are being made more environmentally conscious by the education system and the media.
- **Animal welfare:** In the case of animal products, particularly in the case of eggs and poultry meat, there is a strong driver for 'free range' or 'barn laid' eggs and poultry meat on the basis of animal welfare and concerns about cruelty to caged birds. In many instances, much of the emotion surrounding organic foods is driven by misinformation. Many consumers are confused about messages, such as those surrounding Genetically Modified Organisms (GMOs), hormones and antibiotics in animals, or chemical use on vegetables.

### ***Rational factors***

There are a number of strong rational factors that are driving demand for organic foods. These are:

- **Concerns about long-term health benefits:** Increasingly, life-threatening diseases, particularly cancer, are being traced to over-consumption of foods containing toxic chemicals. People generally believe that organic foods are free of chemicals and therefore consumption of them will make one healthier and contribute to longevity and better appearance.
- **Specific allergies and health complaints:** There is a growing percentage of the population who have specific allergies that can be traced back to chemicals in foods. With improved diagnostic techniques, the medical profession is now better able to trace the causes of allergies and health complaints. People on special or restrictive diets are a large and growing proportion of organic food buyers. It is believed that the organic products are preferred for their more sensitive systems. There is also an increasing crossover between food and nutraceuticals as evidenced by the growing popularity of naturopathy and natural remedies - organics feature strongly here.
- **Better taste:** In many cases, there is a strong feeling and perhaps a reality that organic foods, particularly fruits and vegetables, have a better taste. There may be a number of reasons for this including the possibility that older, more traditional varieties are sometimes used, (e.g. Heirloom tomatoes) are often handpicked and therefore harvested when tree-ripened and at optimum eating quality. Because of the shorter supply chains, the produce can be purchased in optimum condition.

## **2.3 Predictors of demand**

One of the key aims of this study is to identify the key predictors of demand for organic foods. Based on this research we have identified the following predictors of demand.

### ***Population***

Because organics are a niche market product, it stands to reason that the larger the market, the larger the organic niche sub-segment will be and therefore the bigger the demand. The largest markets for organic food are the heavily populated, affluent countries, including the US, the UK and Europe. Ultimately China will also be a large market as the growing middle class becomes more affluent.

### ***Affluence***

Affluence is a major driver of demand for organic foods. Because organic foods typically sell at a significant premium price over and above conventional foods and because they are more difficult to purchase (in the sense that they are not readily available), they tend to be purchased by those who are more affluent. Lower socio-economic groups in developing countries, where it is a struggle to be able to afford food to satisfy a family's sustenance, cannot afford to buy organic foods. Previous research by this consultancy indicates that organics are third on the product purchasing criteria hierarchy for vegetables after satiety and nutrition.

### ***Health consciousness and food safety***

Health consciousness is a major driver of demand for organic foods. Health consciousness tends to be associated with affluence and education levels. However, there are exceptions in certain countries such as China, Taiwan and South Korea, where there is concern about the quality and integrity of fresh foods generally because of the farming practices in the agricultural production system. Even though these markets are not particularly affluent, there is a disproportionate drive for organics. The Chinese culture also has a long history of awareness of the nutraceutical impact of foods, which dates back to imperial times. Chinese consumers will pay a premium for foods that are known to contribute to improved appearance and longevity.

### ***Environmental consciousness***

Demand for organic foods is likely to be stronger in countries that have a greater sense of environmental consciousness. This again tends to be associated with affluence. An example of this factor as a predictor of demand is evident in Continental Europe. Northern and Alpine European countries have a heightened awareness of environmental issues and accordingly their penchant for organic food over their Southern European counterparts is strongly evident. Germany in particular, which is the world's second largest market for organic food and beverage products, is a world leader in terms of recycling and has the strictest environmental protection regulations in the industrialised world.

### ***Supply chains***

Another important driver of demand for organic foods is the availability in the market of supply chains specifically for organics. Because fresh, unprocessed, organic foods tend to have a shorter shelf life, they require a much tighter supply chain. For this reason, they tend to be more likely to be available in countries where there are farmers' markets, central markets or where there is a tight wholesale/retail supply chain network. For this reason, demand for organic foods is very strong in countries such as France and Italy, which tend to still have traditional village markets. The same can't be said, however, for the traditional wet market situation in the more affluent parts of Asia that Australia exports to. Most of the food available in the wet markets (Singapore and Hong Kong) is imported from overseas, and without chemical treatment, most fresh foods cannot withstand the extended journey and timeframe. Another factor is that wet markets are extremely price sensitive; whereas farmers' markets in western countries tend to charge a price premium.

### ***Sophistication of the retail sector***

Whilst this point may be partly in contradiction to the previous point, the situation in many developed countries is that the sophisticated, higher end supermarkets are driving the demand for organic foods. They are doing this by creating organic sections and strongly promoting the product. Demand is therefore likely to be stronger in markets that have more of the higher end supermarkets. The UK and the US have a more sophisticated retail sector with novel store formats that are constantly evolving. The US and the UK are leading the world in the establishment of boutique specialty supermarkets specialising in fine food, many of which also have a very strong organic range.

### ***Strong local industry***

Demand for organics is likely to be more developed where there is a strong local organic production industry and there has been a tradition of availability of organic foods. The resulting volume of supply ensures that economies of scale can be achieved in supply chains. The reliable availability of local organic produce is a key reason for the strong demand for organic foods in Continental Europe.

### ***Constraints on export markets for organics***

Without doubt, the organics category has the potential to grow to a much greater size, as both the literature reviewed and the fieldwork in this study clearly indicate evidence of latent unsatisfied demand for organic foods. However, there are a number of factors holding back this demand. These are:

- **Availability:** The key reason for less consumption of organic foods is lack of availability. This is not just lack of availability in terms of the range of products, but also in terms of the number of outlets and having access to produce on a year-round basis. Consumers are more likely to change their behaviour in favour of organic foods if they are sure of an ongoing, long-term supply on a year-round basis. They are unlikely to buy organic foods on a one-off, occasional purchase basis. For most people, a preference for organics involves a long-term and fundamental shift in purchasing and commonplace behaviour.
- **Price:** A major constraint for organic foods is the price premium. Invariably, organic foods sell at prices substantially over and above the conventional item. Previous research conducted by this consultancy indicates that mainstream consumers are prepared to pay a premium of up to 10% but above this level the demand curve drops off substantially (David McKinna *et al Pty Ltd*, 2004). In many cases, organic foods are selling for up to 300% premium over and above the standard item. Whilst there are people who are prepared to pay a premium, the high price severely limits the market size.
- **Eye appeal:** Due to the nature of organic production whereby conventional pesticides are not used, many of the fresh organic foods lack the eye appeal in terms of a perfect shape and being free of blemishes or insect infestation. Supermarkets have gone to great lengths to market fruit and vegetable products on the basis of eye appeal and shelf presence. They have developed products that consistently present well on the shelf, often at the expense of eating quality. This has built growing expectations of consumers and by comparison, many of the organic foods don't perform well on the criteria of shelf presence or visual appeal.
- **Consistency of quality:** Following on from the above point, due to the nature of the production systems, organic foods tend to be less consistent in their general quality. This, together with the fact that they sell at a premium price, often detracts from purchase.
- **Shelf life:** Another issue with some categories of fresh food is the shelf life of the products. Without treatment, many organic products don't last as long as conventional fruit and vegetables. This is not so much a factor for the consumer, but more for the members of the supply chain. Supermarkets, for example, require a minimum of 10 days life span for a product through the supply chain for economic performance. This life span requirement tends to prohibit many organic foods, particularly those that need to be imported. Although it varies by category, some organic products simply don't have the shelf life to be able to last the journey and still have any shelf

appeal left. Conventional fresh food products are normally treated with chemical agents to extend shelf life.

- **Range and choice:** A further issue for organic food is the range or breadth of choice. Consumers tend to want to buy a whole range of organic products to suit their needs, particularly those on special diets. Unfortunately, the range of organic foods is relatively limited in comparison to conventional products, and most are not available on a year-round basis. An extension of the range and a more reliable supply would greatly change this.
- **Lack of confidence in authenticity:** Qualitative market research previously conducted by this consultancy indicates that there is a high degree of consumer scepticism regarding the authenticity and reliability of food labels and claims. The concern is that, given that organic food commands a substantial price premium, there is a temptation for sellers to pass off conventional foods as being organic. For example, a study coordinated by this consultancy concluded that the sales of organic and free range eggs were more than three times the level actually produced, indicating the extent of the 'passing off' problem. This consultancy's ongoing focus group research shows that consumers are becoming more savvy and attuned to mislabelling and false claims. This is a 'turn off' factor for many consumers.
- **Market access:** Market access is an issue for some product categories. Many markets restrict imports of certain fruits and vegetables and meat products on phytosanitary and disease grounds; Japan and South Korea are particularly stringent. In addition, a condition of entry to many countries is treatment through spraying or fumigation which compromises or negates the organic status of the product. Some markets also have quota restrictions or tariffs and customs duties, which often price a product out of that market.

## 2.4 Propensity to buy organic products

The propensity to buy organic products is greater when the following conditions exist:

### ***Products which have heavy use of chemicals in their conventional production systems***

One of the key drivers of demand for organics is the desire of consumers to avoid chemicals. Hence demand for organic products is greatest where there is a perception that there is heavy use of chemicals in conventional production systems. The key areas here are vegetables, fruits and meat products.

### ***Products eaten with a minimum of preparation***

Demand for organic foods tends to be stronger for products that are eaten with minimal preparation, particularly fruits that are eaten fresh and in some case, where the skin is eaten as well, e.g. apples or strawberries. It also applies to products such as vegetables and eggs. Quite often vegetables are used in salads with minimal or no cooking. Other research by this consultancy suggests that there is a consumer perception that cooking or processing would counter or wash off chemical residues.

### ***Products which have natural and defined taste and flavour profiles and which are eaten for enjoyment***

There is a strong belief that organic products taste better and therefore demand is likely to be stronger for products that have a distinct taste profile and are primarily consumed for the eating enjoyment they provide. Again, this is a major reason for driving demand for vegetables and fruits, particularly seasonal fruits and berries. Another classic case is tomatoes where consumers perceive that tomatoes grown under conventional conditions/systems lack the flavour of the organic version.

### ***Products which are seen to be healthy***

Another main driver of organic sales is the perceived health benefits of organic products. Products that have natural health attributes tend to be favoured in organics, e.g. fresh fruit and vegetables, yoghurt, whole grains, etc.



### 3. Regulations on organic food and beverages

#### 3.1 International regulations

In making an assessment of the global market opportunities, it is important to have an understanding of the labyrinth of regulatory codes of practice for organics, which vary from market to market. Organic standards serve to create an agreement with producers and processors in order to define what 'organic' means, to ensure integrity and consistency of products which are labelled as organic. There are presently hundreds of private organic standards worldwide which aim to serve this purpose. In conducting the broad market assessment contained herein, the applicable local organic regulatory and certification body/bodies and relevant standard(s) for each country/region have been identified and market access requirements detailed.

However, in addition to national certification programs, international standards on the production and processing of organic food and beverages also exist. These standards aim to create a global 'best practice' platform against which other national standards can be benchmarked or founded, so as to create continuity and therefore increased credibility for the industry. There are two major international standards on which most national programs are based. These are outlined in the following pages.

#### **IFOAM Standards**

The International Federation of Organic Agriculture Movement (IFOAM) '*Basic Standards for Organic Production and Processing*' (IBS) was first published in 1980. IFOAM's mission and goals are as follows:

*Mission: 'IFOAM's mission is leading, uniting and assisting the organic movement in its full diversity.'*

*Goal: 'Our goal is the worldwide adoption of ecologically, socially and economically sound systems that are based on the principles of Organic Agriculture.'* (IFOAM, 2005)

As production systems for organics have evolved through technology, knowledge sharing and innovation over the last 25 years, so too have the IBS. The standards are working documents, reflective of the current state of thinking and 'best practice' considerations with regard to organic production and processing systems. The IBS take the form of general principles, recommendations, basic standards and derogations (Willer and Yussefi, 2004). Importantly, they cannot be used for certification in their own right. The IBS simply serve to provide a framework from which other regional and national standards can be developed. Based on the IBS, IFOAM accredits individual certification bodies.

The rationalisation for this approach is based on the need to balance two key issues. The IBS aim to facilitate the harmonisation of organic standards globally as a basis for undistorted trade, fair competition and consumer trust. However, the standards must also be accommodating of different organic practices evolving from diverse local or regional conditions where differing ecological, climatic, cultural or technological circumstances influence the appropriateness of certain systems.

One central international regulation is unable to achieve this balance in full capacity. Rather, individual bodies accredited by IFOAM must meet the IBS. Regional differences are also taken into account, making the certification process more specific and appropriate to local conditions. Applicants are assessed against the IFOAM norms. Products certified by IFOAM accredited certifiers may bear the IFOAM Seal which aims to assure wholesalers, retailers, and consumers that a product and its producer are organically certified within the IFOAM Organic Guarantee System.

Applications for IFOAM accreditation can be made via the IFOAM website at [www.ifoam.org](http://www.ifoam.org).

### **The Codex Alimentarius**

Codex Alimentarius Commission is a Food and Agriculture Organisation of the United Nations (FAO)/World Health Organisation (WHO) initiative, which has developed a broad range of food standards, guidelines and related texts under the 'Joint FAO/WHO Food Standards Program'. These guidelines have been widely used by various governments around the world as a foundation for the development of their own standards. As a component of this, the Codex Alimentarius Commission has developed the '*Guidelines for the Production, Processing, Labelling and Marketing of Organically Produced Foods*'. The aim of the guidelines is to facilitate trade through harmonising the industry, preventing misleading claims, building consumer confidence through product integrity, and providing assistance to governments wishing to establish national regulations in this area, particularly in developing nations.

The Codex Alimentarius guidelines are largely aligned with the IFOAM standards and European Union (EU) Regulations for Organic Food (2092/91 and 1804/99) and are available via the Codex Alimentarius website at [www.codexalimentarius.net](http://www.codexalimentarius.net).

### **3.2 Australian National Standard for Organic and Biodynamic Products**

Australia's organic industry is well developed and there are currently seven approved certifying organisations, which accredit and annually audit organic operators in accordance with the Australian National Standard for Organic and Biodynamic Products (ANS). The Australian National Standard was developed and is maintained by the Australian Quarantine and Inspection Service (AQIS) and is in line with other major international standards such as IFOAM and the EU Regulations. All Australian exports of organic produce must be produced in accordance with the Australian National Standard as well as with importing country requirements.

The seven certifying organisations are as follows:

- Bio-Dynamic Research Institute (BDRI)  
Ph: 03 5966 7370



- National Association for Sustainable Agriculture (NASAA)  
Ph: 08 8370 8455  
<http://www.nasaa.com.au>



- Australian Certified Organic (ACO)  
Ph: 07 3350 5706  
<http://www.australianorganic.com.au>



- Organic Growers of Australia (OGA)  
Ph: 02 6622 0100  
<http://www.organicgrowers.org.au>



- The Tasmanian Organic Producers (TOP)  
Ph: 03 6383 4039  
<http://top.org.au>



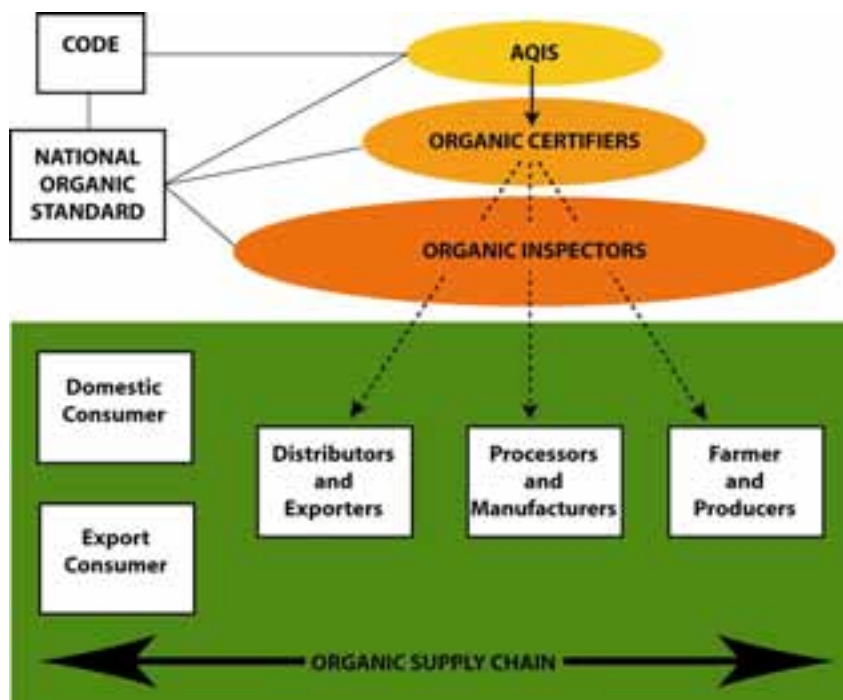
- The Organic Food Chain (OFC)  
Ph: 07 4637 2600  
<http://www.organicfoodchain.com.au>



- Safe Food Production Queensland (SFQ)  
Ph: 1800 300 815  
<http://www.safefood.qld.gov.au>



**Figure 1: Organic Industry Certification Arrangements**



*Source: RIRDC, 2001*

However, despite the existence of a strong Australian National Standard which has achieved equivalency agreements with major international standards such as the EU regulations and Japanese Agricultural Standards (JAS), it has been reported that the Australian organic industry has been hampered by infighting amongst the various certification bodies which has fragmented the industry and resulted in a weakened marketing ability and an overly complicated certification process (Lloyd, 2005).

In 1998 the Organic Federation of Australia (OFA) was established as a national peak body in an attempt to bring increased cohesion to the industry. The industry is in transition from a fragmented sector to an industry in its own right. The industry has been working with the Commonwealth Department of Agriculture, Fisheries and Forestry (DAFF) under the Industry Partnership Program to establish the structures necessary to support the growth of the industry. The OFA was restructured to be formally recognized as the industry peak body in 2003. This was acknowledging the need to present a united front in order to succeed, and have one effective peak body and one common logo. The implementation of a national logo scheme is viewed by this consultancy as an important step forward to increasing consumer confidence in organic products. Evidence to support this assertion is the significant increase in consumer confidence in organic product seen in the US following the introduction of the national USDA organic seal.

### **3.3 Regulatory complexities and their impact on producers**

While the introduction of international and national certification programs, standards and regulatory bodies for organic food and beverage products has increased protection for both consumers and producers, it has also had the effect of seriously complicating the organic industry globally. All organic standards are founded on similar organic principles and guidelines but many countries such as the US, Japan and Europe defer to their own national standards for all imports. While AQIS has established equivalency agreements between a number of such standards and the Australian National Standard, there are still some variations, which generally result in increased compliance and administrative requirements for Australian exporters. As more and more countries start to develop their own national standards, this problem could compound itself exponentially.

For example, in the Southeast Asian region, Japan and South Korea are the only countries that currently have national regulations in place which require mandatory controls over organic imports. Market access requirements for organics for each of these countries differ in a number of areas and compliance with one standard does not necessarily result in compliance with another. Japan allows equivalency certification for other national standards such as the Australian National Standard, but South Korea does not. There can also be differences in how certain categories or products are treated from standard to standard.

Thailand and China are currently in the process of developing their own national standards, which may result in mandatory controls over imports, and, as such, could have requirement variations which would directly affect Australian producers. While AQIS is working with these countries with the aim of signing equivalency agreements, these things take time and nothing is guaranteed. As the region becomes more affluent and demand for organic products increases, it is likely that more Asian countries will develop their own standards and the cost of administering compliance with each one could become a significant burden to the industry and limit the possibility of opportunistic trading.

The most important ramification for Australian organic producers wanting to enter international markets is the need to have good knowledge of their intended export market, understand the specific certification requirements for that region to ensure that its product is compliant and is certified through the correct channels. It means that a great deal of forward thinking is required. Successful producers must know who their target market is before they commence production. As the accreditation process usually takes some years, long-range thinking is necessary anyway.

### **3.4 Market access**

It is beyond the scope of this study to attempt to provide a highly detailed assessment of general market access requirements on a product-by-product basis, because the schedules are invariably complex and product and market specific. Regularly updated information on general market access requirements to the countries in question can be found on the Austrade website at [www.austrade.com.au](http://www.austrade.com.au).

## 4. United States of America

### Key Organic Market Facts: US

Population:	290 million
Consumer acceptance:	40% consume organics
Organic market size:	US\$13 billion p.a.
Market growth:	20% p.a.
% of total food and beverage market:	2%
Access status:	Mandatory controls on imports (National Organic Program) (NOP)
Ratio domestic vs. imported product:	Organic imports US\$1.5 billion (2002)
Current Australian imports:	Processed products, meat, beverages and spices.
Export opportunities:	Opportunities for wine, lamb, processed shelf stable products and counter seasonal fresh produce.
Market outlook:	Excellent

### 4.1 Market overview

The US has a population of 290 million, which includes broad ethnic minority groups including African American (12%), Latino (12%) and Asian (4%). The US is the largest and most affluent market in the world for consumer products.

The US is also the world's largest market for organic food and beverages with an estimated value of over US\$13 billion in 2004. Although only accounting for around 2% of the overall food and beverage market, organics are no longer the domain of 'hippies' and are rapidly growing in popularity. Organic fresh produce is the top-selling organic food category, and is expected to continue to expand as the availability and diversity of products increases. Growth to date has been strong since 1997 (Table 1). According to the research organisation Datamonitor, the overall organic food and beverage segment is projected to reach a value of \$30.7 billion by 2007, with a five-year compound annual growth rate of 21.4% between 2002 and 2007, compared to a 21.2% rate between 1997 and 2002. It is predicted that this growth will be largely driven by sales of organic meat and meat products. With such positive projected growth, the US is expected to account for most global revenues from organic products in the foreseeable future.

**Table 1: Consumer sales and growth rates of organic foods, 1997-2003**

Year	Sales (US\$ billions)	Growth rate %
1997	3.6	
1998	4.3	19.7
1999	5.0	18.2
2000	6.1	21.0
2001	7.4	20.7
2002	8.6	17.3
2003	10.4	20.2

Source: Nutrition Business Journal, 2004

## 4.2 Consumer profile

The strong growth in organics is reflective of the current trend towards healthy eating in the US. As the baby boomers reach their later years of life, they have become very concerned about what they are eating. There is also a big push in the market towards addressing the national obesity problem, with a drive to promote fruit and vegetable consumption. Government initiatives, sustained coverage in the general media, and anti-fast food documentaries such as 'Supersize Me' have fixed the issue of healthy eating in the US consumer psyche. The United States Department of Agriculture (USDA) has just released a modified food pyramid with a strong focus on counting calories and there is now compulsory labelling on transfats (saturated fats). Furthermore, as is discussed in more detail in following sections, in 2002 the US's NOP was fully implemented and all organic products now bear the USDA organic seal. As a result of all of the above factors, consumers are becoming more educated about healthy alternatives, such as no genetically modified organisms (GMOs), organic, biodynamic and functional foods, as well as nutraceuticals. Organics in particular have realised mainstream status in this market.

Approximately 40% of the US's population now consume organics. Research conducted by the Natural Marketing Institute (2002) found that the US's organic consumers could be categorised into three segments:

- The Organic Integrated Group (37% of all organic users) consumes organic products more than once a day
- The Organic Middle Group (39% of all organic users) consumes organic products at least weekly
- The Organic Fringe Group (24% of all organic users) eats organic products occasionally.

Research also indicates that price is the biggest barrier for the purchase of organic foods in the US. Retailer, Whole Foods Market, commissioned an 'Organic Foods Trend Tracker' (2003) which found that despite the fact that 19% of Americans will purchase organic foods regardless of price point, price still remains the biggest barrier for consumers who do not eat organic foods to try organic foods. Nearly 70% of consumers who do not eat organic foods claim price is a major factor in their decision.

## 4.3 Retail market structure

In the US in 2003, 47% of organic foods were sold through conventional channels, 44% were sold through natural food stores, and 9% were sold through direct and other marketing channels (e.g. farmers' markets, restaurants, exports) (Organic Trades Association (OTA), 2004). The large supermarket chains have been quick to capitalise on strong consumer demand for organic produce and 57% of supermarkets in the US now offer a separate natural/organic aisle or selection in their stores.

Whole Foods Market is a particularly relevant example of how organics are moving into mainstream outlets. This US chain is now the world's leading retailer of natural and organic foods with 2004 sales of US\$3.9 billion, up 23% from 2003. It has a comprehensive organic food offering as well as a range of food for specific dietary requirements, e.g. gluten free. The company is expanding rapidly and has recently moved into the UK market, setting up a flagship store in London. The success of Whole Foods Market has also spurred several 'copy cat' retailers to specialise in the organic, natural food segment.

The US supermarket sector is undergoing a period of consolidation. The top five US supermarkets are Wal-Mart Stores, The Kroger Co, Safeway Inc, Albertson's Inc and Ahold USA Inc. In addition, there are a large number of smaller regional chains, but progressively these are being cannibalised by the large chains. As the US market place is consolidating, retailers are now working with fewer but larger suppliers. The implication of this for Australian exporters is that it is difficult for smaller exporters from Australia to enter the market individually and denotes the need for critical mass.

Organic food and beverages are also having a significant impact on the food service sector in the US. The 2005 Restaurant and Institutions 'Organic Food Study' found that organic products are no longer a niche category and have become an important input across the board. The study found that 50% of

chefs surveyed now use some organic products, with 29% planning to increase their use by the end of 2005. Interestingly, the key driver for organics in this sector is the perception of better quality rather than health benefits. As one New York chef put it: “*We use the highest quality foods and we’re charging for it. We have no problem getting the money for it because people can taste the difference*”. As is the case in the retail sector, in the food service sector, vegetables are by far the largest organic category, followed by fruits, meats, grains and dairy.

The vast majority of organic products sold in the US are able to command a price premium over their conventional equivalents. During 2000-04, the highest premiums in fresh produce were observed for broccoli and carrots (over 100% over conventional), with premiums being higher at the wholesale level than at the farm gate level (USDA, 2005). These price premiums are recognised as being a significant barrier to the greater adoption of organic food.

In the short term, price premiums on organics in the US are expected to remain stable as demand continues to override supply. However, it is considered unlikely that these premiums will be sustained in the long-term as revenues are ploughed back into the US organic industry, and its capacity is likely to increase faster than demand. From this point, price premiums and the proportionate level of increased profits are likely to decline, unless economies of scale are realised in production and the supply chain.

In addition, given the barrier to sales that price premiums on organics create, it is likely that the major supermarket chains will exert their significant market power to decrease margins for producers and processors, or source product from low cost producers, such as China and South America, which are moving towards large-scale organic production.

#### **4.4 Market access, certification and labelling regulations**

Prior to 2002, the certification standards for production and processing of all products labelled organic in the US were dictated by the EU regulations on organic production (the labelling of plant products being governed by EU Regulation 2092/91 and products from organically managed livestock being governed by EU Regulation 1804/99). In October 2002, USDA implemented the NOP. The EU regulations are no longer applicable and NOP is now the sole standard.

The new NOP of the USDA determines four product categories:

1. **100% organic:** products containing only organically produced ingredients.
2. **Organic:** products containing 95% organically produced ingredients by weight.
3. **Made with organic ingredients:** a product containing more than 70% organic ingredients. Up to three of the organically produced ingredients can be specified on the principal display panel of the packaging.
4. **Processed products containing less than 70% organically produced ingredients:** cannot use the term organic in the principal display panel, but the ingredients organically produced can be specified on the ingredients statement on the information panel.

The USDA organic seal can be used on the two first product categories, provided that the requirements of the NOP are complied with (figure 2).

**Figure 2: USDA Organic Seal**



The US regulations have provisions to accept other certification systems on the basis of a bilateral agreement. Under the NOP, foreign certification bodies that are accredited according to the US requirements are accepted by the USDA for certification in accordance with the NOP, without being directly accredited by USDA. However, this process just recognises that the accreditation procedures and foreign certification bodies still need to meet the requirements of the NOP to issue acceptable certification for the US.

Australia is currently trying to negotiate an equivalency agreement with the US, however, we are told that the process has stalled and AQIS is now looking at alternative avenues to achieve equivalency. We understand that the barriers to achieving this are more politically based than related to any real problems with the two standards being equivalent.

As a component of the NOP Standards, all product sold as organic must bear the USDA organic seal. The introduction of clearer labelling has given the industry a boost by making organic products more visible in the marketplace and raising consumer awareness. The fact that organic products must meet NOP standards in order to obtain the official organic logo has strengthened the US consumers' confidence in organic products. This increased confidence is evidenced by research indicating that one year after the new standards and labelling laws were introduced, one in three Americans believed the new logo and/or clearer labelling made an impact on their decision to purchase organic foods (Whole Foods Market, 2003). Moreover, almost 50% of those claiming to consume more organic foods than they did one year ago, say that clear, credible, organic labelling makes them more inclined to purchase organic foods (Whole Foods Market, 2003).

#### **4.5 Assessment of US's domestic organic industry**

The introduction of a national standard for organic products has increased consumer confidence and cemented organics as a legitimate mainstream industry. The US market for organic food and beverages is the fastest growing in the world and as a result of this strong demand, local production of organic products has stepped up. Organic farming has been one of the fastest growing segments of US agriculture for nearly a decade. In 2004, the US held approximately 950,000 hectares of certified organic land (Figure 4). Many regions are recording increased levels of certified organic acreage annually, as more farms are converted in order to meet demand and take advantage of increased profit margins. California has demonstrated the greatest increases in organic production and acreage conversion.



**Figure 3: Organic agriculture in North America**



*Source: Willer and Yussefi, 2004*

Product categories with the most significant growth in US domestic production include corn, soybeans and other major crops, growth of which more than doubled from 1992 to 1997, and doubled again between 1997 and 2001. Within the organic livestock sector, poultry and dairy have also grown at a significant rate.

**4.6 Australian exports to the US**

6.12% of Australia’s organic exports (volume) are exported to the US making it our fifth largest export market for organic food and beverages. Australia predominantly exports organic beverages, spices, meat and processed products to the US. A breakdown is contained in Table 2 below.

**Table 2: Australian organic exports to the US**

Product Category	Standardised net mass (kg or l)*
Animal products	-
Beverage and spices	24,481
Cereals	-
Drinks and juices	-
Fruit and nuts	-
Meat products	54,085
Other	-
Processed products	171,657
Sugar	-
Vegetables	-
Wine	-
<b>TOTAL</b>	<b>250,223</b>

*Source: DAFF, 2004*

*\*Dollar values not available*

#### **4.7 Australia's competitiveness in the US market**

Despite strong domestic growth in the production of organics, significant shortfalls in supply exist, which provide export opportunities for Australia. A recent USDA study estimated that the US imported as much as US\$1.5 billion in organic food products in 2002, while exporting as little as US\$125 million worth of organic food products.

Many US companies are importing organic products from low cost producers, particularly South America, China and New Zealand. By and large, imports are used when local production is in the off-season. However, in an effort to improve margins, imports are winning in some categories where they are cheaper than their domestically produced counterparts.

Examples of imported products include:

- Chilean fruits such as apples and cherries
- Mexican vegetables
- Chinese vegetables such as asparagus
- New Zealand fresh produce.

There are a number of factors constraining Australian food exports to the US which include:

- distance and freight cost
- the relatively strong \$AUD
- market access in some categories
- formidable competition from lower cost and more closely located countries including Canada, and South American countries, such as Brazil, Argentina and Chile.

Australia's success in the US is in circumstances when products are unique; when there is a counter seasonal market opportunity; with processed shelf stable products; or with specialised products. Examples here include grass-fed lamb, grass-fed and processed or feed-lotted/grain-fed beef, wine, and navel oranges. Conventionally produced wine has been a great success story for Australia, which is now challenging Californian wine for market leadership. The success of Australian wine in the US market is due to the fact that producers have a clear understanding of consumer needs and responded by developing wine that is highly drinkable, user friendly, affordable and with novel labelling and promotions. As there is currently no organic wine being exported to the US, this is viewed as a significant opportunity for Australian producers on the basis of the success of this market of conventional Australian wine.

#### ***Market potential for Australia***

Being the largest global organic market, the US offers great potential. However, the distance to market is an issue for both supply cost and supply chain integrity, particularly in the case of short shelf life products. This suggests that the best export prospects are in:

- shelf stable products, e.g. canned, dried, preserved food
- high value and unique products, e.g. lamb
- counter seasonal products, e.g. seasonal fruit (although only the more robust type)
- wine - Australia's strong position in wine together with growth in wine consumption and a large organic market suggests a good opportunity for organic wine.

## 5. United Kingdom

Key Organic Market Facts: United Kingdom	
Population:	60 million
Consumer acceptance:	75% purchase during the year
Organic market size:	US\$1.84 billion (2004)
Market growth:	11%
% of total food and beverage market:	2%
Access status:	EU Regulations 2092/91 and 1804/99 Australia has 'third country' status
Ratio domestic vs. imported product:	46% imported
Current Australian imports:	Cereals, animal products, meat, processed products, sugar, vegetables, wine.
Export opportunities:	Opportunities in shelf stable processed foods: baby food and hygiene products, dried fruit, nuts, flour, edible oils and wine. Seasonal windows for summer fruit. Organic meat experiencing highest growth in this market.
Market outlook:	Good

### 5.1 Market overview

The UK has a population of about 60 million including strong ethnic minority groups of Chinese, South West Asian, Arab and Afro-Caribbean communities. As a member of the EU, the UK is heavily reliant on European countries for its food supplies. The economy is strong and, whilst there are pockets of poverty, on average the population is relatively affluent and the consumer reasonably well educated.

The market for organics is highly developed in the UK and is approaching maturity as evidenced by a slowdown in growth. From the mid-1990s until recently, the organic sector has enjoyed strong growth.

The market doubled between 1998/99. During this time, organics shifted into the mainstream, driven by a heightened awareness of the nutritional value and safety of organics comparative to their conventional counterparts. The Bovine Spongiform Encephalopathy (BSE) crisis and other food safety incidents significantly contributed to this.

The UK organic food and beverage market is now the third largest in the world. It is reported that retail sales of organic food topped £1.12 billion (US\$1.84 billion) in 2004 and are growing by £2 million a week, double the growth rate of the general grocery market. While sales of organic products still only account for around 2% of the total UK grocery business, British consumers now have access to the most comprehensive range of organic food and beverage products in the world. Expected growth rates for the total UK market and specific product categories are detailed in Table 3.

**Table 3: UK expected market growth rates between 2002 and 2007 for the total organic market and for specific product categories**

Category	% growth
Total organic market	11.0
Convenience products	8.8
Meat products	12.3
Dairy products	8.8
Fruit and vegetables	8.3
Cereal products	6.0

Source: Organic Centres Wales, 2005

## **5.2 Consumer profile**

The profile of the UK consumer has altered drastically since the various waves of immigrants in the post World War II period made their impact on the diet and lifestyle of the community. The influence of the ethnic minorities increased the consumption of fresh fruit and vegetables and made a whole new selection of Asian/Indian, Continental European and Caribbean foods available.

A strong characteristic of the British consumer is the dependence on home meal replacement or pre-prepared meal components. This trend has largely been driven by the sophistication of the supermarket sector and by a widespread lack of general cooking skills.

The UK consumer is generally highly educated and sophisticated and is well ahead of other countries in terms of organised protest and lobbying consumer interest issues such as ethical consumption, GMOs, food safety, and animal liberation. This groundswell activity has driven consumer demand for organic products. Reflecting consumer sensitivity, the major supermarkets in the UK have codes of practice and product quality and integrity standards, which not only cover food safety and performance, but also increasingly cover environmental sustainability and social ethics.

Around three-quarters of UK households buy some organic food during the year. Those aged 55 to 64 are most likely to buy organic food, and women are more likely to buy it than men. 70% of the UK public would now like to see organic food on school menus and organic baby food is a particularly strong category in the market (Soil Association, 2004).

## **5.3 Retail market structure**

The UK has the most developed supermarket segment in the world - indeed it invented the modern supermarket model that has been rolled out across the globe. Supermarkets dominate the food business in the UK and are the single largest channel for organic foods.

In 1983, Waitrose became the first UK supermarket to sell organic produce and since then all the major retailers have followed suit stocking a wide variety of products. In 2000, Iceland, a frozen food retailer, converted to only stocking organic food.

Most of the UK chains including Tesco, Sainsburys, Waitrose, Asda (a wholly owned subsidiary of Wal-Mart) and Marks & Spencers have strong private label programs which account for anywhere between 60% and 80% of all sales. Private label organic food and beverages are now becoming widely available in these major supermarkets and compete head to head with conventionally branded organic product. UK supermarkets also have a very strong focus on value added products such as semi-prepared foods and home meal replacement. Consumers are increasingly expecting the same level of value added products with organics, and supermarkets are looking to meet this demand.

Small High Street shops have all but disappeared in the UK, except the specialist niche market operators. The dominance of the supermarkets has reduced the wholesale markets to minimal market share and they now exist primarily to service the food service sector, and smaller street vendors. Supermarkets rarely source product from central wholesale markets.

However, despite the dominance of supermarkets, in 2004 the share of the organic segment held by big UK retailers like Tesco and Sainsburys marginally declined due to the fact that a significant number of organic shoppers are now buying produce direct from suppliers. The UK's love of farmers' markets is ever growing. Across the country, every weekend people flock in their thousands, 'from Hackney to Hampshire to north of Hadrian's Wall', to buy produce fresh from the farmers themselves.

In addition, the number of professional home delivery schemes is increasing. Sales of organic products through farm shops and home delivery schemes grew by 16% last year and topped £108 million. As a result, the supermarket share of organic food sales fell from 81% to 80%, despite the fact that the overall value of supermarket sales rose from £821 million in 2002/03 to £899 million in 2003/04.

A breakdown of the estimated retail value of organic food sold through different outlets is detailed in Table 4.

**Table 4: Estimated UK retail values of organic food sold through different outlets, 2001-02 to 2000-04**

Outlet	2001-02		2002-03		2003-04		
	Sales (£mil)	% total market value	Sales (£mil)	% total market value	Sales (£mil)	% total market value	Annual growth %
Supermarkets	755	82	821	81.0	899.4	80	9.5
Direct sales	73	8	93.3	9.0	108.4	10	16.2
Independent retailers	92	10	101.0	10.0	111.1	10	10.0
<b>Total</b>	<b>920</b>		<b>1,015.3</b>		1,118.9		10.2

Source: Organic Centre Wales, 2005

Despite the surge in direct sales, supermarkets remain the dominant force in the supply chain for organics. Due to the notoriously inconsistent supply of organics, supermarkets are seeking out long-term relationships with suppliers who have the critical mass to handle large volumes year round. As is the case in the US, the implication for Australian producers is that the UK supermarkets will generally only do business with very large suppliers, single desk exporters or consolidated individual groups.

The UK supermarkets have established dedicated supply chains for organic products. They have very strict product integrity and quality systems and suppliers must have supply chain accreditation, third party auditing processes and so on.

#### **5.4 Market access, certification and labelling regulations**

As a member of the EU, all food labelled as organic in the UK must conform to EU regulations 2092/91 and 1804/99. The regulations are designed to protect both consumers and producers. They define the inputs and practices which may be used in organic farming. They apply to processing, processing aids and ingredients in organic foods and detail the inspection system which must be put in place to ensure accreditation (Department for Environment Food and Rural Affairs (DEFRA), 2005). Like other member states, the UK is responsible for enforcement and for its own monitoring and inspection system. Each member state has the responsibility to interpret and implement the regulation in its national context (Willer and Yussefi, 2004). As such, the EU regulations form the basis of the UK organic standards which are implemented under the Organic Products Regulations 2004 through the Compendium of UK Organic Standards (DEFRA, 2005).

The EU regulations have a provision to accept other certification systems on a bilateral agreement. By reaching an equivalency agreement, accepted countries are placed on the 'third list of countries'. Australia is one of eight countries thus far to be included on the EU third country list. This means that Australian organic products (with the exclusion of livestock and meat products) can be certified by an approved Australian certification agency, rather than signing an inspection contract with a European certification agency and applying for an import permit with the local competent authority. As such, organic products exported by Australia to the UK must be accompanied by a consignment specific '*Certificate of Inspection for Import of Products from Organic Production*'.

While the majority of exporters of organic products to the UK are not on the third list of countries, Australia's acceptance to the list presents a competitive advantage as it increases the ease of market access. Other countries on the list include Argentina, the Czech Republic, Costa Rica, Israel, Hungary, New Zealand and Switzerland (Willer and Yussefi, 2004).

Long before the introduction of the EU regulations, the UK had its own organic standards and labelling schemes. The UK organic seal is highly recognised and well trusted by British consumers. These quality marks are well regarded because, for imported products to be awarded a private label, all operators (producers, processors and traders) must fulfil not only the requirements of the EU regulations and national standards, but also comply with the private label standards and undertake additional verification and compliance.

The EU also has a logo for organic products where 95% of the ingredients are organic products that originated in the EU. Use of the symbol is voluntary and has had little market impact to date.

### 5.5 Assessment of the UK's domestic organic industry

In response to the growing demand for organic products, the domestic capability for organic production has experienced strong growth. In the year to April 2004, the UK's fully organic land area increased by 18% from 434,300 hectares to 630,299 hectares. To date there are 3,995 registered organic producers and 1,845 registered organic processing outlets in the UK (Organic Centre Wales, 2005). However, despite the continued growth of the organic market and the setting of clear government targets for expanding the UK's organic production, little progress has been made to date towards import substitution with domestic product (Soil Association, 2005). Approximately 46% of organic food and beverages sold in the UK are imported, a figure that has remained static for some time. Supermarket chains across the UK are looking to international suppliers to meet domestic demand for organic goods.

The issue of organic imports has recently hit a nerve with UK consumers. The UK supermarket chains Tesco, Asda and Sainsbury have been reportedly importing substantial amounts of organic food rather than buying from UK's farmers, even when local supplies are available. Driven by low pricing strategies, supermarkets are sourcing product globally to increase margins and, in some categories, to ensure consistent supply. The consumer backlash is based on both a desire to support local industry and a real concern that while imports may meet basic EU and UK regulatory standards, they may not be comparable to UK products in terms of ethical labour practices, environmental sustainability, animal welfare practices, etc., which are highly valued by a large proportion of UK consumers.

### 5.6 Australian exports to the UK

Following Japan, the UK is Australia's second largest export market for organic products, accounting for 17.51% of the total export volume. A summary of Australian exports to this market by standardised net mass is detailed in Table 5.

**Table 5: Australian organic exports to the UK**

Product Category	Standardised net mass (kg or 1)
Animal products	95,818
Beverage and spices	-
Cereals	154,000
Drinks and juices	-
Fruit and nuts	-
Meat products	57,851
Other	-
Processed products	76,927
Sugar	88,600
Vegetables	4,518
Wine	238,301
<b>TOTAL</b>	<b>716,015</b>

Source: DAFF, 2004

\*Dollar values not available

## **5.7 Australia's competitiveness in the UK market**

Australia enjoys very strong brand imagery in the UK. Australia's image in this market is particularly well suited to organics as it has a reputation for being from a fresh, healthy, sunny environment. Australia is a popular tourism destination for UK people so the imagery of rural landscapes and the sunny outdoors resonates strongly with them. There are lingering historical emotional ties between Australia and the UK with 300,000 Australians living in the UK and a very large number of British people living in Australia. The UK is very positive about Australia and feels a very close relationship to it. Accordingly, Australia enjoys strong, positive brand recognition for its products in this market. Australian products are prominent on the shelves of UK supermarkets, both in proprietary and private label brands, especially jam, honey, dried fruit, cereal-based processed foods, confectionery, bottled sauces, condiments and so on.

As 46% of organic food and beverages are imported, there is an opportunity for Australia to be a key supplier to this market.

Australia suffers formidable competition from other lower cost southern hemisphere countries, notably South Africa and Chile. These countries have a substantial cost advantage and are becoming aggressive and focused marketers. Australia has all but lost its traditional markets for products such as apples, pears, citrus and lamb.

Whilst these countries aren't necessarily strong in organics, they have pushed Australia out of its traditional markets in conventional products. Organic products attract a substantial premium above standard products, which greatly limits demand. Because there is strong competition in conventional products in driving down prices, a situation is created whereby the price gap between conventional South American citrus, for example, and Australian organic citrus becomes too great, therefore dampening demand for the Australian product.

## **5.8 Market potential for Australian organics in the UK**

As for the US, the UK is a very large market for organics and as such offers potential. However, as for the US, the UK is problematic for Australia because the distance affects cost and supply chain product integrity. Best prospects for Australia are in shelf stable, processed foods, including cereals, confectionery, baby products, dried fruit and nuts, honey and wine. There is also a seasonal window of opportunity for summer fruit although the travel distance is an issue. There are also limited opportunities for beef and lamb, although the UK has a strong local industry.

## 6. Continental Europe

<b>Key Organic Market Facts: Continental Europe</b>	
Population:	396.4 million (Continental EU 2004)
Consumer acceptance:	Variable (highest in Scandinavian and Alpine countries, lowest in Southern Europe).
Organic market size:	Total N/A. Germany US\$3.06 billion Italy and France (US\$1.5 billion)
Market growth:	1.5–6.1% depending on country.
% of total food and beverage market:	Variable <1–2.4%
Access status:	EU Regulations 2092/91 and 1804/99 Australia has 'third country' status
Ratio domestic vs. imported product:	22-30% imports
Current Australian imports:	Cereals, animal products, meat, beverages, spices, processed products, drinks, juices, sugar, vegetables, fruit, nuts and wine.
Export opportunities:	Opportunities in shelf stable processed foods: baby food and hygiene products, dried fruit, nuts, flour, edible oils and wine. Seasonal opportunity windows for summer fruit.
Market outlook:	Good

### 6.1 Market overview

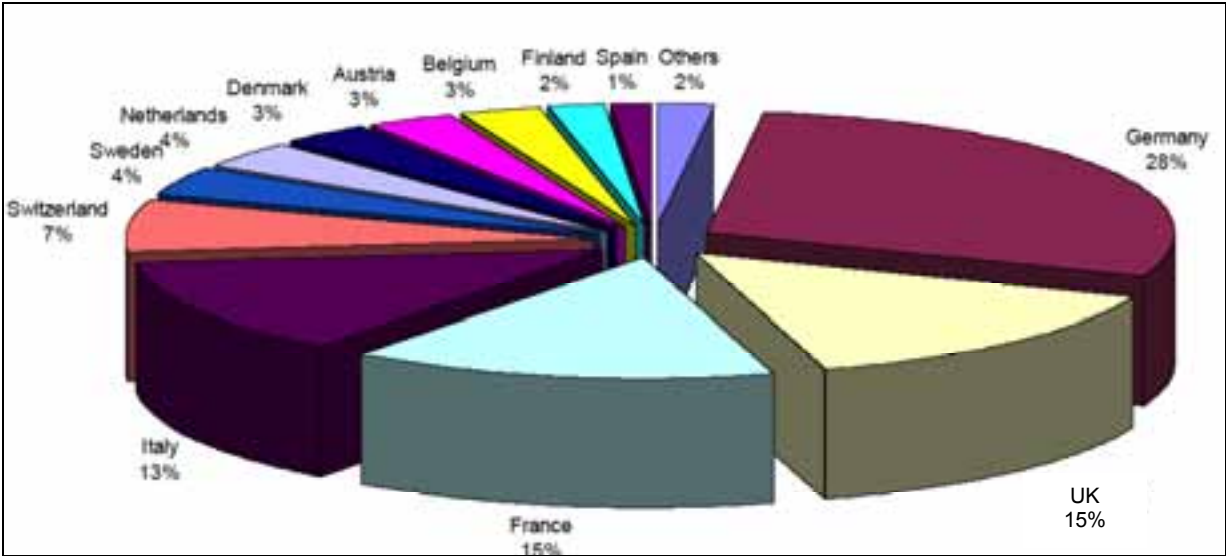
Continental Europe, (Austria, Belgium, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Italy, Latvia, Lithuania, Luxembourg, Malta, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, the Netherlands) is a vastly diverse market in terms of ethnicity, culture, economics and culinary preferences. The creation of the EU, as we know it today, has brought peace and unprecedented prosperity to the region. While facing a number of challenges going forward, for the most part Continental Europe has good public infrastructure, a well-educated and trained work force, and high domestic savings rates coupled with financial systems that are capable of channelling resources to productive investment (Köhler, 2003). As such, the economies of most Continental European nations are strong or stable and the average consumer educated and relatively affluent.

The Continental European market for organic food and beverages was traditionally the largest in the world. However, the recent organic boom over the Atlantic has now placed it second to the US. Sales of organic food and beverages are quite disparate across the continent. In 2004 the average expenditure rate on the segment was US\$27.2 per annum. However, this per capita rate varies dramatically from country to country - Spain having a rate of US\$7.3 and Switzerland US\$105 (Willer and Yussefi, 2004). As a percentage of total sales, the market for organic produce is highest in Scandinavian and Alpine countries, and Southern European countries have the lowest market share.

While the European Information System for Organic Markets (EISfom) is working on a standardised system for the collection of data on organic production and trade, no uniform data collection system, and consequently no concrete statistics, are available on the industry in Continental Europe at present. Some country specific data is however available. Germany is the largest market for organics in Europe, even over the UK, and was valued at US\$3.06 billion in 2004. After Germany and the UK, Italy and France are the next largest Continental European markets each valued at approximately US\$1.5 billion. Switzerland, Denmark, Sweden, Austria and the Netherlands are also important markets. The composition of the total European market (including the UK) is broken down in Figure 4.



**Figure 4: Composition of the Total European Organic Market**



Source: FIBL (Research Institute of Organic Agriculture), 2005

Like the UK, the market for organics in Continental Europe is reaching maturity and sales growth has slowed somewhat since the late 1990s when high penetration of products into mainstream retail outlets increased availability and drove sales. In recent years, distribution in mainstream retailers has reached saturation point with the resultant effect of slowing growth. Despite this, the current rate of growth is positive with revenues increasing by 26% between 2001 and 2004. Organic Monitor (2005) projects healthy Continental European growth rates going forward as sales channels for organic products broaden. They have also forecast that the organic fruit market will show higher growth albeit from a smaller base than organic vegetables. Table 6 provides a breakdown of the expected market growth in selected Continental European countries from 2002-2007.

**Table 6: Expected market growth rates between 2002 and 2007 for the total organic market and for specific product categories in selected Continental European countries**

	Denmark	Austria	Switzerland	Germany	France
Total organic market	1.5	4.6	4.5	4.8	6.1
Convenience products	3.3	8.4	7.0	7.3	10.0
Meat products	1.7	3.2	8.0	3.1	10.0
Dairy products	1.0	3.4	1.5	6.7	6.5
Fruit and vegetables	4.0	5.7	5.0	7.1	5.0
Cereal products	2.5	5.3	2.0	4.6	5.3

**6.2 Consumer profile**

According to Datamonitor, an overwhelming majority (90%) of Continental European consumers feel that improving health is important. Continental European consumers, in seeking to lead healthy lifestyles, have consequently become increasingly sceptical about mass production techniques, food safety issues, and their nutritional intake. The impact of the Chernobyl disaster in Russia and other such events have had a long lasting impact on the Continental European consumer psyche.

However, while the overriding perception of health is an important consideration, food choice is subject to cultural differences. What is considered ‘healthy’ or ‘ethical’ can vary from country to country. For example, as noted by Grunert (2003), animal welfare is highly desired in the UK, but much less so in Southern Europe. Organic convenience products are popular in the UK. However, in Germany, they are much less accepted as organic production is linked to low levels of processing.

Functional foods are well accepted in Finland where biotechnology has a good reputation, but less so in Denmark, where consumers are sceptical about high-tech applications such as GMOs in food production.

As in other global markets, organic foods in Continental Europe generally attract a price premium. Organic Monitor (2005) argues that German consumers are some of the most price sensitive in Continental Europe when it comes to food purchases, despite the fact that they are the largest market for organic products in the region. They spend about 11% of their disposable income on groceries, the lowest rate in Continental Europe. They argue that the price premium of organic foods is a major deterrent to consumer purchases in this market and a change in consumer behaviour is deemed necessary if organic foods are to gain broader appeal. Moreover, the recession in the German economy is amplifying the price sensitivity of consumers.

### 6.3 Retail market structure

The retail market for organic products in Continental Europe is dominated by supermarkets, which hold 48% market share. As mentioned previously, the late 1990s saw organics move into mainstream retail outlets, and almost all major supermarkets in Continental Europe stock a wide variety of organic products. Specialised organic supermarkets have been new entrants to the sector and are gaining market share. Much of the growth of these niche supermarkets is in Germany, where 40 new supermarkets opened in 2004 alone. Organics Monitor (2005) reported that German chains like Basic and Alnatura are planning to continue to further expand their locations in 2005 and 2006. Moreover, high growth in the organic food market and competition by new 100% organic market entrants prompted Rewe, a leading conventional food retailer, to open a dedicated organic supermarket in May 2005.

The dynamics of the retail industry in France, Spain and other Continental European countries are also beginning to shift in a similar way. Supermarkets in Continental Europe, particularly higher end ones, generally have a very wide-ranging, organic food offering. French retailer Picard has incorporated organics into its comprehensive private label offering (Figure 5).

**Figure 5: Picard (France) private label organic vegetables**



Source: David McKinna et al Pty Ltd, 2005, Photo Library

**6.4 Market access, certification and labelling regulations**

Organic food and beverage products are regulated by EU regulations 2092/91 and 1804/99 as described previously.

Generally Australia enjoys good market drivers for most products. Its Foot and Mouth Disease (FMD) and BSE freedom gives it an advantage for meat products over competitors.

**6.5 Assessment of Continental European domestic organic industry**

A breakdown of organic agriculture in Continental Europe is detailed in Figure 6. Production of organic fruit and vegetables has increased significantly across Europe, however imports continue to play an important role. Organic fruit and vegetable sales increased by 26% between 2001 and 2004, however, the rise in organic farmland in Western Europe was just 14%. Imports account for approximately 22% of the volume of Continental European sales, the majority of which are off-season and tropical products.

**Figure 6: Organic agriculture in Continental Europe**



Source: Willer and Yussefi, 2004.

## 6.6 Australian exports to Continental Europe

As is evident from the breakdown provided in Table 7, the types of commodities exported to individual countries within Continental Europe vary substantially. It is important to note that some countries act as distribution centres for imports. This is the case for the Netherlands, which imports the majority of Australian organic vegetables and then distributes them to other countries in the region. The large quantities of cereals exported may be a result of the fact that this sector is relatively underdeveloped within Continental Europe, with most domestic organic farm conversions focusing on fresh produce and meat products.

**Table 7: Australian organic exports to Continental Europe (standardised net mass – kg)**

Country	Animal products	Beverage and spices	Cereals	Drinks and juices	Fruit and nuts	Meat products	Processed products	Other	Vegetables	Wine	Total
Austria	3,840										3840
Belgium			151,100								151,100
Denmark		19,350					480				19,830
France			428,150				1,585				429,735
Germany	12,261	22,456	52,160	3,840	8,000	58	2,934	58	3,012		104,879
Italy			100,000				200				100,200
Netherlands			135		903		1,110		79,347	904	82,399
Switzerland	222		186,180				1,110				187,512

Source: DAFF, 2004

\*Dollar values not available

## 6.7 Australia's competitiveness in the Continental European market

Again the biggest barrier to Australia's competitiveness is the tyranny of distance, which limits export to high value and more shelf stable products. Australia is competitive in grains and some vegetable products.

## 6.8 Market potential for Australian organics in Continental Europe

Again, as for the UK and the US, the best prospects for Australia in Continental Europe are in processed and shelf stable products including cereals and baby food and hygiene products.

## 7. Japan

Key Organic Market Facts: Japan	
Population:	127 million
Consumer acceptance:	High
Organic market size:	'Green Food' – US\$3 billion 'organic' - US\$250 million
Market growth:	'organic' 70% p.a. (influenced by regulatory changes)
% of total food and beverage market:	1%
Access status:	JAS mandatory controls on imports - Australia has equivalency agreement.
Ratio domestic vs. imported product:	N/A
Current Australian imports:	Cereals, animal products, meat, beverages, spices, drinks/juices, processed products, sugar, nuts and wine.
Export opportunities:	Well developed market. Fresh produce constrained by phytosanitary requirements. Opportunities in beef and lamb, drinks/juices, processed products, e.g. soy-based products, baby foods, corn-based products, grains and flours, edible oils and meat.
Market outlook:	Excellent

### 7.1 Market overview

Japan's population of 127 million Japanese (including indigenous Aniu and Okinawans) and Koreans, is highly urbanised. The population is in decline and therefore so is the long-term demand for food because of the low birth rate and ageing population. Japan has also been in a 15-year economic recession producing a strong deflationary trend.

However, the Japanese market for organic food and beverages is the largest, most established and sophisticated in Asia. Organics began as a grass roots movement in the 1970s as a response to the problems caused by industrialisation. Japan experienced unprecedented economic growth during the 20<sup>th</sup> century, which peaked during the mid-1950s–1970s. This rapid development brought with it widespread environmental destruction and contamination of natural resources. The Minamata disease was one of the most tragic cases. Chemical company Chisso Corporation dumped massive amounts of mercury and other pollutants into Minamata Bay from 1932-1968, causing over three thousand people to suffer methyl mercury poisoning from contaminated seafood.

Such large-scale food safety incidents caused the Japanese to re-think chemical fertilisers and, driven by consumer outcry, demand increased for naturally produced and chemical-free food and beverage products. The legacy of industrialisation on the Japanese food industry continues today, with 'organic' products and 'Green Foods' having a strong position in the market where they are largely recognised as a better alternative to their conventional counterparts. Booming consumer demand for organic foods in Japan is causing the organic fresh fruit and vegetable market to experience acute supply shortages.

As well as strong demand, the issue of supply shortages in Japan is also related to the certification laws introduced in April 2001. These certification standards are exceptionally stringent and products may only be labelled 'organic' if they meet the JAS. The regulations are such that many farmers who were previously considered to be organic (because their agricultural practices greatly reduced or eliminated synthetic chemicals) are now unable to be certified as a result of non-compliance issues and this has drastically reduced the number of products on the market that meet the 'organic' definition. The introduction of the new regulations and the subsequent reduction in the number of organic products caused the value of the industry to shrink by 90% from US\$3 billion in 2000 to US\$250 million in 2001.

The excluded 90% of products are classified as ‘specially cultivated crops’ or ‘Green Foods’ which are grown with reduced use of chemical pesticides and fertilizers. The introduction of the JAS label for organic products has brought about greater awareness of what organic food is through clearer rules and regulations, and this step, whilst drastic, is predicted to have a positive effect on future sales.

## 7.2 The supply chain

In the case of Japan, there is need for special mention of the supply chain. The supply chains are extremely convoluted with many links. For example, a study conducted by this consultancy on red meat found that the meat passed through 17 supply chain links between Australia and the end consumer. Whilst the situation is improving, in the sense that some of the links are being eliminated, the supply chain can act as a major market barrier.

## 7.3 Consumer profile

Japanese culture has a strong aesthetic focus, and, despite its urbanisation, remains tied to the concept of harmony with nature. In addition, Japanese traditional farming techniques are essentially organic in their nature, and support for organic production methods is to some extent motivated by a desire to preserve this aspect of Japan’s cultural heritage. As such the organic concept fits well with the Japanese consumer psyche, and organic products have great appeal in this market.

In line with the organic spirit is the fact that Japanese culture values hygiene and healthy living enormously. Consumers are prepared to pay a lot of money for traditional health products or any foodstuffs that are believed to contribute to increased well-being, improved appearance or longevity, etc.

As well as the cultural fit of the organic imperative, the food safety issues cited above have caused the Japanese consumer to become increasingly concerned about how food is processed and the environmental consequences of large-scale conventional farming.

Increasingly, the Japanese consumer is interested in the traceability of their food. Japan is currently leading the world in this regard with the Quick Response Code (QRC) device, which is likely to become mandatory on all food packaging (the QRC allows the consumer to access website details about the product from a mobile phone so they can research the product even from the supermarket aisle). An example of the QRC is shown in Figure 7.

**Figure 7: Quick response code (QRC)**



*Source: David McKinna et al Pty Ltd, 2005, Photo Library*

The Japanese consumer is also extremely complex, and by far the most quality conscious of any consumer in the world. They are historically very brand conscious, seeking out the desired quality and ‘named’ products, but, since the recession, at the best possible price. Appearance of products is also particularly important, especially in gift-giving festivals, where food is often given as a gift. For example, it is not uncommon to see gift packs of perfect local fruit selling for AUD\$200-\$500.

The introduction of the ‘JAS Organic Seal’ appeals to this focus on branding and labelling and has increased demand for officially certified product. However, much confusion still exists regarding the difference between ‘organic’ and ‘Green Foods’ in the marketplace.

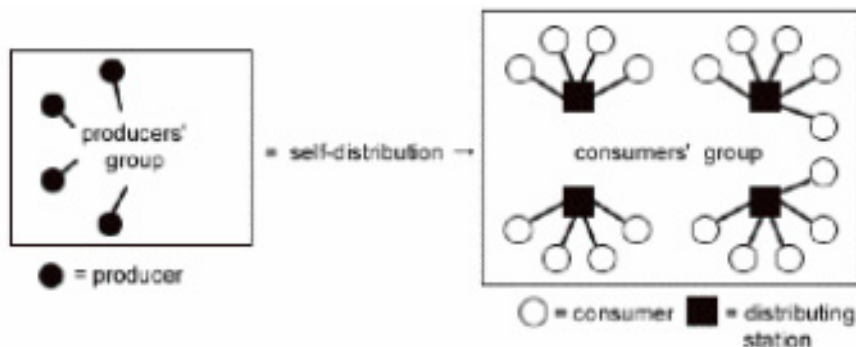
## 7.4 Retail market structure

According to the FAO (2001) at the wholesale level, it is estimated that:

- up to 25% of organic production is sold through distribution organisations which specialise in organic food
- 55% or more is sold through specialised home delivery networks, such as the teikei system
- food brokers and traders handle about 5%
- wholesale and warehouse organisations handle about 5%
- food processing and manufacturers handle about 10%.

As the organic food market in Japan began as a grass-roots movement, Japanese consumers initially bypassed the established distribution system, purchasing directly from growers. This direct distribution network is known as the ‘Teikei’ system. Teikei aims to create an alternative direct distribution system, which is independent of traditional retail market structures. Teikei works through a method of self-distribution whereby the producer and consumer form a relationship and both provide capital and labour to support the distribution system (Japan Organic Agriculture Association, 1993) (JOAA). An example of the Teikei supply chain structure is detailed in Figure 8.

**Figure 8: The Teikei supply chain**



Source: Japan Organic Agriculture Association, 1993

However, as demand for organics has increased, organic products are now readily available in conventional retail outlets, reducing the reliance on the original Teikei system.

Unlike in other modern industrialised nations, Japanese consumers predominantly patronise small local retailers rather than large supermarket chains. 70% of the total retail food sales take place in the more than 1 million small food stores in Japan. There are also a large amount of Western-style retail chains, however, their sales have been slipping, particularly during the recent economic slump. Both the larger chains and the smaller local stores stock ‘organic’ and ‘Green Foods’.

Home delivery and other direct marketing systems such as online shopping have also impacted on the way Japanese consumers purchase organics. Such distribution systems have increased in popularity as they have substantial cost advantages over the traditional highly convoluted Japanese retail supply chain, and these cost advantages translate into significant savings for the consumer.

As noted by the Department of Agriculture, Fisheries and Forestry (DAFF) (2004), a number of supermarkets, restaurants and cafés which brand themselves as organic have recently opened. Organic restaurants, popularly called *natu-res* (natural restaurants) are appearing all over Japan, such as the

Kyushu-based Dorobushi, which developed from a single organic restaurant in Kumamoto in 1991 to become a chain, and recently opened outlets in Tokyo.

Retail prices in Japan for organic agricultural products average 10-20% more than prices for conventional products, with some exceptions, such as tea, which can attract a 100% premium in some cases.

The main fresh organic products sold in Japan include:

- **Vegetables:** onions, carrots, potatoes, bell peppers, salad vegetables, broccoli, cabbage, asparagus, pumpkin, sweet potatoes, green beans, ginger and taro.
- **Fruits:** mandarins, kiwi fruit, strawberries, oranges, bananas and some other tropical fruits.

**7.5 Market access, certification and labelling regulations**

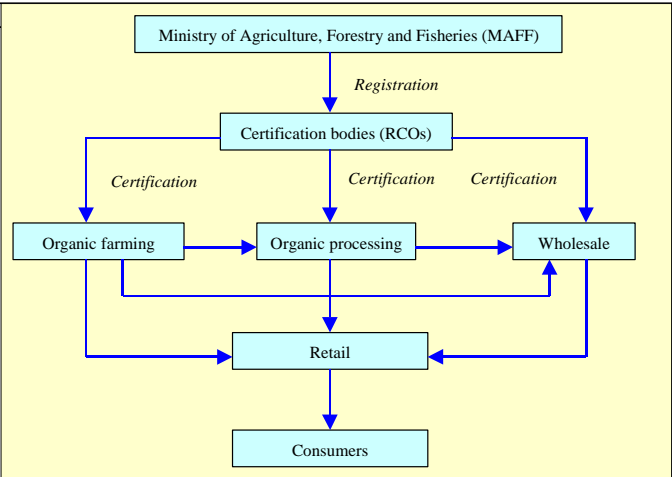
As has been highlighted already, the Japanese Ministry of Agriculture, Forestry and Fisheries (MAFF) introduced new guidelines for organic food production and marketing, and since April 2001, all organic foods marketed in Japan must meet the JAS and be marked with the JAS seal (Figure 9).

**Figure 9: JAS Logo**



The new standards have extremely stringent phytosanitary requirements and there have been problems due to definitional confusion. A model of the Japanese inspection system is provided in Figure 10.

**Figure 10: Japanese inspection system**



Source: FAO, 2001

The NASAA was the first certification agency outside of Japan to be accredited under the JAS program. The Japanese ministry has recognised the ANS as being equivalent to JAS with the exception of the use of five production products - wetting agents, white oil, disodium diphosphate, ammonium phosphate and ammonium sulphate.



At present, Australian operators intending to export organic primary product directly to the Japan market and obtain the JAS label must be JAS certified. However, raw and/or processed product that is exported in bulk does not itself need to be JAS certified if imported by a JAS certified operator in Japan.

Alternatively, Australian exporters to Japan who are not intending to apply for the JAS label directly must obtain an Export Declaration from an accredited Australian certifier (e.g. NASAA) to verify that the specified product has been produced in accordance with the ANS. As is the case for products exported to the EU, this declaration must accompany the goods along with an additional statutory declaration to verify that the prohibited products have not been used at any stage in the production and/or processing of product.

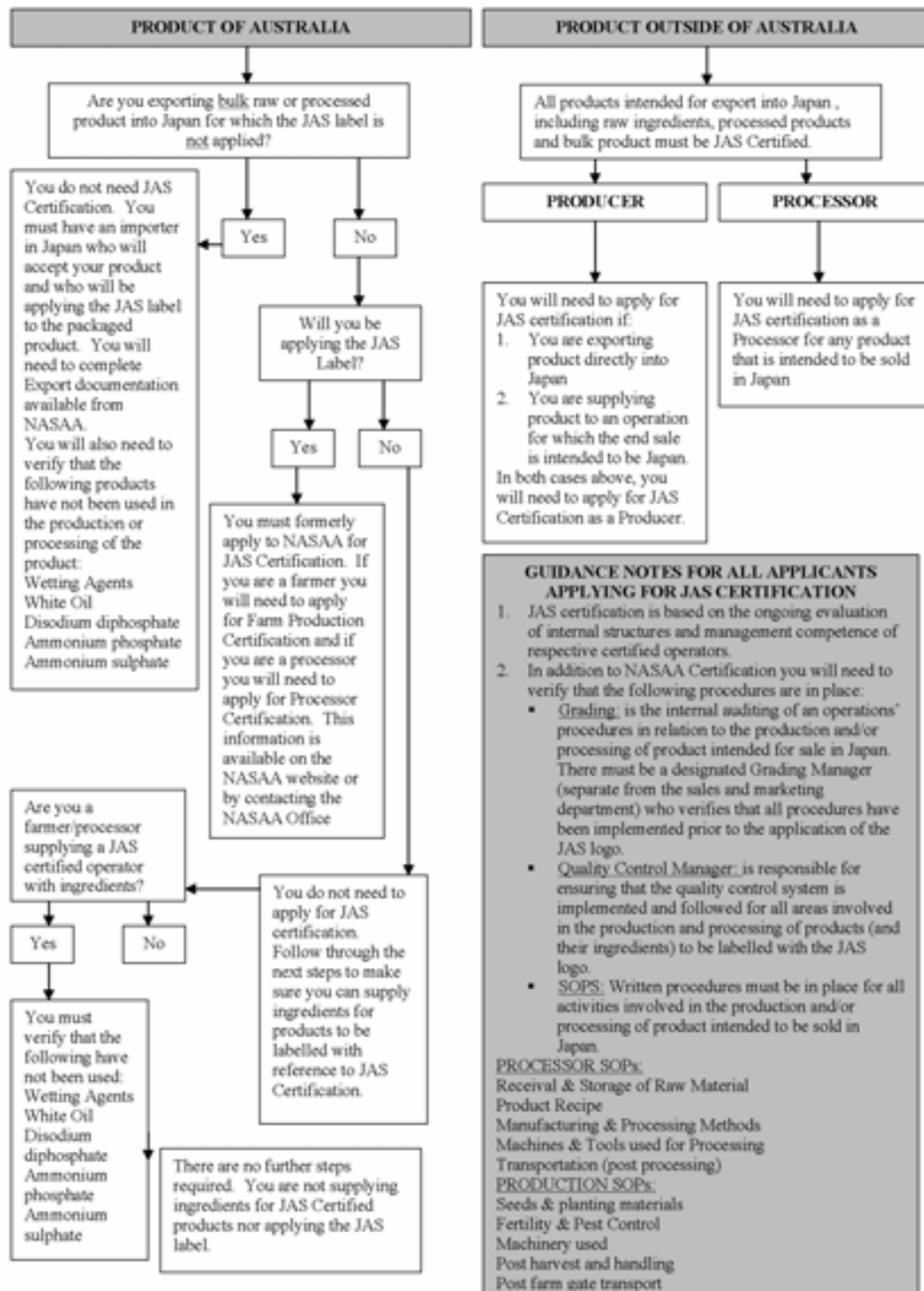
JAS compliance requires producers and processors to maintain a clear audit trail and documented operational procedures as a part of a comprehensive quality system.

To assist all JAS applicants in meeting the requirements for JAS Certification, accredited Australian certifiers such as NASAA are required to carry out a training session for each JAS applicant within the first 12 months of JAS certification.

A flowchart for JAS certification is provided in Figure 11 overleaf.

At the time this report was written, the JAS program was undergoing regulatory changes. The full effects of these changes for Australian producers and processors are yet to be assessed.

Figure 11: Flow chart for JAS certification



Source: NASAA, 2005

## 7.6 Assessment of Japanese domestic organic industry

The local Japanese organic farming industry is constrained by land scarcity and overly wet and humid conditions, which makes some products difficult to produce. In 2004, 5,083 hectares of land was under organic management. Key products include rice, tea, green vegetables, potatoes, citrus and other fruit.

## 7.7 Australian exports to Japan

Japan is by far Australia's largest export market for organic accounting for 33.59% of all organic exports. As is evident from the breakdown in Table 8, a wide variety of products are exported to this market. According to the Department of Primary Industries NSW (DPI), 90% of Australia's 2000 tonne organic soybean crop is currently exported to Japan. However, the industry reported demand for supplies of 10,000 to 20,000 tonnes of organic soybeans.

The lack of vegetables exported is attributed to the developed domestic Japanese industry and the problem of fumigation for some categories of imported product. Under the JAS, an organic product that has been fumigated cannot carry the organic label. Some market sources mention that fumigation is carried out for over 70% of a shipment, regardless of whether the shipment carries quarantine pests (FAO, 2001).

**Table 8: Australian organic exports to Japan**

Product Category	Standardised net mass (kg or 1)*
Animal products	26,208
Beverage and spices	106,915
Cereals	26,095
Drinks and juices	332,687
Fruit and nuts	258
Meat products	114,165
Other	14,179
Processed products	730,290
Sugar	20,750
Vegetables	-
Wine	2,154
<b>TOTAL</b>	<b>1,373,701</b>

Source: DAFF, 2004

## 7.8 Australia's competitiveness in the Japanese market

The key suppliers of organic food and beverage products to Japan are the US, China, New Zealand and Australia. China has long been a major supplier of organic products to Japan, eroding Australia's market share to a degree. However, in 2002 chemical residues found in 'organic' frozen spinach exported to Japan went some way towards damaging China's organic credentials in this market. Japanese consumers are increasingly becoming wary of the Chinese product and a preference is growing for imports from countries with more credible certification systems.

Organic fruit and vegetables account for almost three quarters of Japan's organic food sales. However, although growth is expected in the organic market as a whole, sales of organic fresh fruit and vegetables are unlikely to increase their market share in the near future, mostly because of the barrier presented by the random fumigation by port officials of all fresh food products entering Japan. Opportunities for Australia therefore lie in other products such as soy-based products, corn-based products, grains and flours, edible oils and meat.

The Japanese preference towards buying local product may hamper Australia's ability to gain share in this market in some categories. Australia would therefore be well placed to focus on categories for which there is a limited local supply.

## **7.9 Market opportunities for Australian organics in Japan**

There are good prospects for a range of organic food products in Japan. Australia is very strong in beef and lamb, which suggests major growth opportunities for organic meat. There are also strong growth prospects for juice and drink products, especially fruit and vegetable-based drinks. Juice products with enhanced functionality are popular in Japan such as carrot or citrus-based drinks with natural additives, e.g. wheat-grass, guarana, ginseng, etc.

There is a major opportunity for carrots, asparagus, onions and cabbage, the limiting factor being the supply of organic versions of these products.

Potentially, there are also opportunities for organic fruit, particularly citrus, apples, pears and summer fruit. However, because of the Japanese requirement of fumigation, the export of many products to Japan is problematic. Price competitiveness is also an issue. Many products for which there is a local industry, e.g. citrus, carry a high tariff, which prices many products out of the market.

## 8. Singapore

### Key Organic Market Facts: Singapore

Population:	4.3 million
Consumer acceptance:	low
Organic market size:	US\$4.7 million
Market growth:	20%
% of total food and beverage market:	<1%
Access status:	No mandatory controls
Ratio domestic vs. imported product:	95% imported
Current Australian imports:	Cereals, animal products, beverages, spices, drinks/juices, processed products, fruit, nuts, wine.
Export opportunities:	Limited by market size. Opportunities for chilled and fresh products, e.g. milk, juice, dairy, perishable fruits.
Market outlook:	Fair

### 8.1 Market overview

The Singapore market has a population of 4.3 million people ethnically comprised of Chinese (76.7%), Malay (14%), Indian (7.9%) and others (1.4%). Singapore's history is that of a multicultural society, and the presence of a large expatriate population has also led to a diverse and rich variety of food types being available. Singaporeans are keen to experiment and are very open to new food ideas.

Singapore consumes less than 0.1% of the total global demand for organic food. Based on research conducted by this consultancy, Singapore consumers are extremely price conscious and less sensitive to chemicals in food products. Singaporeans place great faith in their government. If a food is available on the shelf, it is assumed that the government must have deemed it as being safe.

However, there is a small but growing market for organic products in Singapore, particularly amongst the more affluent and the Western and Japanese expatriate communities. In 2002, the Singapore market for organic products was valued at US\$4.7 million. Because Singapore is an island state/city, with almost no agriculture, most organics were imported with only a limited selection of organic vegetables supplied through domestic production (AgExporter, 2004). Global Agribusiness Information Network (GAIN, 2004) predicts demand for organic food and beverages will grow by an estimated 20% per year in line with historical annual growth rates for the category.

### 8.2 Consumer profile

The Singaporean consumer is one of the most affluent in the Asia Pacific region. The average disposable income in Singapore has now surpassed Australia and most other developed countries. A high percentage of Singapore's 4.3 million people are extremely wealthy and educated overseas, many in Australia. Despite the affluence and high standard of living, the Singaporean consumer is also a very thrifty and pragmatic shopper. They look for the best products at the best price and are highly price sensitive.

Singapore boasts a large expatriate community, many of whom have been long-time consumers of organic products. This group has largely supported the organic industry to date, and seeks out organic products from specialty retailers. However, this market is not expected to grow substantially unless the expatriate community expands significantly.

The real opportunity for growth in organic sales lies with Singapore local residents, who, based on their growing affluence, are emerging as potential customers for organic foods. Like most parts of the world there is a strong push toward healthier eating. However in Singapore, this is driven relentlessly by the government. Over time the Singaporean consumer has become far more knowledgeable and sophisticated. In particular, they are becoming more knowledgeable about the origin of products, the

varieties and nutritional value. Although origin labelling is not compulsory in Singapore, most supermarkets use country of origin as a selling and customer service feature. Singaporeans, on the whole, show an increasing preference towards consuming more vegetables and eating less meat. This is in line with the government promotion that places emphasis on a healthy lifestyle, which encompasses eating the right food and exercising regularly.

As in other parts of the world, organic products command significant premium prices in this market, ranging from 100 to 300% over conventional equivalents. In the main, today's average Singaporean consumer is not willing to pay the substantial premium for organic products, and considers conventional fresh foods to be the nutritional equals of organics. This perception can be attributed to two key factors: lack of awareness and lack of government support for organic products.

### **Lack of awareness**

As Singapore is an island state with no agricultural history, it tends not to have great environmental consciousness nor have strong emotional links with the land. A consequence of this is that despite growing consumer awareness of healthy eating, it is fair to say that in comparison to some Western nations, Singaporeans are not as advanced in terms of fighting consumer interest issues such as ethical consumption, GMOs, food safety, and animal liberation. Unlike the UK, the Singaporean consumer has total faith in their government to ensure all the food they buy is safe. They assume that if the product is on the shelf it must be safe to consume.

### **Lack of government support**

Singaporeans have a very trusting and sub-servient attitude to government on all matters. The Agricultural and Veterinarian Authority (AVA) manages food regulation in Singapore and certifies the safety of food. For the majority of consumers, if the AVA certifies conventional food as safe, then there is no advantage in paying a premium for organics. This situation is compounded by the fact that Singapore's Health Promotion Board (HPB) has pushed the view that organic food offers no nutritional advantages over conventional equivalents.

*“Despite various claims made by food producers, foods grown organically are no better or worse to our health as compared to conventionally grown products. If you 'go organic' because you are worried about the safety issue of food, fear not. The AVA conducts inspections to ensure that both imported and locally produced fruit and vegetables are safe for consumption” (HPB, 2005).*

Despite this, there is a small and growing segment of the population, mainly from the more affluent and sophisticated upper classes, who are purchasing organics for a variety of reasons. GAIN (2004) cites healthy lifestyle and medical reasons as key drivers for this segment. Organics are at times purchased to combat allergies. People recovering from major illnesses such as cancer are also more inclined to purchase organics. An example of the medicinal link was the momentary increase in demand for organics following the Severe Acute Respiratory Syndrome (SARS) outbreak. Organic skin care products are also popular in this market.

## **8.3 Retail market structure**

As the organic market in Singapore is still a niche industry and has not reached mainstream status, specialty stores are the main distribution channel. They often carry a wide range of organic products and are generally located in areas where large numbers of expatriates live. These stores usually buy in sizeable quantities, dividing products into smaller packages before putting them on shelves (Figure 12).

**Figure 12: Organic packaging in Singapore**



Source: David McKinna et al Pty Ltd, 2005, Photo Library

At present, the majority of Singaporean super/hypermarkets carry only a limited range of organic products. A modest increase in the organic product offering has been witnessed in recent years as demand increases, but specialty stores are still the main outlet for organic food and drinks.

NTUC Fairprice and Cold Storage are the two largest supermarket chain outlets for imported food and beverages in Singapore. The top 8 retail chains in the market are detailed in Table 9.

**Table 9: Singaporean retail chains**

Supermarket	Number of Outlets
NTUC Fairprice	76
Cold Storage	35
Shop and Save	36
Giant Hypermarts	5
Marketplace	9
Daimaru	2
Carrefour	2
Isetan	1

Cold storage is used more up-market stores with a large fresh food offering which tends to serve affluent Singaporeans and expatriates. It also has the Marketplace stores, which carry a large fresh and gourmet food range including an extended organic food offering.

NTUC tends to serve the middle to lower, more price-sensitive market segment, although it does have a number of upscale stores servicing the more affluent shopper. It has a small but expanding organic food offering.

In volume terms, wet markets still represent the bulk of sales of conventional fresh foods such as fruit, vegetables, seafood, rice, eggs, chicken and pork, with organics showing a minimal presence. The origin of foods in wet markets is unknown.

Apart from wet markets there are traditional Chinese grocery and provision stores that sell dried product, herbs, spices and a limited range of vegetables. They are well stocked in traditional medicines and nutraceuticals.

The food service industry for organics in Singapore is marginal to non-existent. Almost all local restaurants have largely bypassed organic menus, with the exception of a limited number of speciality organic vegetarian restaurants.

**8.4 Market access, certification and labelling regulations**

Singapore is an extremely free market, with no duties or tariffs and reasonably relaxed bio-security regulations because it has virtually no local agriculture. Singapore does not have a national organic certification scheme or regulations and the Singapore government has no immediate plans to set up such a scheme. The AVA manages food regulation in Singapore. The Food Control Department of the Ministry of Environment and the Consumers Association of Singapore monitor the labelling on organic foods. Organic products that make health claims are categorised as either pharmaceutical or foodstuffs. Products in the pharmaceutical category are strictly regulated in terms of sale and promotion. Health products that are not classified as pharmaceuticals are not permitted to include health claims on packaging.

Organic food and beverages in this market are typically labelled as such, however, this labelling is not mandatory. Often the label of the certifying group is displayed, e.g. NOP, EU and other certification labelling schemes.

**8.5 Assessment of Singapore’s domestic organic industry**

As has been mentioned previously, because Singapore is an island state/city with almost no agriculture, most organics are imported with only a limited selection of organic vegetables supplied through domestic production.

**8.6 Australian exports to Singapore**

Australia exports a variety of organic products to this market albeit in small quantities (Table 10). We have been told that there has been a significant number of recent consignments of Australian organic mixed fruit and vegetables to this market, however, these have generally only been in 200-500 kg lots. Cereals are the largest export category in terms of standardised net mass.

**Table 10: Australian organic exports to Singapore**

Product Category	Standardised net mass (kg or l)*
Animal products	3,125
Beverage and spices	3,831
Cereals	28,123
Drinks and juices	162
Fruit and nuts	4,440
Meat products	-
Other	4
Processed products	7,995
Sugar	-
Vegetables	8,041
Wine	360
<b>TOTAL</b>	<b>56,081</b>

Source: DAFF, 2004

\*Dollar values not available

**8.7 Australia’s competitiveness in the Singapore market**

Traditionally Singapore has been a large market for Australia but in recent years Australia’s position has declined substantially. Singaporeans are extremely price sensitive and as such have embraced cheaper product from low-cost producers such as South Africa, Chile, Thailand, Indonesia, China and Malaysia.



As has been mentioned, the Singapore market is a classic example of a *laissez faire* market in that it is openly competitive with product from all over the world available. Singapore has minimal tariffs or duties on imports. While Australia is a dominant force in the organic fresh produce category, other major exporters are seeking to make inroads in this market due to the low tariffs and growing affluence. New Zealand has a strong presence in organic fresh produce and the US has captured most other organic food product sales. Thailand and Malaysia are also emerging as alternative sources for organics as a result of their close proximity to Singapore (GAIN, 2004).

### **8.8 Market opportunities for Australian organics in Singapore**

Market opportunities in Singapore for Australian organic food exist but they are limited. Singapore is a relatively small market with zero market growth. , it is extremely price sensitive and consumers will not pay more than they need to. A market research study conducted by David McKinna *et al* Pty Ltd found that in recent times, Singapore consumers are showing greater interest in healthier food and that a growing percentage of them are interested in organics. However, those who expressed interest indicated that they would be prepared to pay an additional 10% over the regular price for an organic version. Given Australia's declining cost competitiveness, this greatly limits the opportunities. Having said this, there are still significant opportunities. Because of Singapore's close proximity and availability of freight, Australia can be competitive in some chilled and fresh products including juice, dairy products, seafood and perishable fruits. It is cost effective to also freight many high-value short shelf life products, e.g. milk, yoghurt and other dairy products.

## 9. Hong Kong

### Key Organic Market Facts: Hong Kong

Population:	6.8 million
Consumer acceptance:	Low
Organic market size:	US\$50 million
Market growth:	20-25%
% of total food and beverage market:	<1%
Access status:	No mandatory controls
Ratio domestic vs. imported product:	95% imported
Current Australian imports:	Cereals, animal products, meat, drinks/juices, processed products, vegetables, fruit, nuts, wine.
Export opportunities:	Limited by market size. Fresh produce, cereals, drinks and juice, wine, red meat.
Market outlook:	Fair

### 9.1 Market overview

The population of Hong Kong is around 6.8 million, the majority of which are Cantonese with a minority of around 5% expatriates.

Organic food and beverage products are a major trend in Hong Kong grocery shopping. While the Hong Kong government keeps no statistics on organics, the Hong Kong Trade Development Council (2004) observed that sales of organic foods in this market have been growing at an annual rate of 20-25% since the 1990s, although this is from a small base. DAFF (2004) estimates the value of the Hong Kong market to be valued at US\$45-50 million in 2000.

### 9.2 Consumer profile

The Hong Kong market is polarised between the very affluent and the very poor, but there is a growing middle class. There is also a large and affluent expatriate market in Hong Kong. As such, there is a significant segment of the population who are highly affluent and very brand conscious and conspicuous consumers. The Hong Kong consumer is known for being impulsive, yet rational. They are influenced by price, but in the final analysis driven by the value for money equation, which is usually a 'quality versus price' trade off.

There is a strong cultural and spiritual heritage that values highly any foodstuffs, tonics or medicaments that will add to longevity, beauty and general wellbeing. This cultural pull is so strong that the affluent will spend what seems to Australians to be incredible sums of money on premium foodstuffs, traditional remedies and foods with deemed health benefits.

This focus on health has sparked growing popularity of organic products within this market. Hong Kong has experienced a number of food safety crises including contaminated fish, Listeria in ice cream, bird flu (H5NI) and numerous cases of pesticide residues in vegetables (mostly from Chinese imports), which have tipped the cost-benefit ratio in favour of organics over conventional products. There is a great deal of scepticism about the safety of Chinese produce and, as over 90% of Hong Kong's vegetables are grown in China, there is much cause for concern. Deaths from chemical poisoning in Chinese produce are widely reported in Hong Kong. There are compelling reasons for those who can afford to, to buy organic produce from safe countries such as Australia.

Like other markets, the premium on organic products sold in Hong Kong is substantially higher than its conventional counterparts. However, as noted by GAIN (2004), the price discrepancy between conventional and organic foods has also narrowed over the years. Currently, organic products are priced generally 10% higher. Demand is strongest for fresh organic vegetables, however, a wide range of imported organic products are now available including cereal, flour, dried fruit, oils, seasonings, coffee, tea, soy-milk, juices, fruit, meat and various kinds of non-staples and snacks.

### 9.3 Retail market structure

In Hong Kong the food service market is larger than the retail market because of the popularity and affordability of eating out. In retail, wet markets and traditional Chinese grocery stores still dominate, although the modern western supermarkets are growing.

The food market has a large hotel, restaurant and institutional trade because of the volume of tourism and a prevailing culture of entertaining outside the home and hosting banquets in hotels for special occasions. It is estimated that 62% of all food expenditure in the Hong Kong area is consumed away from home. This culture derives from the small size of homes, limited kitchen facilities and a history of minimal refrigeration. The affordability of meals at the lower end of the market (e.g. noodle shops and tea houses) means eating out is a daily option for all socio-economic cohorts. Furthermore, eating out is the only way people socialise and congregate. The business lunch and corporate banquets are also an important cultural component of doing business. To date, organics have made little impact in the food service sector, although some niche organic restaurants do exist.

Organics are, however, having a growing presence in the retail sector through supermarkets. Over the last few years there has been a steady change away from consumers shopping in the traditional wet markets towards shopping in supermarkets. This is in some part due to hygiene concerns but largely to do with the competitive product offering carried by supermarkets compared to local stores. The supermarket sector is virtually a duopoly between the Wellcome and Park 'n Shop groups. It is estimated that supermarkets have 44% of all total retail food sales and the presence of organic food and drinks in these stores has been growing steadily. Park 'n Shop, the bigger of the two chains, has set up a separate organic food section in many of their stores. Another smaller Hong Kong retailer, Geant Supermarket, has increased its range of organic items from 200 in 2001 to over 2,000 items in 2004. Figure 13 provides an example of how organic fresh produce is presented in Hong Kong supermarkets.

**Figure 13: Organic fresh produce in Hong Kong**



Source: David McKinna et al Pty Ltd, 2005, Photo Library

There is also a movement in the supermarket sector towards larger, more sophisticated formats including hypermarkets and more boutique, high-end store formats selling imported foods, pre-prepared meals (e.g. City Super), etc. The impact of organics has been greater in these smaller niche retail chains, which target the more affluent Western and Japanese expatriate communities.

There is a strong presence of organic vegetables from China in the Hong Kong wholesale market which has a program to promote organic vegetables.

#### 9.4 Market access, certification and labelling requirements

The Hong Kong market is heavily reliant on imports for food. It is estimated that 95% of all fruit and vegetables are imported. Hong Kong is a very open market with zero tariffs and limited quarantine restrictions.

Hong Kong has three sets of organic standards developed by the Hong Kong Agriculture, Fisheries and Conservation Department, the Hong Kong Organic Farming Association and the Hong Kong Organic Certification Centre (formerly the Garden Farm). With support funding from the Agricultural Development Fund of the Vegetable Marketing Organisation, the Hong Kong Organic Resource Centre was established to set up a local organic standard and certification system by 2005 to promote the local organic movement. This was done in an attempt to help the small local farming industry compete with the onslaught of cheap products from China.

Currently there are no regulations on the importation of organic products other than that they must meet standard food laws. Importers do, however, request certification from the exporting country in most instances. Hong Kong citizens are understandably sceptical about the validity of organic documentation on product of Chinese origin.

Hong Kong is also the gateway for the 'Grey Channel' into China whereby illegal product and those with high customs duties move into the country under the watching eye of Chinese officials who financially gain from the practice.

#### 9.5 Assessment of Hong Kong domestic organic industry

Hong Kong has limited agricultural land and production systems and as such most food and beverages are imported. Due to the growing demand for organic products, some local production has commenced and is mainly focused on organic fruit and vegetables such as lettuce, melon, beans and carrots. The wholesale market authority has organised and funded an organic vegetable promotion (Figure 14). As mentioned above, the catalyst for the foray into organic product was simply a means for local farmers to compete with the flood of Chinese product. The government assists farmers by providing training, supply chain facilitation and marketing. Initially, supply was unstable and production was insignificant. However, in recent years with the support of government, local supply has become more stable, albeit a minnow in the total market.

**Figure 14: Marketing the local Hong Kong organic offering**



Source: David McKinna et al Pty Ltd, 2005, Photo Library

## 9.6 Australian exports to Hong Kong

Australian exports to the Hong Kong market are relatively limited, Hong Kong being ranked 17<sup>th</sup> on Australia's top 20 export list in terms of net mass. Cereals, animal products and beverages are the largest export categories (Table 11).

**Table 11: Australian organic exports to Hong Kong**

<b>Product Category</b>	<b>Standardised net mass (kg or l)</b>
Animal products	3,178
Beverage and spices	-
Cereals	5,415
Drinks and juices	3,954
Fruit and nuts	79
Meat products	-
Other	-
Processed products	1,393
Sugar	-
Vegetables	-
Wine	72
<b>TOTAL</b>	<b>14,091</b>

Source: DAFF, 2004

\*Dollar values not available

## 9.7 Australia's competitiveness in the Hong Kong market

As for Singapore, Australia's competitiveness in Hong Kong is declining in the face of strong competition from lower cost countries including China, South Africa and South America. Australia's market stance has substantially diminished in the past decade. Notwithstanding this, there are still limited opportunities.

## 9.8 Market opportunities for Australian organics in Hong Kong

The market opportunities for Australian organic products are limited because of the size of the market and the extensive competition. Best prospects are in certain fruits (citrus, apple and pear, melon, stone fruit, grapes) and vegetables (carrots, potatoes, onions, etc.) although price could be a limiting factor here. There will be growth opportunities for cereal products, drinks and juice, wine and red meat.

## 10. China

### Key Organic Market Facts: China

Population:	1.3 billion
Consumer acceptance:	Low
Organic market size:	US\$150 million
Market growth:	N/A
% of total food and beverage market:	<1%
Access status:	No mandatory controls on organics at this stage.
Ratio domestic vs. imported product:	Predominantly domestic supply
Current Australian imports:	Sugar
Export opportunities:	Long-term potential, trade barriers problematic. Unlikely to be competitive in fresh produce. Opportunities in processed and frozen foods, dairy, cereals, wine, and infant and baby formula. Processing inputs such as sugar, cereals.
Market outlook:	Short term: poor Long term: good

### 10.1 Market overview

China is the world's largest economy and has a population of 1.3 billion. Since the Reform and Opening Up policy began in 1978, China has sustained rapid economic growth. The policy has also led to unprecedented growth in the varieties of food available. In 2003, total consumer spending in China was US\$1.1 trillion, of which roughly 41% was spent on food (Deloitte, 2005). While the local market for organic products in China is relatively small, China has a very high potential for growth given the significant size of the population, the growing percentage of which have a growing disposable income.

Willer and Yussefi (2004) report that demand for organic products is currently out-stripping supply in China's urban centres. The International Fund for Agricultural Development (IFAD) (2005) estimates the domestic market in China for organic food and beverage products to be currently valued at US\$107 million wholesale or US\$150 million retail. Organics are only a minor component of the total food industry and organic produce is estimated to be less than 0.1% of the total food in the domestic market. In urban areas this market share is estimated to be considerably higher but still not more than 1%.

However, like Japan, food is also sold under the 'Green Food' label, which is given to foods that are grown in a safe and ecologically sound manner. The retail sales of certified Green Foods make it one of the largest such sectors in any country of the world, nearing the retail value of the US\$12 billion organic market. Growth of the 'organic' sector, particularly in urban areas, where higher levels of organic awareness and affluence increase demand, is constrained by limited product range, inconsistent supply, significantly higher price premiums in some categories and low levels of consumer understanding of organics.

### 10.2 Consumer profile

The Chinese consumer market offers great opportunity, accounting for one-quarter of the global population, and consumer spending growing at 10% per annum. Even a very small niche market segment in China constitutes large volumes. The market is polarised between the very poor and the growing number who are affluent and tends to be concentrated in the coastal cities of Guangzhou, Shenzhen, Shanghai and Beijing. For the Chinese, consumption is a novel pleasure; having had few choices for four decades they are now playing catch-up in a big way.

Deloitte (2005) is predicting that the period 2005-07 could be an important turning point for China's consumer market. Factors such as increased investment by foreign retailers, efforts by the Chinese government to shift the focus of economic growth toward consumer spending, the reform of China's banking system, and increasing the market for consumer credit may have the effect of accelerating the growth of consumer spending. As China's economy flourishes, the number and variety of consumer products available increases. The Chinese consumer, as a result, is becoming more sophisticated and seeks out the best quality products and shopping experiences.

As China's economy has grown, food safety and quality problems have also increased, in part due to misuse of chemical inputs in food production. The current domestic food security situation in China is unsatisfactory to say the least. Reports of high-level chemical residues are a daily occurrence with new types of food safety problems arising all the time. During a study tour in China by this consultancy in early 2005, several people were reported dead and many poisoned due to high chemical residue levels in leafy vegetables. This type of incident appears to be a regular occurrence. The Chinese government has reported that consumer confidence in food safety is now below 50%. The spate of food contamination incidents, which have been occurring across the country, have increased awareness of the benefits of organically grown products among a large number of consumers.

Over thousands of years, the Chinese have developed a highly sophisticated understanding of the medicinal and health benefits of foods. As such, there is a strong cultural heritage that values highly any foodstuffs, tonics or medicaments that will add to longevity and general well-being. In Chinese culture, virtually every food has nutritional functionality and spiritual significance.

Given China's tarnished track record in food safety and the strong cultural pull towards healthy eating, a growing number of consumers are now willing to pay a premium for organic foods and beverages. Premiums on organics in this market are highly disparate, in some cases reaching exorbitant levels of as much as 300 – 400% above their conventional counterparts. The IFAD (2005) suggests, however, that in most cases, premium levels range from 10-50% with 20-30% as an approximate average. The big issue for consumers in this market is determining whether certification is indeed authentic. Because of China's one child policy, parents go to great lengths to give their children the best of everything. This is a key driver for organics and particularly infant food.

Despite China's impressive economic growth it still has a very large underclass who live in extreme poverty. Best market prospects for organic food are in coastal cities such as Shenzhen, Shanghai, Guangzhou and Beijing where there is a large concentration of affluent consumers and greater level of sophistication and westernisation.

### **10.3 Retail market structure**

As China grows economically and becomes increasingly westernised, the way in which the Chinese consumer shops is also changing. In the early 1990s, the supermarket revolution arrived in China and the proliferation of supermarket chains across the country has been witnessed at an unprecedented rate. China has the fastest growing supermarket sector in the world. This growth has been driven partly by foreign investment and partly by investments made by the Chinese government in the sector. The government has instigated policies that promote the conversion of traditional wet markets into supermarkets (IFAD, 2005) in a drive to modernise the nation. The largest domestic retail chain in China is Lianhua. It operates 2,700 hypermarkets, supermarkets, and convenience stores in 16 Chinese provinces.

Supermarkets sell, domestically, twice the quantity of fresh fruits and vegetables that are exported from China. As is the trend globally in supermarket strategy, Chinese supermarket chains are changing their procurement systems from the traditional wholesale system toward use of large, centralised, distribution centres, specialised/dedicated wholesalers operating preferred supplier systems and private standards for quality and food safety (IFAD, 2005).

## 10.4 Market access, certification and labelling requirements

Many of Australia's food products don't have legal market access to China. However, this doesn't stop a large amount of product entering through the 'Grey Channel' via Hong Kong. Product is either smuggled in via re-packaging or hiding among other shipments and with the cooperation of law enforcement officials who can be persuaded to let product through. The Free Trade Agreement between China and Australia would remove this barrier. Only high value products can justify the cost and effort of going through the 'Grey Channel'.

**Figure 15: Green food label**



In 1991 the Chinese government introduced the 'Green Food' label (figure 15) and this initiative was the first certification program of its kind in China. Some grades of 'Green Foods' are somewhat comparable to organic products with the biggest difference being that the 'Green Food' standards are focused on the final product, rather than the organic farming process itself. This makes 'Green Foods' inappropriate for export under an organic classification. However, the introduction of the 'Green Foods' program has gone a long way toward improving food safety in the country.

The 'Green Foods' program to date has been very successful. There are currently 2,047 certified 'Green Food' enterprises producing more than 4,000 products.

Since this time, further developments in terms of regulation and certification of the industry have taken place. There are currently four Chinese food standards:

- The basic ("non-poisonous") standard
- Green Foods A standard
- Green Foods AA standard
- Organic standard.

The government is currently looking to consolidate these standards in line with its focus on increasing exports of organic products and improving the credibility of domestic organic produce. While there are currently no mandatory controls over imported organic products, this may change under the new regime. AQIS is currently working with the Chinese government with the hope of securing an equivalency agreement with the new Chinese standard should mandatory controls be implemented.

**Figure 16: OFDC logo**



A special Organic Food Development Centre (OFDC) logo (Figure 16) is used to certify the quality of organic products in China. All certificate holders who have products up to the *OFDC Organic Certification Standards* can apply for and will be granted the right to use the logo after being approved by OFDC Certification Committee (OFDC, 2005). However, anecdotally it is suggested that essentially licenses are granted on the basis of bribes or favours for government officials.

## 10.5 Assessment of China's domestic organic industry

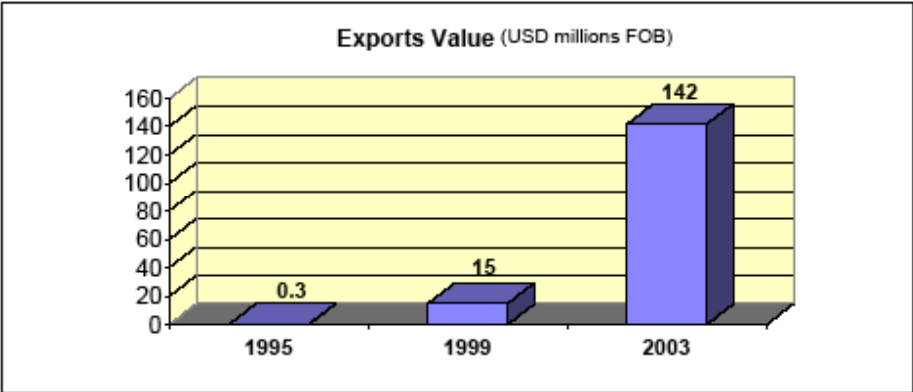
In China, where farmers account for more than 70% of the population of 1.3 billion, organic growers are only a tiny minority. However, as a result of the buoyant international market for organic food and beverages and the expectation of increased revenues, a program of systematic organic acreage conversion has been witnessed throughout China. In 2004, China was estimated to have 301,295



hectares of certifiable organic land (Willer and Yussefi, 2004). Because of the cost of chemicals, much of this land has always been farmed using organic practices anyway.

According to the IFAD (2005) to date, more than 200 kinds of organic agricultural products have been certified in China. Most certified products are export-oriented with primary markets in North America, Japan and Europe. In addition, relatively affluent Asian nations such as South Korea, Singapore and Malaysia are also potentially organic export markets for Chinese product, but these are still comparatively small. As shown in Figure 17 the value of Chinese organic exports has ballooned from less than US\$1 million in 1995 to approximately US\$142 million in 2003. IFAD (2005) estimates organic exports for 2004 to approach US\$200 million.

**Figure 17: China’s certified agricultural exports**



Source: IFAD, 2005

As the majority of Chinese farmers are relatively poor, organic farming systems are extremely appealing as they forfeit the cost of expensive chemicals used in intensive farming and increase returns through premium pricing. The Chinese government, which is highly focused on improving living standards of the largely impoverished rural workforce, is supportive of organic farming as a way of lowering input costs while tapping high-value markets (Nakanishi, 2003). In addition, a study by IFAD (2005) found that organic agriculture is a viable approach that can be suitable for small landholders. It can be particularly useful in the more difficult environments, where resources are scarce and cultivation is problematic. It also potentially serves to reduce risk by encouraging localised input production, fostering soil and water conservation and encouraging the diversification of production.

It is important to note that the farming industry in China is evolving rapidly into more sophisticated practices. The next generation of Chinese farmers are university graduates and due to a combination of foreign joint ventures and community co-operatives, small land holdings are becoming co-ordinated broad acre or volume producers with significant economies of scale. Government assistance, including investment in some rural areas, means farmers are beginning to have access to state of the art equipment and machinery.

**10.6 Australian exports to China**

According to DAFF (2004), in 2003 Australia was only officially exporting organic sugar to China (Table 12).

**Table 12: Australian organic exports to China**

<b>Product Category</b>	<b>Standardised net mass (kg or l)</b>
Animal products	-
Beverage and spices	-
Cereals	-
Drinks and juices	-
Fruit and nuts	-
Meat products	-
Other	-
Processed products	-
Sugar	31,600
Vegetables	-
Wine	-
<b>TOTAL</b>	<b>31,600</b>

Source: DAFF, 2004

\*Dollar values not available

### **10.7 Australia's competitiveness in the Chinese market**

As Chinese supermarkets rapidly move towards a preference for large, centralised distribution centres and specialised/dedicated wholesalers operating preferred supplier systems, they may initially find the Chinese farmers lack critical mass and inconsistency of supply.

However, for most products that the Chinese can produce, Australia is not competitive mainly because of labour costs. China is a net exporter of many products and has taken market share from Australia in most of the Asian markets in which we used to compete. As a consequence, Australia can only compete in products that aren't available in China, being the Northern Hemisphere.

There are some seasonal opportunities in China for certain Australian fruit and vegetables.

### **10.8 Market prospects for Australian organics in China**

Without doubt, China offers excellent long-term potential for some categories of organic product. There is a large, growing affluent consumer segment, which can afford, and increasingly demands, organic foods and market access. It is unlikely that Australia can be competitive in most fruit and vegetables except for seasonal windows of opportunity. High prospect products include processed and frozen food, dairy products, cereals and wine. Infant formula and baby food is in strong demand as are organic skin care products.

## 11. South Korea

### Key Organic Market Facts: South Korea

Population:	48.4 million
Consumer acceptance:	High
Organic market size:	US\$300 million
Market growth:	30%
% of total food and beverage market:	N/A
Access status:	NAQS and KFDA have mandatory controls – Market access only possible for processed products.
Ratio domestic vs. imported product:	Fresh produce = domestic/processed = imports
Current Australian imports:	Animal products.
Export opportunities:	Limited to processed foods by trade barriers. Opportunities for variety of processed products, e.g. baby foods, noodles, etc.
Market outlook:	Fair

### 11.1 Market overview

With a largely homogeneous population of 48.4 million, South Korea today is a fully-functioning, modern and rapidly developing democracy. Following the split from North Korea in 1953, South Korea witnessed rapid economic growth with per capita income rising to roughly 14 times the level of North Korea.

While the total market for organic food and beverages is relatively small, the industry has experienced strong growth in the past five years predominantly for fresh produce, field crops and imported processed foods. The total retail market for 'environmentally friendly' agricultural products is currently valued at \$1 billion, of which products which meet the standard definition of 'organic' account for approximately 30%. The industry is expected to continue this pattern of expansion at a rate of 30% in the next few years (GAIN, 2005).

Compared to Japan, the range of organic products on offer in South Korea is more limited. The restrictive nature of South Korean certification laws seriously impedes market access for international suppliers of organic fresh produce and grains, leaving only the underdeveloped domestic industry to supply the market. Processed foods are governed by a different government body, and therefore have different regulations making market access easier for processed goods.

### 11.2 Consumer profile

Similarly to other countries with organic markets, South Korean consumers are primarily motivated by health concerns to purchase organic products over their conventional counterparts by health concerns. There is a segment of the South Korean market which perceives organics to be safer, healthier or better for the environment than conventional foods and are willing to pay a premium for them. As noted by GAIN (2005), a consumer survey conducted in 2004 found that 50% of South Korean consumers purchased organics because of concerns about health; 22% were concerned about food safety; 17% purchased based on a perception of superior taste/quality; and 5% were motivated by environmental concerns.

According to Landry Consulting (2004), South Korea has used more pesticide/chemical in the past 40 years than any other nation and has a usage rate 15 times that of the US. This high reliance on chemicals is a result of the fact that the average South Korean farm is very small relative to the population it supplies and there is a real need to improve yields. The significant and prolonged use of chemicals in local agriculture has had a devastating impact on the environment and the health of South Koreans. Cancer is the leading cause of death for adults in South Korea, with fatalities almost doubling over the last twenty years. Government and consumers alike are now seeing a link between the increase in cancer and the high usage of pesticides, creating a market environment where organic food and beverages are likely to show a massive increase in popularity.

Within South Korean culture, women within the 30–50 year-old age demographic are typically the primary purchasers of family groceries. South Korean women are characteristically protective of their children and this attribute has contributed to the strong sales of organic baby foods and children’s food products in this market.

In the case of imported organic products, a preference exists for US and EU imports. However, there is room in the market to introduce new products from an alternative supplier such as Australia, which currently has a limited market presence.

**11.3 Retail market structure**

In South Korea, organic products are found in five retail sectors: high-end department stores, hypermarkets, chain supermarkets, smaller retail outlets and wet markets. Of these, imported organic products are predominantly sold in major department stores, which rent out floor space to the importers/distributors for the sale of organic products. The Hyundai department store is one such example that has two separate organic areas. Country of origin labelling plays an important role in the marketing of imported organic products in this instance: one section stocks organic products from the EU while the other stocks organic products from the US. The Lotte department store also stocks organic products.

After department stores, specialty health food outlets are also important retail channels for organic products. The major retail grocery chains are currently stocking small amounts of organic products. There is a correlation between the size of the range and the affluence of the area surrounding the store location. As has been witnessed in other markets, product ranging for organics is expected to increase in supermarkets as the demand for organic products grows.

**11.4 Market access, certification and labelling requirements**

South Korea has a national organic certification program that is regulated by two different agencies. Certification, labelling and standards for fresh produce and grains are regulated by the Ministry of Agriculture (National Agricultural Products Quality Management Service, (NAQS)), and the equivalent standards for processed organic products are handled by the Korean Food and Drug Administration (KFDA).

The South Korean organic labelling system for fresh produce and grains is called ‘environmentally friendly’ and there are four types of organic seals (Figure 18). They are: organic (green), transitional (light green), no chemicals (blue), and low chemicals (orange).

**Figure 18: South Korean organic seals**



Currently, the regulations for fresh produce and grains make it extremely difficult for international companies to export such products to South Korea. Korean laws do not have any provision to recognise the standards of other countries, and the process of being accredited by the South Korean government is arduous and costly, and the end result is only valid for one year. We have been told that the South Korean agricultural industry is led by very strong industry groups which have put pressure on the South Korean government to seriously impede the ability of other nations to export

raw organic products to South Korea. While this serves to protect local industry, it seriously disadvantages South Korean consumers as the domestic industry is very limited in its scope and is unable to supply enough fresh product to meet demand or provide the range of fruit and vegetables which could be made available by imports.

The regulations for processed organic products handled by the KFDA do, however, allow for recognition of other national standards and, as such, the vast majority of organic products imported by South Korea are processed. All shipments of processed organic products must be accompanied by an original Transaction Certificate, which must be shipment specific and include details of the exporting country’s certifying agency.

**11.5 Assessment of South Korea’s domestic organic industry**

South Korea has 32,000 ‘organic’ and ‘environmentally friendly’ certified farmers, 2,000 of which are purely organic (50% are rice producers and 50% are greenhouse vegetable farms). Despite the government’s reluctance to allow imports of fresh produce into the country, organic production only accounts for 0.02% of total local ‘organic’ production and 2.5% is ‘environmentally friendly’ (Landry Consulting, 2004).

The South Korean government has set a goal of converting to 100% organic/environmentally friendly production nationwide to counteract the environmental and health problems caused by South Korea’s agricultural chemical usage. In order to achieve this, the Korean government is subsidising up to 10% of total agricultural production until the year 2010. The support is provided on both a federal and local level and assistance ranges from subsidies for machinery and production to low interest loans.

The local capability for processed organic products is limited with only four certified processed organic products produced in South Korea: kale extracts, kimchee, green tea and vegetable extract. As such, the government allows for the importation of processed products.

**11.6 Australian exports to South Korea**

As a result of the difficulties associated with exporting fresh product and grains to the South Korean market, exports from Australia are very limited with only animal products being recorded in the latest trade data (Table 13). We are told that Australia has begun to export significant quantities of baby food to this market.

**Table 13: Australian organic exports to South Korea**

Product Category	Standardised net mass (kg or 1)
Animal products	960
Beverage and spices	-
Cereals	-
Drinks and juices	-
Fruit and nuts	-
Meat products	-
Other	-
Processed products	-
Sugar	-
Vegetables	-
Wine	-
<b>TOTAL</b>	<b>960</b>

Source: DAFF, 2004

\*Dollar values not available

### **11.7 Australia's competitiveness in the South Korean market**

Australia's ability to compete in this market is limited by the current South Korean regulations on organic certification. While other key producers such as the EU, the US and China are also blocked by this legislation, countries with a well-developed organic processing capability such as the US and EU have an obvious advantage.

Australia has a significant opportunity to increase exports to this market, particularly for processed products such as baby food, confectionery, juices, dried fruit, cereals and dairy products. This is due to the limited range of products available and increasing consumer demand, which is fuelled by increasing awareness and government support for organics.

However, another issue limiting Australia's ability to succeed in the South Korean market is the underdeveloped supply chain. According to GAIN (2005) there are only four major organic importers/distributors supplying the South Korean market. This limited supply chain is constraining growth in the market and more channels are needed if a wider variety and increased supply of product is to be introduced.

### **11.8 Market prospects for Australian organic products in South Korea**

Market prospects for Australian organic products in South Korea are judged to be limited. Without doubt, as the economy and South Korea continue to grow there will be an increasing segment of affluent consumers, who will demand organic products. This is particularly so given the high incidence of cancer due to overuse of toxic chemicals on farms.

South Korea is likely to be self-sufficient in most vegetable products. Furthermore, at the present time most fresh organic food products don't have market access. There is likely to be a growing market for organic beef and lamb leveraged off the major market for the conventional equivalent.

Market access for food products is very restricted which will block the majority of organic products. There is some talk of an FTA between South Korea and Australia but in our view this is a long way off.

## 12. Taiwan

### Key Organic Market Facts: Taiwan

Population:	22 million
Consumer acceptance:	Low
Organic market size:	US\$44.5 million
Market growth:	20%
% of total food and beverage market:	<1%
Access status:	No mandatory controls on organics.
Ratio domestic vs. imported product:	N/A
Current Australian imports:	Cereals, meat, processed products.
Export opportunities:	Cereals, meat, processed products including infant and children's foods, fruit and vegetable juices, and processed cereals, e.g. noodles.
Market outlook:	Fair

### 12.1 Market overview

The land mass of Taiwan is a third the size of Tasmania and yet has a population of 22 million comprised of Taiwanese (including Hakka) 84%, mainland Chinese 14%, and other indigenous minority groups 2%. Taiwan has a dynamic capitalist economy with a Gross Domestic Product (GDP) of US\$12,700 per capita. The country has a substantial trade surplus and its foreign reserves are the world's third largest.

Taiwan is an interesting market. While it is ethnically Chinese, it is significantly different from mainland China in terms of lifestyle, attitudes, culture and to some extent eating style. Taiwan was occupied by Japan for 50 years until 1949 and the Japanese influence is apparent.

Comparatively, Taiwan has been slow to join the global organic movement. Organic agriculture in Taiwan only commenced in Taiwan in the late 1980s and the Taiwan government did not establish certified organic farming projects until 1995. Certified organic land in Taiwan accounts for less than 1% of the total agriculture acreage which is predominantly devoted to organic rice with some organic fruit and vegetable production as well (Forum of Organic Agriculture, 2005). As such, Taiwan is largely reliant on imported organic products and the variety of products available is limited. It would be fair to say that the organic movement in Taiwan is in an embryonic state.

However, despite its slow start, consumer demand for organic products in Taiwan is increasing with a 75% increase in the retail value of the market in the four years from 1999–2003. The Taiwan government estimates that the organic market was valued at approximately US\$44.5 million in 2003 compared with 23.7 million in 1999 (Phipps, 2005).

### 12.2 Consumer profile

The Taiwanese are renowned for being extremely thrifty shoppers and the propensity for food preparation in the home is greater than in other parts of Asia.

Western food is widely available in Taiwan but Chinese and Japanese cultures are most evident in food styles. In Chinese cuisine, Shanghai and Cantonese styles are the most popular. It is claimed that ancestrally and culturally the Taiwanese have more in common with southern Chinese however the Japanese influence from 50 years of pre-war occupation also has lingering impact on the cuisine.

Traditional Taiwanese cuisine is generally casual and simply prepared. Barbequed street snacks and soup-based noodles are popular, with beef noodles in fact being more or less the national dish.

According to a consumer survey, the average Taiwanese organic consumer is affluent and aged between 31 and 40. The price premium that organics attract (for both domestically produced and imported product) has been a major constraint to the success of organics in this market. Organic products are 20–50% more expensive than their conventional counterparts.

Compounding this is the fact that misleading claims and mislabelling of conventional products as organic is rife and has dampened consumer confidence. Despite the establishment of five non-government organic certification groups, there have been a number of high profile cases involving fraud. A local consumer watchdog group tested 17 samples of organic vegetables in the marketplace and the results found chemical residues in 50% (Phipps, 2005).

In response, the Hualien County government has established its own government-regulated organic program and is assisting farmers to convert through funding and education programs.

### 12.3 Retail market structure

Due to the fact that markets for organic products have only just begun to develop, organic products were traditionally sold in specialty shops for consumption by consumers with certain health needs.

However, in recent years, a number of Taiwan retailers have been quick to capitalise on the sudden growth in demand for organic products by Taiwanese consumers and there are a large number of organic food stores opening up all over the country. The market leader is Kang Ti, which was first established in Canada and now has 105 stores in Taiwan. However, the Uni-President Group's Santa Cruz, Cotton Fields, Green Village and Organic Garden are also strong in the market. Santa Cruz is reported to be focusing on expansion with the goal of increasing its current 10 locations to 100 by 2008 through franchises. Examples of in-store presentation of organics are provided in Figure 19.

**Figure 19: Dedicated organic section Taiwan**



*Source: David McKinna et al Pty Ltd, 2005*

Direct marketing has also proved to be a successful distribution outlet for organic products. In its efforts to promote the domestic organic industry, the Hualien County government has set up a website to help local farmers distribute their products and ensure demand for product. The initiative, which went online in 2004, has been a great success with hundreds of thousands of customers utilising the service to purchase organic produce. It is reported that in the week prior to the 2005 Lunar New Year, 800,000 people purchased produce cultivated by Hualien's organic farmers (Phipps, 2005).



Key organic products doing well in this market include:

- **Unprocessed foods:** grains, beans, lentils and tree nuts.
- **Processed foods:** dried fruit, noodles, pastas and canned soups. Seasonings such as olive oil, sunflower seed oil, sesame oil, soy sauce and miso are also in demand.
- **Beverages:** herb teas, apple juice, vegetable juices and low-salt tomato juice. Wheat grass powder and fibre powder are also big sales items.

#### 12.4 Market access, certification and labelling

While the Taiwan Council of Agriculture (COA) has established standards for the certification of domestically produced organic products and a domestic labelling system, there are currently no mandatory import regulations specifically governing organic foods. All imported organic foods are subject to the same import regulations as conventional foods. Fresh vegetables and fruits must meet Taiwan's phytosanitary requirements and processed foods must meet labelling and food additive requirements.

#### 12.5 Assessment of Taiwan's domestic organic industry

As mentioned previously, Taiwan's first certified organic farming programs were established in 1995 by the Taiwan Provincial Department of Agriculture and Forests (now the COA).

However, there has been very little incentive for Taiwanese farmers to convert to organic systems as a result of the underdeveloped domestic retail market for organic products. Farmers cannot justify the cost of conversion and levels of product wastage at the hands of insects, etc., which is reported to be significant in the region.

Lack of clarity from the Taiwanese authorities on what constitutes an organic product and high levels of bureaucracy have also been reported as constraints to the domestic industry.

In addition, industrial pollution, especially on the west coast, has also hampered efforts to convert to organic. Much of Taiwan has faced serious land problems with ground-water pollution, particularly lead contamination.

In 2003, the total area of land devoted to organic agriculture was 1,092 hectares. This land is predominantly focused on rice and vegetable production.

#### 12.6 Australian exports to Taiwan

Australian exports to this market are limited and are focused on cereals, meat and processed products.

**Table 13: Australian organic exports to Taiwan**

Product Category	Standardised net mass (kg or 1)
Animal products	
Beverage and spices	
Cereals	17,125
Drinks and juices	
Fruit and nuts	
Meat products	497
Other	
Processed products	4,740
Sugar	
Vegetables	
Wine	
<b>TOTAL</b>	<b>22,362</b>

Source: DAFF, 2004

\*Dollar values not available

## 12.7 Australia's competitiveness in the Taiwan market

In 2000, 90% of imported organic products to the Taiwan market were sourced from the US. As the industry begins to cement itself and consumer demand for organic products increases, the opportunities for Australia to supply the market and increase its market share appear to be significant. It would appear that it would be a good opportunity for Australia to enter this emerging market now in order to establish itself in the long-term.

## 13. Other Markets

### 13.1 New Zealand

With a population of 4,035,461, New Zealand is a relatively small market. The New Zealand organic industry is largely export focused, with a lesser percentage of local production being used to service the domestic market. However, strong growth in the domestic market has been apparent with growth of the industry recorded at around 50% per year from 2000-2002. In 2002, the domestic market for organic products was valued at US\$38.5 million.

Willer and Yussefi (2004) estimate New Zealand to have approximately 46,000 hectares of certified organic land. Recognising the export potential for organic products in light of strong global demand, the New Zealand government has shown support for developing the local organic industry.

New Zealand is a key player in the global organic industry and produces a variety of products including dairy, meat, eggs, honey, edible oils (including flaxseed oil, avocado oil, olive oil), processed foods (including baby food products) and processed vegetables.

Despite the fact that the New Zealand organic market is only minor in the context of the greater global market, New Zealand remains a key export destination for Australian organic products accounting for 10.21% of the total volume of Australia's exports. This is largely due to the fact that Australia has good market access to New Zealand and the fact that it is considered by many to be an extension of the Australian domestic market. A breakdown of Australian exports to this market is provided in the table below.

**Table 14: Australian organic exports to the New Zealand**

Product Category	Standardised net mass (kg or l)*
Animal products	21,168
Beverage and spices	45,588
Cereals	131,148
Drinks and juices	34,656
Fruit and nuts	2,686
Meat products	-
Other	1,250
Processed products	178,448
Sugar	51
Vegetables	1,148
Wine	1,152
<b>TOTAL</b>	<b>417,295</b>

Source: DAFF, 2004

\*Dollar values not available

## 13.2 Malaysia

With a population of 23.9 million, Malaysia is a relatively large and ethnically diverse market which includes Malay 50.4%, Chinese 23.7%, Indigenous 11%, Indian 7.1%.

The organic market in Malaysia is expanding at a similar rate to other Southeast Asian markets covered in this report with consumption growing at around 20% per annum. This growth is, however, from a very small base and organics are yet to move into the mainstream in Malaysia. Around 95% of organic food and beverage products are imported into Malaysia and the total value of these imports is around US\$4 million.

Demand for organic products in this market is driven by increasing public awareness of the benefits of organics and concern about chemicals in foods. Price is a strong barrier to consumers switching from conventional to organic products as they attract a premium of anywhere from 100–400% in this market.

Another key issue facing the Malaysian organic industry is the lack of regulatory control over the industry and consequently lack of consumer trust in the authenticity of organic products. Like other markets which lack such controls, fraudulent claims have the result of discrediting the industry.

Australia is a key supplier of organic products to this market, and, while only representing 1.91% of the total volume of Australia's organic exports, Malaysia is currently a more important market for Australia than Singapore, Taiwan, Hong Kong or China. A summary of Australia's exports to Malaysia are detailed in the table below.

**Table 15: Australian organic exports to Malaysia**

Product Category	Standardised net mass (kg or l)*
Animal products	1,944
Beverage and spices	-
Cereals	16,429
Drinks and juices	3,551
Fruit and nuts	27,285
Meat products	-
Other	30
Processed products	5,640
Sugar	-
Vegetables	23,394
Wine	-
<b>TOTAL</b>	<b>78,273</b>

Source: DAFF, 2004

\*Dollar values not available

In our assessment, the Malaysian market for organics will grow steadily over the next decade. Demand for organics will be driven by affluence and westernisation and the development of the modern supermarket sector.

# Product/processing potential assessment

## 1. Australian organic industry

### 1.1 Introduction

The product/processing assessment component of the project aims to provide an analysis of the current activity undertaken for each organic product, which identifies:

- Production capacity
- Planned expansion
- Constraints to market expansion
- International competitiveness and prime prospects
- An assessment of the potential for each industry.

This assessment has been undertaken in order to gain a clear understanding of Australia's current organic capability in light of the substantial export opportunities in the Southeast Asian region which have been identified in the previous section.

The organic industry is extremely fragmented. Predominantly, the industry comprises Small and Medium Enterprises (SMEs) who tend to work at a regional level and within a very narrow product band.

The whole issue of assessing Australia's organic capacity is extremely problematic because of the clear dearth of data. Like the majority of countries considered in the broad spectrum country assessment in this publication, currently there are no concrete statistics on the Australian organic industry. This is a result of the failure of official trade data and other statistical sources to differentiate between organic and conventional products in many instances. To some extent, this may be attributed to the fact that the organic industry is relatively new, combined with the desire to avoid adding to the length and complexity of the current data collection process. Also, a large part of organic production is from small, part-time hobby farmers who sell through weekend markets and are not accounted for by the statistics. Another issue is the fact that farms may actually produce organic products but not market them as such, due to the administrative burden. Consequently, much of the market information is reliant on estimates and should be treated with caution.

Unless otherwise stated, key data sets contained in this section have been sourced from the DAFF (2004) report on the Australian organic industry, which appears to be the best source of available data. DAFF outlines its methodology for gathering this data as follows and warns that it does not provide definitive results.

*Two approaches were adopted to data collection. The first was to use data that is routinely collected by several of the AQIS-approved certifying organisations. The National Association for Sustainable Agriculture Australia, Australian Certified Organic, the Tasmanian Organic-Dynamic Producers and Safe Food Production Queensland all provided data. The Organic Growers of Australia, Organic Food Chain and the Bio-Dynamic Research Institute either did not collect the data sought or were unable to provide any data owing to privacy concerns.*

*The second approach was to conduct a survey of certified organic farms to collect data directly. The sample for the survey was drawn randomly from a list of certified organic producers (excluding in-conversion and pre-certified farms). The list was constructed from lists publicly available from the National Association for Sustainable Agriculture Australia, Australian Certified Organic, the Tasmanian Organic-Dynamic Producers and the Organic Growers of Australia. Safe Food Production Queensland did not have any farmer customers. Organic Food Chain and the Bio-Dynamic Research Institute were*

unable to provide any lists owing to privacy concerns. Lists were supplemented and crosschecked with names from the Organic Federation of Australia 2002 directory and the Western Australia Organic Farmers Association 2003 directory.

## 1.2 Domestic industry overview

In 2000-01 the farm gate value of Australia's certified organic produce was estimated to be around AUD\$89 million. This represents less than 0.3% of the total estimated farm gate value of all food and fisheries production, but is more significant in horticulture, representing around 4% of the total farm gate value (Australian Bureau of Agriculture Resource Economics (ABARE), 2003). More recent estimates by DAFF (2004) place the 2003 value of the industry at around AUD\$140.7 million. As different methodologies were used to derive each figure, caution must be used in their comparison. However, this data does provide a good indication that the industry is showing strong growth and that Australia's organic capability is improving. This assertion is also supported by anecdotal evidence from trade media, organic associations and producers alike.

The Australian organic industry has a wide range of stakeholders, including growers, processors, manufacturers, exporters, retailers and certifying agencies. ABARE (2003) estimates that there are around 2,000 certified organic producers in Australia representing all levels of the supply chain. Of this, it is estimated that there are 1,700 certified growers who operate in a wide variety of rural industries and include grains and pulses, horticulture, viticulture, livestock, dairy, wine, sugar cane and honey. However, as noted by DAFF (2004), the sources of such estimates are unclear, given that no publicly available statistics are kept on such matters.

Analysis of the distribution of organic farms by stage in the certification process shows that in 2003, 23% were 'in conversion' (Table 16). The increasing number of farmers in the organic sector is counterbalanced by the decreasing number of farmers involved in conventional farming. This suggests that the organic industry is to some extent in an embryonic and in a relative sense a pre-commercial stage. It is apparent that the Australian organic industry is evolving from a niche alternative industry to a segment within the mainstream food industry.

**Table 16: Distribution of organic farms by stage in certification process**

Stage of certification	%
Organic	69
In-conversion	23
Voluntary deferral	6
Pre-conversion	2
<b>TOTAL</b>	<b>100</b>

Source: DAFF, 2004

Australia has the largest amount of certified organic land in the world. The best current estimate is around 10 million hectares (Figure 20). Important, though, is the fact that most of this area is dedicated to extensive beef enterprises and is used for grazing. As such, the productivity of this land is somewhat limited when compared to the outputs of European certified areas.

**Figure 20: Organic agriculture in Australia and New Zealand**



Australia's largest export market for organic products is by far Japan, which accounts for 33.59% of all organic exports (Table 17). Following Japan is the UK (17.51%), France (10.51%) and New Zealand (10.21%).

Source: Willer and Yussefi, 2004

**Table 17: Percentage of total export volume by destination**

Destination	Total mass (kg or l)	% of total export mass
Japan	1 373 701	33.59
UK	716 015	17.51
France	429 735	10.51
New Zealand	417 295	10.21
US	250 223	6.12
Switzerland	187 512	4.59
Belgium	151 100	3.70
Germany	104 879	2.56
Italy	100 200	2.45
Netherlands	82 399	2.02
Malaysia	78 273	1.91
Singapore	56 081	1.37
Canada	36 944	0.90
China	31 600	0.77
Taiwan	22 362	0.55
Denmark	19 830	0.48
Hong Kong	14 091	0.34
Austria	3 840	0.09
French Polynesia	3 250	0.08
New Caledonia	2 481	0.06
South Africa	1 856	0.05
Dubai	1 440	0.04
Saudi Arabia	1 056	0.03
Korea	960	0.02
Israel	820	0.02
Noumea	526	0.01
Norway	360	0.01
Ireland	165	<0.01
Indonesia	63	<0.01
<b>Total</b>	<b>4 089 057</b>	<b>100.00</b>

Source: DAFF, 2004

### **1.3 Key barriers facing the Australian organic industry**

Whilst there is a large potential for growth in the Australian organic food industry, there are many barriers to overcome for the industry to fulfil this potential. Key barriers to developing a viable organic export industry are considered to be:

#### ***Cost***

Australia has a significant cost disadvantage when compared to some emerging food producers such as South Africa, South America, China, Thailand and other Southeast Asian countries. Whilst some of these countries don't have organic capabilities, they do set a floor price for conventional products. The issue is that the premium that Australia needs to achieve over and above the cheap product makes it difficult to grow demand for organics. Increasingly, Southeast Asian markets are being supplied with conventional product from these emerging low-cost producers. The price gap is therefore often too high which greatly restricts demand. The issue is that organics usually require a substantial price premium over conventional product because of higher costs, lower yields, etc. For Australian organics, this is over and above the conventional price, which, in turn, is well above the competition.

#### ***Distance***

Freight costs and shelf life are key constraints to success in export markets for many products, particularly in the case of lower value and short shelf life products such as fruit and vegetables.

#### ***Market Access***

Market access and trade barriers are key concerns in many markets, particularly South Korea and China. Moreover, compliance variations between the standards of different markets limit the capacity for opportunist trading. If producers and processors intend to export, they must undertake substantial forward planning – they must know their intended market and its market access requirements before they commence production.

#### ***Phytosanitary requirements***

Many countries insist that fresh imported product be sprayed and fumigated which nullifies or compromises its organic status.

#### ***Climate and seasonality***

Organic products are subject to seasonal fluctuations more than their conventional counterparts, largely because of the smaller and more diversified nature of organic farms. This causes increased problems in balancing supply and demand. Moreover, climate and environmental conditions sometimes make organic production difficult. In particular, tropical climates tend to be more prone to pests and disease, which are more difficult to contain without access to pesticides, fumigation, antibiotic, etc.

#### ***Small size of industry and industry participants***

The Australian organic industry is constrained by its overall small size and the small size of its participants. The organic industry represents less than 1% of the total value of the total estimated farm gate value of all food and fisheries production. It is dominated by SMEs, which tend to be family businesses that employ less than 50 people and in many cases are hobby farmers focused on supplying local farmers' markets and stores.

The dominance of SMEs in the organic industry has a number of implications. Our research indicates that SMEs tend to be undercapitalised and this lack of capital is a key factor constraining their growth. Often houses and personal assets are mortgaged to the maximum to keep the business afloat. An important implication is that many of these firms lack the resources and expertise required to succeed in the highly competitive global environment.

In addition, the small scale of most organic operations also limits production volumes. Companies have to be able to produce significant volumes if they intend to trade with global supermarkets. In

terms of being able to meet both their volume demands on a year-round basis and the costs associated with the compliance requirements, producers need to have a certain turnover and level of expertise to be able to be viable as an export operation.

### ***Low production volumes***

Without the use of pesticides, chemicals, antibiotics and other conventional farming practices, organic farms in many categories show a decreased yield. Moreover, organic farms can be more susceptible to pests and disease, which can also disrupt supply and yields. This increases the cost of producing organically and this cost is passed on to the consumer in the form of premiums.

As such, organic production is riskier than conventional farming. Under certain environmental or climatic conditions, there is an onslaught of pests or disease, which under conventional farming practices are managed with chemicals. Organic producers must resort to non-chemical means, which are typically less effective.

We understand that where fresh product is exported, it is typically in mixed consignments of around 200-500kg. The consignments can contain a wide variety of products in small quantities, and shipments are erratic.

### ***Quality inconsistencies and irregular supply***

The small size of the industry also affects supply and quality consistency. Global supermarkets are increasingly looking towards closed loop supply chains and developing long-term relationships with producers in order to sustain consistent supply and quality. In its present form, by and large the Australian organic industry lacks the critical mass necessary to meet the demands of global supermarkets, which are the key retail distribution point for imported organic products in the majority of the Southeast Asian markets considered in this report.

### ***Fragmented nature of the industry***

As has been mentioned previously, while Australia has one national standard for organics, there are seven independent certification agencies, each with their own logo, etc. which causes the industry to be highly fragmented and impedes its ability to develop some form of critical mass through co-operative marketing and selling activities. The fragmented structure has resulted in a weakened organic industry and an overly complicated certification process.

### ***Short shelf life and high perishability of some organic categories***

It has been reported by DAFF (2004) that a number of organic categories, namely fresh produce and unprocessed organic milk, have a lower shelf life than their conventional counterparts. This constrains the ability to successfully transport fresh product to distant international markets, or, in the case of organic milk, to processors located some distance from the producer. Realistically, most fresh products are limited to the closer Southeast Asian markets.

### ***Shortage of certified processing facilities***

As has been identified in the market analysis, because of market access restrictions and phytosanitary requirements of a number of the potential export markets, much opportunity for Australian organics lies in processed products. However, to date the majority of major food companies have been reluctant to invest in organic processing because of difficulties relating to supply and quality inconsistencies, which have been highlighted above, as well as increased compliance costs.

### ***Conversion can be slow and costly***

For many categories, organic conversion can be a slow and costly exercise and can take up to three years for certification to be granted. This may constrain growth of the industry by reducing the number of producers who convert.



### **Lack of market intelligence and statistical data**

In conducting this research, it has become evident that little concrete market intelligence and statistical data is available on the organic industry. A fundamental component of global competitiveness is to have up-to-date, timely, comprehensive, relevant and actionable market intelligence. Without this information, it is likely that organic companies seeking to enter export markets may fail because they do not have access to this knowledge.

It is the experience of this consultancy that not just organic producers, but agri-food producers in general, sometimes make business decisions on the basis of poor/false information and consequently their efforts are misplaced. They need to understand on a day-to-day, week-to-week, month-to-month and year-to-year basis what is going on in their customers' markets, who is buying the product, why they are buying it, how they are using it, where they are buying it, how they evaluate the quality, pricing parameters, competitive pressures, and so forth.

## **2. Production capability assessment**

### **2.1 Overview**

The Australian organic industry encompasses a vastly diverse array of organic products. Furthermore, the range is expanding on a daily basis because of consumer interest and demand. In light of strong international competition and the fact that much of Australia's traditional agri food markets have been eroded by lower priced competitors, Australian farmers are now seeking a means to differentiate their products and achieve a premium for them. To many, organic production is considered to be a viable solution because organic products attract a premium and there are acute supply shortages for a number of categories in many markets.

Table 18 shows the breakdown of the estimated farm gate values of organic products on a category basis for 2003. The total value is less than the AUD\$140.7 million previously quoted, as it does not include on-farm processing.

**Table 18: Estimated farm gate value of organic by category 2003**

<b>Product category</b>	<b>AUD\$ Estimated Total</b>	<b>% Total organic category</b>
Beef	52,349,101	40.93
Sheep and goat	2,915,387	2.23
Pigs	745,750	< 1
Poultry	353,750	< 1
Eggs	795,755	< 1
Milk	7,410,000	5.79
Cereals	17,565,525	13.73
Vegetables	24,384,964	19.07
Fruit and nuts	21,373,875	16.71
<b>Total</b>	<b>127,893,695</b>	<b>100.00</b>

Source: DAFF, 2004

Given the extensive amount of certified grazing area, it is not surprising that beef is by far the most valuable organic category. Following beef, vegetables, fruit and nuts, and cereals are Australia's next most valuable categories at a national farm gate level. Pigs, poultry and eggs are of little significance comparatively.

Australia's exports of organic products showed strong growth from 1999–2003, but have experienced a sharp decline in 2002 and 2003 (Table 19). This decline in exports is predominantly the result of decreased exports of fruit, vegetables, beef products, cereals and processed products (Table 20). There are a number of reasons for this decline, which include the effects of drought, the strengthening

of the Australian dollar, Australia's declining competitiveness in export markets, and increased demand from the domestic market for organic products. This decline is in line with the trend for conventional products.

**Table 19: Total certified organic exports by year**

Year	Sum of net mass standardised (kg or l)	% change on previous year
1999	774,058	-
2000	15,769,679	1,937.27
2001	37,469,727	137.61
2002	16,195,319	-56.78
2003	4,089,026	-74.75

Source: DAFF, 2004

**Table 20: Certified organic exports by product group and year, standardised net mass kg or l.**

Destination	1999	2000	2001	2002	2003
Animal products	20 400	204 371	189 874	156 989	182 820
Beverages and spices	0	248 772	714 857	714 857	223 667
Cereals (grains, pulses and oilseed)	252 248	10 572 251	26 306 775	9 290 306	1 297 723
Drinks and juices	3 919	39 866	424 629	723 594	380 290
Fruit and nuts	10 483	558 402	696 436	451 815	44 011
Meat products	27	102 496	396 270	682 250	243 683
Other	1 050	0	4 679	525	15 621
Processed products	462 806	3 072 839	6 094 564	3 843 265	1 196 660
Sugar	1 050	288	4 345	86 702	141 001
Vegetables	2 805	921 353	2 449 012	227 470	119 460
Wine	19 270	49 041	188 286	335 863	244 111
<b>Total</b>	<b>774 058</b>	<b>15 769 679</b>	<b>37 469 727</b>	<b>16 195 319</b>	<b>4 089 057</b>

Source: DAFF, 2004

## 2.2 Australia's organic meat production capability

### Production capacity

While predominantly focused on beef and lamb, there is a fair range of organic meats produced in Australia, such as veal, goat, duck, pork and chicken (including organic spatchcocks). Organic meat products make up the bulk of the total value of Australia's organic production capability accounting for around 44% of the total farm gate value. Farm gate values of Australian organic meat products are detailed in Table 21.

**Table 21: Estimated farm gate value of Australian organic meat**

Product category	AUD\$ Estimated Total	% Total organic category
Beef	52,349,101	40.93
Sheep and goat	2,915,387	2.23
Pig	745,750	< 1
Poultry	353,750	< 1
<b>TOTAL</b>	<b>36,363,988</b>	<b>44%</b>

Source: DAFF, 2004

The majority of Australia’s organic meat exports are destined for Japan, the UK, the US and Canada, with smaller consignments being sent to Germany and Taiwan. There was a 31% decline in meat product exports from 2002 and 2003, largely as a result of the drought.

Key Australian organic meat producers include Cleavers Organic Meat Company, which supplies organic beef and lamb to major supermarkets, and Inglewood Farms, which sells organic chicken to David Jones, restaurants and supermarkets.

**Planned expansion**

Almost certainly, the organic meat industry is set to expand rapidly. In particular, there is growing demand in the food service sector, and higher-end eating establishments are featuring organic beef on their menus. Given that the Australian red meat industry is grass/range fed and that growth promotants are banned, it is relatively easy for many producers to convert to organic. The price premium available makes this attractive. It is conceivable that the beef and sheep meat organic sector could double within five years. Expansion is also likely in poultry and pig meat although organic is more problematic in intensive animal industries because of greater vulnerability to disease.

**Constraints to market expansion**

Much of Australia’s organic meat is sold through organic meat cooperatives to processors. The supply of organic meat fluctuates more than its conventional counterpart as a result of the availability of organic feed. The cost of organic feed is reported to be double that of conventional and becomes in short supply during drought periods, further escalating the cost and deterring producers from running as organic. There are some producers who will only run as organic when feed is at a reasonable price.

Moreover, a key issue affecting supply is the fact that organic producers are less likely to sacrifice premiums in low demand times and will only sell during periods of peak demand. Conventional producers are more likely to sell product all year round.

**International competitiveness**

Australia has the potential to be an international force in organic meat production. As has been mentioned, Australia has more certified organic land than any other country in the world, the majority of which is dedicated to extensive grazing operations. Moreover, the fact that Australia is Foot and Mouth Disease and BSE free creates a further competitive advantage.

Australian organic beef now has an advantage in the US market as a result of the Australia-US Free Trade Agreement, which brought about a 10 per cent tariff reduction.

**Potential assessment**

The Australian organic meat production sector has great potential in light of the global demand for organic meat products and the vast areas of land that could be certified and converted into dedicated organic meat production enterprises.

**2.3 Australia’s organic fruit, vegetable and nut production capability**

**Production capacity**

The organic fruit, vegetable and nut categories represent over 35% of the total farm gate value of Australia’s organic food and beverage production.

**Table 22: Estimated farm gate value of Australian organic fruit, vegetables and nuts**

Product category	\$ Estimated Total	% Total organic category
Vegetables	24,384,964	19.07
Fruit and nuts	21,373,875	16.71
<b>TOTAL</b>	<b>45,758,839</b>	<b>35.78</b>

Source: DAFF, 2004

## **Fruit**

Recent estimates place Australia's organic fruit production at around 20,000 tonnes per annum, of which only 75% was sold as 'organic'. The farm gate value of Australia's organic fruit industry is approximately AUD\$20 million and accounts for about 15% of the farm gate value of Australia's organic production.

Australian farms produce a wide variety of organic fruits including apples, avocados, bananas, grapefruit, lemons, watermelon, olives, oranges and paw-paw to name a few.

Due to its Mediterranean climate, South Australia largely produces organic citrus products. Organic citrus is also grown in Northern Victoria and Queensland. The Queensland industry has recently suffered at the hands of the highly contagious bacterial disease *Canke*, which forced some organic citrus growers to spray their crops and forgo selling their produce as organic.

Tasmania produces organic apples. There is a 300-hectare property incorporating a 100-hectare apple orchard and processing facility currently undergoing certification. The owners intend to bring the processing plant up to standard and contract out for both conventional and organic produce. However, Tasmania is currently having problems with codling moths in its organic apples, which means they have to be treated with methyl bromide. This prevents them being exported to the Japanese market as organic, which is one of Tasmania's key export markets for apples.

## **Vegetables**

Australian farmers produce an extensive range of vegetable products, albeit in relatively small quantities in most cases. Examples of organic vegetables available include asparagus, beans, broccoli, carrots, garlic, ginger, lettuce, onions, potatoes, pumpkin, squash and zucchini. Organic herbs and spices are also produced, such as basil and oregano, and organic rock salt and peppercorns. Vegetable production is predominately focused in the eastern states by virtue of climatic advantages.

## **Nuts**

Australian organic nut production is predominately focused on high-value nuts such as macadamias. Wodonga Park in south-east Queensland is certified by the ACO and is a key producer of macadamia nuts. The farm is the country's largest producer and exporter of biodynamic macadamia nuts in Australia and supplies organic markets domestically as well as in Europe, the US, Malaysia, Taiwan and Japan.

## **Planned expansion**

Without doubt there will be significant escalation of organic horticulture. In the light of declining competitiveness in export markets, many horticultural producers are utilising technology and 'best practice' farming systems to reduce chemical use. This is being driven by the desire to reduce costs and the fact that markets are demanding cleaner and greener food. Many have got to the point where they are almost chemical free, although they occasionally need to revisit the use of chemicals when there are pest or disease problems mainly caused by climatic conditions. As markets become more established and the price premium makes it more attractive, many conventional producers will consider converting.

## **Constraints to market expansion**

The Australian organic fruit and vegetable industry is perhaps the most fragmented of any other organic sector in the country. Organic fruit and vegetable production in Australia was predominately founded in the ideals of environmental sustainability and social responsibility rather than being driven by the lure of increased profit margins and a global, corporate outlook. The majority of Australian organic fruit and vegetable producers are small-scale hobby farmers who generally supply local farmers' markets, small independent grocery stores or sell products at the farm gate. Many are content to run their farms at this scale provided the returns are great enough to make ends meet.

There are, however, some fruit and vegetable farmers who are increasing their capability and supplying larger volumes. Some larger supermarkets stock organic pumpkins, carrots, avocados and citrus. They source product directly from Australian suppliers and work with producers to ensure consistency of quality and supply. By going direct to the producers, they are able to reduce the premium applied to the products by cutting out the wholesalers.

In recent months the major supermarkets have escalated their interest in a commitment to organic. This is in response to growing shopper demand and a recognition that supermarkets are losing market share to greengrocers, farmers' markets and central retail markets. As a result they are going to great lengths to overcome this hurdle and the challenges that organics pose to the supermarket business model.

### ***International competitiveness***

As has been outlined previously in this report, Australia is struggling to compete in global markets and many of the horticultural sectors in the light of strong competition from lower cost producers, notably South Africa, South America and China. Australia's ability to compete is increasingly being narrowed to unique and differentiated products or where it enjoys a seasonal window of opportunity when other countries can supply. To a large extent, these factors apply equally for organics. Moreover, in some cases the price premium achieved by the organic product is sufficient to allow Australian exporters to compete with low-priced, conventional products.

### ***Potential assessment***

The fragmented nature of the industry is causing supply and quality issues. The organic fruit and vegetable sector lacks the critical mass it needs in order to meet the domestic demand for organic fresh produce in many categories, let alone the volumes required by international supermarkets.

Indeed in global markets, fresh organic produce accounts for 60–90% of the total organic market and demand for these products outstrips supply in most categories. Given that the global demand for organics will grow exponentially and that supply won't be able to keep up, it is likely that the price premium for some categories in some markets will grow. This will provide a major incentive for Australian producers to switch to organics.

However, another issue to consider in organic fresh produce is the fact that Australia's own quarantine laws mean that Australian producers of fresh organic products are protected in the domestic market. Most imported fresh produce (except from New Zealand) is subject to fumigation, which nullifies its organic status. This may mean that Australian fresh produce producers are not motivated to focus on export markets when they have a viable domestic industry to supply, which generally offers greater returns by avoiding the costs associated with export.

## **2.4 Australia's organic dairy production capability**

### ***Production capacity***

The estimated farm gate value of Australia's milk production in 2003 was AUD\$7.4 million and accounted for 5.79% of the total value of Australia's organic production. Approximately 90% of Australia's organic milk supply is handled through an organic milk cooperative and is predominantly sourced from the dairy belts in Victoria, eastern South Australia and southern New South Wales. In addition, organic milk is also sourced from a small cluster of organic dairy farmers in Queensland. Western Australia is reported to only have one organic milk producer that supplies one processing operator (DAFF, 2004). Western Australia's capability is likely to increase as more farmers undertake the conversion process.

### ***Planned expansion***

Based on the significant premium, which can be obtained by producers for organic milk domestically, it is likely that where possible, more farmers will convert to organic systems. Organic milk production

is relatively easy compared with other industries. If anything, there is an oversupply of organic milk as excess supplies are blended with conventional product.

### **Constraints to market expansion**

The Australian organic dairy industry does not suffer from the supply and demand problems to anywhere near the same extent experienced by other sectors.

As is the case for organic meat, the expansion of the organic dairy industry has been recently constrained by the drought. The cost and availability of organic feed can be the deciding factor in running an operation as organic or conventional from year to year.

### **International competitiveness**

Australia is only likely to be competitive in organic dairy products in the closer Southeast Asian markets. There is reported to be an oversupply of organic milk in the UK and Europe and perhaps the US. Chilled organic products such as milk, yoghurt, cream, butter, etc. must be air freighted which limits the economic reach. The Australian dairy industry is a highly effective commodity with lines such as dried milk and related products in the greater Asian region. This also applies to organics.

### **Potential assessment**

Organic dairy products are very marketable based on nutritional grounds. A three-year project funded by the EU found that organic milk has higher levels of nutrients and antioxidants than conventional milk. The research found that dairy cattle raised on an organic diet produce milk with 50% more Vitamin E and 75% more beta-carotene than conventionally farmed dairy. The organic milk is also two to three times higher in zeaxanthine and lutein, which are powerful antioxidants. Higher levels of omega 3 essential fatty acids that provide protection from heart disease are also found in organic milk.

More than any other industry, the dairy industry is likely to satisfy market demand for organic products because it is better structured to balance supply. This being so, it is likely that organics' share of the total dairy category will grow but the premium attainable will reduce.

## **2.5 Australia's organic cereal production capability**

### **Production capacity**

The estimated farm gate value of organic cereals is shown in Table 23.

**Table 23: Estimated farm gate value of organic cereals**

Product category	AUD\$ Estimated Total	% Total organic category
Cereals	17,565,525	13.73

Source: DAFF, 2004

Wheat is the most commonly grown cereal in Australian organic farming systems and the central ingredient in many processed organic products such as bread, pasta, baked products, etc. According to the DPI (2002) between 1999 and 2001, production of organic wheat for export increased from a total of 156 tonnes to over 20,000 tonnes.

It is noted by the DPI (2002) that organic wheat prices vary considerably depending on the market, the quality (ie. protein content, screenings, grain size, variety) and also the season. Premiums on organic wheat are generally 30-50% above the conventional price but can be as high as 100%. The situation with organic soybeans, pulses and seeds is similar to organic wheat, with product selling at about double the price of conventional and export markets are strong in this category. Prices for organic wheat are more stable than their conventional counterparts.

In both organic and conventional wheat, protein content is a key evaluative criterion. In some export markets such as Europe, wheat is required to have a protein content of 12%, and higher duty charges

can apply to products which fall below this. In other cases, premiums are paid for wheat with higher protein levels. For export, protein content greater than 14% is desirable to achieve good premiums. Farm location can impact on the protein levels in wheat. North-east Victorian organic wheat generally achieves a protein content of less than 11% whereas organic wheat from the Wimmera and Mallee regions generally achieves higher protein levels.

### ***Planned expansion***

It has been reported by Landline (2003) that as a consequence of the increased margins described above, a large number of Australia's bigger cereal growers are looking at organics as an alternative to conventional farm/grain production.

### ***Constraints to market expansion***

A key constraint in the organic grain sector is the slow rate of conversion. A study conducted by the Rural Industries Research and Development Corporation (RIRDC) investigated the slow conversion rate, and, while the study only covered a small sample of wheat farmers, the following issues were identified:

- Yields were found to be substantially less than on conventional farms, especially on those farms more recently converted. This gap has widened in recent times due to growing sophistication in fertilizers and chemical crop management systems in conventional farming.
- While the premiums that organic cereal crops attract are substantial, the cost of conversion and administering an organic system are high.
- A comparison of inputs and outputs on organic and conventional farm types showed that returns to organic farming were often comparable but not better than conventional farming, and were worse in some cases.

### ***International competitiveness***

The prospects for expansion of organic grain production from Australia are excellent. Australia is a globally competitive producer of conventional grain products. Furthermore, being processed, grain based products don't suffer from the distance problems of perishable products. Specialised bread, pasta, noodles and baked products are a growth category and organics would benefit from this.

### ***Potential assessment***

There is excellent potential for expansion in cereal production. The Australian industry is well developed and enjoying large and growing exports of cereal based products. Australia is also globally competitive in grain products.

## **3. Processed food and beverage capability assessment**

### **3.1 Overview**

The growth of organic farming in Australia and the increase in domestic and international demand for organic products has also brought about a significant rise in the amount of processed organic food available and hence growth in the number of post-farm gate supply chain participants (ie. processors, wholesalers and distributors). Internationally, companies such as Unilever and Nestlé have introduced some organics to their product ranges (eg: baby food) and have developed a strong organic processing capability.

Australia's organic processing sector is growing, albeit from a small base. However, to date many major food companies have been reluctant to invest in organic processing because of difficulties relating to supply and quality inconsistencies, as well as increased compliance costs. In categories where there is more stable supply and demand, such as baby foods and frozen vegetables (Heinz Watties) and cereals (Uncle Toby's), there has been more commitment.

Australia's organic processing capability covers a wide range of products including jams, sauces, olive oil, meat processing and packing (meat portions and burgers), grains for milling, apple juice, pasta sauces, dried fruits, breads, muesli, breakfast cereals, noodles and pasta, wine, dairy products

(cheese, yoghurt, milk powder, cream), salad mixes, roasting coffee, chocolate-coated nuts, honey, tea tree and herb oils (DAFF, 2004). The industry is characterised by two types of processors, big companies with a small organic component or small companies that are 100% focused on organics and are only supplied by a few organic producers. In addition, a number of organic producers actually process their products onsite or operate boutique food businesses in keeping with the low food mile ideology of the organic movement in that products should spend minimal time in the supply chain to remain fresh.

### **3.2 Australia's organic dairy processing capability**

Organic dairy processing operations are generally located very close to producers. This is a result of the perishability of milk, which, according to DAFF (2004), is more of a problem with organic milk as it has an even shorter life span.

Major dairy products that are processed in Australia include milk, yoghurt, ice cream and hard and soft cheeses. Australia's larger dairy processing operations only handle a small amount of organic product and generally focus on organic milk, yoghurt and ice cream, as these are high volume categories (DAFF, 2004). These larger processors sell product to the major supermarkets as well as smaller outlets and largely source product from three or fewer local farmers.

Large-scale organic dairy processing has had a few success stories in Australia. Well-known Australian organic dairy brands include Timboon biodynamic cheese, Jalna biodynamic yoghurt and FarmHouse biodynamic ice cream. The proprietors of Farmhouse biodynamic ice cream near Colac, are reported to earn as much from the 15% of the organic milk they use for ice cream as they do for the other 85% that is sold to the local conventional factory. Jalna invested in its own biodynamic dairy in 1998 in the Goulburn Valley, which supplies milk for its biodynamic yoghurt range.

The hard and soft cheeses are generally processed by boutique manufacturers. These smaller processors generally sell their product in their local state with smaller amounts going interstate. These smaller processors do not have an international market focus and tend to only sell to specialty stores, smaller outlets and on-site as they do not have the critical mass to supply supermarkets nationally, or the wider global market.

### **3.3 Australia organic meat processing capability**

Organic meat processors in Australia include abattoirs, manufacturers of processed products, boning, cutting and packaging operations, and companies involved in a combination of these activities. Generally, organic processing only makes up a small percentage of these companies' activities, although there are a few operations that are 100% organic. Given the nature of meat, organic meat processors produce a wide variety of products including cutting and packing standard cuts, pork smallgoods, such as bacon and ham, and beef smallgoods, such as pastrami and roast beef.

There are a number of specialty butchers opening up such as 'Sam the Butcher' in Sydney which sells specialty products such as organic duck confit, 1 year aged organic prosciutto and organic chicken liver pate. Organic beef eye fillet at Sam's is priced at \$54.90 per kg and organic duck fillets are \$48.00 per kg.

As noted by DAFF (2004), approximately 70% of each beast is exported, with only high-end quality cuts generally supplied to the domestic market. Casserole and stir-fry cuts have lesser appeal in the Australian market but are valued in many export markets – particularly in Asia.

To combat the problems of supply and demand in the organic meat industry, which have been mentioned previously, DAFF (2004) acknowledges that the industry is reliant on strong long-term relationships. Meat producers and processors work together to ensure long-term supply. This is sometimes processor driven, whereby processors assist producers with business plans or processors help by buying more organic product than necessary and then selling it as conventional in order to help out the producers.



A large export abattoir in northern Tasmania has recently been certified to process organic red meat. The product is predominantly destined to the Sydney restaurant trade. There is also a new organic slaughterhouse at North Motton in the north-west of Tasmania, which supplies a killing and packing service for small number of livestock.

### **3.4 Australia's organic fruit, vegetable and nut processing capability**

The processing industry for these products is not well-developed and has largely been constrained by supply issues. The biggest problem is that the majority of organic fruit and vegetable producers are small operations or hobby farmers, making it difficult for a large-scale processors to ensure a consistent supply of quality product. Moreover, the returns for processors are not great enough to justify the risk associated with these supply chain difficulties. If the processing industry is to be developed, larger organic producers are required.

Despite this, the range of processed organic foods available from Australian-based operations is quite varied. Examples of processed fruit and vegetable products include:

- canned goods, such as organic baked beans, tomatoes and chickpeas
- processed corn products, such as corn thins and corn chips
- sauces and syrups, such as pasta sauce, sate sauce, maple syrup
- spreads and jams including fruit preserves, peanut butter and honey
- oils and vinegars, particularly olive oil and balsamic vinegar, organic salad dressings
- wine.

In the juicing industry, DAFF (2004) reported that there is an oversupply of carrots for juicing and an undersupply of apples and citrus. Processors are relying on imported organic concentrates to combat this problem.

#### ***Organic wine***

Organic and biodynamic wines are a major growth area, which have piggybacked off the success of the Australian wine industry in global markets. Australian wines have taken the UK and the US markets by storm. Australia is now a market leader in the UK, taking share off Italian and French wines.

It is second in the US where wine is starting to become popular within its culture. Australian wines have been enthusiastically embraced because of their easy-to-drink style, their casual and user-friendly labelling, and affordable price. Not only have they taken share off the traditional supply countries, they have grown the total market. Being affordable and easy to drink, they have taken share off beer and spirits.

As with any market, as it grows and becomes more sophisticated and segmented, there emerges a growing segment of organic wine retailers. Even supermarkets are now expanding their organic wine range. They report that this is a rapidly growing sector. Because of Australia's success in conventional, it will be well placed to capitalize on the growth.

### **3.5 Australia's organic cereal processing capability**

Kialla Pure Foods (QLD) is Australia's leading grain-flour processor and has achieved JAS certification. In order to meet the domestic and international demand for their products, Kialla have developed a network of organic grain farmers in order to improve supply of raw product.

The company produces a range of cereal products including flour products such as rye, wholemeal, millet, barley, buckwheat, maize and soya flour, ready made bread mixes, oils, including sunflower oil, soy beans, mungbeans, and cereals such as wheat bran and rolled oats.

As well as being sold domestically, Kialla's value-added organic grain products are sold to Switzerland, the UK, Germany, New Zealand, Taiwan, Hong Kong, Japan, Malaysia and Indonesia.

Other organic processing companies include Whole Grain Milling Company and Casalare Specialty Pasta.

# Market potential assessment

## 1. High prospect market determinants

### 1.1 Introduction

This section has applied the insights gained in previous analysis to assess the export opportunities for the Australian organic sector. As a foreword to the analysis, it is useful to first develop some general principles and guidelines as to the key determinants or drivers of opportunities for Australian organic products.

### 1.2 Key market opportunity determinants of Australian organics

From the research and analysis we have identified what the consultants believe to be the key determinants of demand for organic products. Demand for organic products from Australia is most likely to be greater if the following conditions exist:

- where Australia is a globally cost-competitive producer
- where there is supply chain integrity
- where there is proximity to markets
- where there is a seasonal window of opportunity
- where Australia has unique and differentiated products
- where there are established mainstream industries.

#### ***Where Australia is a globally cost-competitive producer***

As was highlighted previously in the report, Australia is declining in global competitiveness in many categories. Australia, for example, is losing its competitiveness internationally in most fruit and vegetable products and many processed foods to lower-cost producers, notably South Africa, South America and China. However, Australia does have natural cost advantages in broad acre products, grains, cereals and red meats. Whilst organic foods generally command a price premium over the conventional equivalent, there is a limit as to the level of the premium. If Australia is not globally cost-competitive for the conventional equivalent, it makes it difficult for it to be competitive with the organic product, notwithstanding the price premium attainable for organics.

#### ***Supply chain integrity***

Demand for products from Australia will be greater if it has demonstrable supply chain capability, either in terms of shelf stable products or cool chain systems that can deliver products to the export markets with integrity and a sufficient shelf life to get them through the retail system.

#### ***Proximity to markets***

Following on from the above point, Australia is more likely to be successful in markets that are geographically close, particularly for perishable and short shelf life products. There are two issues here: freight cost and product shelf life. All other things being equal, Australia would have a competitive advantage in Southeast Asia, particularly in the more affluent areas such as Singapore, Malaysia and Hong Kong, because of the relative proximity to markets. Depending on the category, both air and sea freight are feasible and affordable. Australia struggles to compete in Europe and the US for fresh food because of distance. For those longer voyages, product usually needs to be treated which can compromise or negate its organic status.

#### ***Seasonal windows of opportunity***

Traditionally, much of Australia's competitive advantage in fresh foods is due to the fact that it enjoys seasonal windows of opportunity, when no other country can supply a seasonal product at that particular time of year. This applies to most Northern Hemisphere countries. Examples here include citrus (navels and easy peelers), summer fruits, berries, tropical fruit, grapes, etc. Another notable example is onions where Australia can supply fresh onions into peak demand seasons in Northern Hemisphere countries.

Unfortunately, the seasonal windows for Australia are narrowing because of the rapid expansion of other Southern Hemisphere products, notably from South Africa and South America. Furthermore, the introduction of new varieties, eg: low chill and production systems, has allowed for the expansion of the season.

### ***Where Australia has unique and differentiated products***

Another area of opportunity for Australia is where it has unique and differentiated products. A large part of the reason for Australia's great global success in wine is that the product is uniquely different from French and Californian products in terms of variety, wine style, labelling, packaging and price. There is a substantial opportunity for the Australian organic wine industry to leverage off the success of the mainstream Australian wine industry.

### ***Established mainstream industries***

The organics industry is likely to have the greatest chance of success in mainstream industries in which Australia has demonstrable core competencies. These are industries in which it has a geographical or climate competitive advantage and established supply chains. With this comes competencies and know-how in growing, processing and distribution, skilled labour force, successful supply chains and so forth, industries with mainstream, competitive status, including beef, lamb, grains, pulses, dairy, temperate horticulture, and wine. However, mainstream status is not a sufficient condition. Other factors also need to be applied to determine its prospects. Organics can leverage on these competencies.

## **2. Market opportunities for Australian organic products**

Table 24 overleaf, summarises the key markets for organic foods covered by this report and makes comment on the prospects for Australian products. It draws together the key factors that will drive demand for Australian organic food:

- population
- total market size for organics
- growth rate of organic market
- Australia's exports to each country, and
- percentage of Australia's total exports to each country in volume terms.

**Table 24: Summary of market potential for Australian Organic Food**

Country	Population	Market Size US\$	Market Growth (p.a.)	Australian exports	Key products	% of total volume of Australia exports (kg or l)	Comment
US	290 million	13 billion	20%	Processed products, meat, beverages and spices	Processed products and meat products.	6.12	Distance key constraint. Opportunities for wine, lamb, processed shelf stable products and counter-seasonal fresh produce opportunities.
UK	60 million	1.84 billion	11%	Cereals, animal products, meat, beverages, spices, processed products, sugar, vegetables, wine.	Wine and cereals.	17.51	Distance key constraint. Opportunities in shelf stable processed foods: baby food products, dried fruit, nuts and wine. Seasonal windows for summer fruit. Beef and lamb. Honey.
Continental Europe	396.4 million	<i>Total unknown.</i> Germany: 3.6 billion Italy: 1.5 billion France: 1.5 billion	1.5 – 6.1%	Cereals, animal products, meat, beverages, spices, processed products, sugar, vegetables, fruit, nuts, wine.	Cereals and vegetables	26.41	As above
Japan	127 million	‘Green Food’: 3 billion ‘Organic’: 250 million	N/A	Cereals, animal products, meat, beverages, spices, drinks/juices, processed products, sugar, nuts, wine.	Processed products, drinks and juices, beverages and spices, meat products.	33.59	Well-developed market. Fresh produce constrained by phytosanitary requirements. Opportunities in beef and lamb. Drink products. Processed products, eg: soy products and wheat products, eg: noodles.

Country	Population	Market Size US\$	Market Growth (p.a.)	Australian exports	Key products	% of total volume of Australia exports (kg or l)	Comment
Singapore	4.3 million	4.7 million	20%.	Cereals, animal products, beverages, spices, drinks/juices, processed products, fruit, nuts, wine	Cereals, vegetables, processed products	1.37	Freight advantages. Limited by market size. Opportunities for chilled and fresh products, eg: milk, juice, dairy, perishable fruits
Hong Kong	6.8 million	50 million	20-25%	Cereals, animal products, meat, drinks/juices, processed products, vegetables, fruit, nuts, wine.	Cereals	0.34	Limited by market size. Fresh produce, cereals, drinks and juice, wine, red meat.
China	1.3 billion	150 million	N/A	Sugar	Sugar	0.77	Long-term potential, trade barriers problematic. Unlikely to be competitive in fresh produce. Opportunities in processed and frozen foods, dairy, cereals and wine. Infant and baby formula. Processing inputs such as sugar.
South Korea	48.4 million	300 million	30%	Animal products	Animal products	0.02	Limited to processed foods by trade barriers. Opportunities for variety of processed products, eg: baby foods, noodles, etc.
Taiwan	22 million	44.5 million	20%	Cereals, meat, processed products.	Cereals	0.55	

*NB: Key product judgement based on standardised net mass (kg or l).*

## **2.1 Key organic markets for Australia**

### ***Japan***

Overall Japan is the biggest market for Australian product in volume terms, accounting for a third of all Australia's exports of organic food and beverage products. The key drivers in Japan include concern about health, overuse of chemicals in traditional agriculture, etc. Unfortunately, it is not viable to send many fresh products to Japan, not only because of the distance, but more importantly because of Japan's strict phytosanitary regulations, which affect market access for many products. Furthermore, many products which have market access need to be subject to fumigation and treatments, which nullifies their organic status. Whilst there is not much volume of meat at the moment, longer term there are likely to be strong opportunities for Australian organic red meat. Conventional Australian beef and lamb are prominent in Japan, and almost certainly in time the organic markets will emerge from this.

Longer term, there are also likely to be some opportunities for Australian organic wine. Although Japanese are on a per capita basis very low wine consumers, there is a growing per capita wine consumption and Australian wines are very popular.

### ***Continental Europe***

In volume terms the second greatest market area for Australian organic products is Continental Europe, with Germany and France being major consumers of organic foods. Demand for organic foods in these markets is driven by a high level of affluence, a sophisticated consumer base, and concern about chemicals and environmental sustainability. Australia is a major exporter to these markets, particularly with cereals, animal products (including meat), beverages (including wine), spices, processed products, sugar, vegetables, fruits and nuts. Part of the reason for our success in vegetables and fruit are the seasonal windows of opportunity and the ability to put product in there in the off-season. A major constraint in Continental Europe is distance, which affects both the cost and the shelf life of the product.

### ***UK***

The third-ranking market for Australia is the UK. Even though it has a much smaller population than Japan or Continental Europe, it still consumes close to 20% of all Australian exports. The key drivers for the UK are the affluence and sophistication of the consumers and the growing environmental and bio-ethical sensitivity by consumers. Another factor is the massive growth of private label programs where supermarkets are particularly developing the market for organic foods. In addition, the comprehensive range of organic food available also builds demand.

The main Australian organic products currently exported to the UK include cereals, meat and animal products, beverages, spices, processed products, sugar, vegetables and wine. Australia would do particularly well in this market with cereal based products, confectioneries, condiments and other processed foods such as baby foods, dried fruits and nuts, etc.

### ***USA***

Of those markets considered in this report, the US is the fifth-ranked market for Australian organic products in terms of percentage of total volume of exports. The key driver for organics in the US is the very large population and large percentage of consumers who are very affluent. Because of distance, the products going into the US tend to be processed and shelf stable products including processed meats, cereals, baked products, beverages and spices and wine. The distance and the strong competition from other closer supply countries, particularly from Central and South American countries, which have a strong organic capability, make it difficult for Australia to compete in fresh foods. Again, we predict that there will be a growing demand for Australian organic wine, piggy-backing off the great success of conventional Australian wines in the market.

### ***Southeast Asia / East Asia***

The Southeast Asian markets including Singapore, Hong Kong and increasingly Malaysia, will be significant markets although much smaller than the others previously mentioned. Singapore only accounts for 1.37% of Australia's total organic exports. A key factor here is the proximity to market. While Singapore has a small population, it is almost totally reliant on imported foods and because of Australia's proximity it has traditionally been a major supplier of conventional fresh produce, particularly fruits and vegetables. However, Australia's competitiveness in this market is steadily declining in light of strong competition from South Africa, South America and other countries in Asia. Also, relative to Europe and the US, consumers in Southeast Asia are less health and environmentally concerned.

Whilst we predict that organic fruits and vegetables will continue to be exported with a growing opportunity, this will be limited to some degree by the price competition and the fact that Australian product needs to command a substantial premium over and above the standard product which is a limiting factor in a very price-sensitive market.

### ***China***

In the longer term China will become a major market for organic foods. At present, the only product officially going into China is sugar. Many more products are entering China via the 'Grey Channel' via Hong Kong and as such don't register on the official import/export data. However, as the country continues to develop economically, and with the emergence of highly affluent consumers, there will be growing demand for certain organic products that are unavailable locally. Australia will not be able to compete with standard products that are produced in China, which include most fruit and vegetable products, but may be able to seek out niches for certain other organic products. There are also some remaining seasonal windows of opportunity into China. The negotiation of a Free Trade Agreement with China, which is believed to be inevitable, will fuel demand for organic foods in the longer term. The best prospects for China are likely to be processed organic foods.

### ***New Zealand***

Despite that fact that New Zealand has a strong domestic organic capability and is export focused due to its limited domestic market, New Zealand is a key export destination for Australian organic products. Australia has good market access and freight advantages to New Zealand. Cereals and processed products are key categories in this market.

## **2.2 Key organic products for Australia**

The following products have been identified as being those with the best export prospects for Australian organic producers.

### ***Cereals and cereal products***

Australia is a globally competitive producer of cereals and is well placed to be a provider of organic cereal products. The cereal category is one where demand is reported to consistently outstrip supply in key markets such as Europe and Japan. Australia's competitiveness in cereals and pulses will allow it to be competitive in baked products, noodles and pasta.

### ***Sugar***

Australia is a cost competitive producer of sugar. There is a growing demand for organic sugar as a processing input for other organic products.

### ***Meat and animal products***

Australia is a globally competitive producer of beef and lamb and a key exporter to markets worldwide. Australia's FMD and BSE free status gives it major market advantages. In the face of strong competition in these products from Argentina and other South American countries, the loss of our FMD and BSE free status could be crippling to the industry. It is likely, given the strong demand

for Australian meat, that there will be an emerging market for organic beef and lamb products and smallgoods.

### ***Dairy products***

Clearly there will be a growing demand for organic dairy products including milk, yoghurt, ice cream, cheese and other processed dairy food. However, it is questionable as to what extent Australia can capitalise on this opportunity. Whilst Australia is a globally competitive organic dairy producer, the key constraint for fresh product is distance. Most of Australia's dairy products are exported to the Asian region in powder and condensed form for further processing. It is problematic for Australia to export short shelf life chilled products anywhere beyond the Southeast Asian region because of cost and shelf life. Australia faces strong competition in the European markets from local European producers who have a distance advantage.

### ***Honey***

Australian honey is popular in Continental Europe and the UK, particularly the unique varietal types such as yellow box, etc. Australia does have a significant cost disadvantage, vis-à-vis competitors in honey, particularly Argentina, but with its uniquely Australian products it can command a price premium.

### ***Dried fruit***

Australia has traditionally been a major player in conventional dried fruit, although increasingly it is losing market share to lower cost producers such as Turkey, Greece and Iran. The limiting factor for organics is the availability of supply.

### ***Fruits***

Potentially there is a market for Australia with organic fruits, particularly citrus (navel and easy peelers), apples, pears and stone and tropical fruits. Australia has lost market share in the conventional commodity groups such as oranges, apples and pears to lower cost competition. It is also increasingly under threat in the case of stone and tropical fruits.

### ***Vegetables***

In our view there are limited opportunities to export vegetables because of the perishability of the product and the need for treatment to increase the shelf life and pass phytosanitary requirements in export markets. Australia's cost competitiveness is also an issue in this category. The only real opportunities are for counter-seasonal supply.

### ***Fruit and vegetable drinks***

There is an opportunity for Australia to be a major supplier of organic fruit and vegetable drinks, particularly in the Southeast Asian region.

### ***Wine***

In our view there are excellent prospects for organic wine because of the great success of the Australian wine industry in the UK, the US and increasingly in Continental Europe. The UK is already importing significant volumes of Australian organic and biodynamic wine. As per capita consumption of wine in these countries increases and people become more sophisticated, there will be a growing demand for organic wines.

### ***Skincare products***

There is already a major market for organic skincare products because of the desire to use natural products on the skin. Traditionally this has been a female domain but increasingly male cosmetics are growing. This trend is particularly strong in Asia, with some department stores having dedicated organic cosmetic offerings. The Australian Jurlique cosmetic brand has a strong presence in many Asian markets.



***Infant foods***

There is a great interest in organic infant foods, particularly baby formulas and baby foods. This will be particularly strong in China because of the one-child policy, which is driving parents to go to any expense to give their child the best. This is also true in other parts of Asia (e.g. South Korea) and Europe.

***Other processed foods***

There are major export opportunities for processed organic foods such as canned vegetables, frozen vegetables, sauces and syrups, spreads and jams, and oils and vinegars. Australia has done quite well with unique jams and condiments and there is no reason why this shouldn't cross over into the organic sector.

The opportunity here comes from the fact that processed foods generally have greater shelf stability and have easier market access in many instances over fresh product. However, based on the research it would appear that Australia has a limited organic processing capability and is currently unable to fulfil the opportunities available for processed organic foods to the full potential. There is limited commitment to organic food processing in many categories as a result of problems with inconsistent supply and quality.

***Animal feeds***

Whilst it is not a food product, as such, there is a strong demand for organic animal feed products, such as hay, pellets etc. Australia has a comparative advantage in this area.

# Conclusions

1. Demand for organic foods is growing rapidly in most developed countries, and is mostly in double digit figures. The growth in demand has not only been in the quantity consumed but also in the breadth and depth of range of organic product.
2. Organics has moved from being a small niche market, specialty product, to being a mainstream food category. This is reflected in supermarkets around the world having dedicated organic ranges and putting in place supply chains to grow their organic business.
3. Demand for organic products has been driven by a combination of rational and emotional factors. The emotional factors include perception of naturalness and getting back to basics, concerns about environmental sustainability and friendliness, and animal welfare issues. At a rational level the issues include long-term health and beauty benefits and concerns about chemicals in food, response to specific allergies and health complaints, and perception of better taste.
4. The growth of the industry has been constrained by a number of factors but is mainly supply related. A key factor is the availability of supply of produce being available on a year-round basis both in terms of range and choice. The price premium is also a limiting factor, with a price premium above 10% over the conventional version the demand curve drops off steadily. Other issues holding back demand include eye/shelf appeal, consistency of quality, shelf life and distance to market, shelf presence, lack of consumer confidence in the authenticity of labelling claims, and market access.
5. Based on this research, we have identified a list of factors which are likely to be predictors for the propensity to buy organic products and therefore longer term demand. These are:
  - products which have a heavy use of chemicals in their regular production systems
  - products eaten with a minimum of preparation or cooking
  - products which have naturally defined taste and flavour profiles and which are primarily eaten for enjoyment
  - products which are seen to have health and beauty benefits
  - products for infants and children.
6. Growth of the global market for organics is being complicated by the large number of regulatory and labelling schemes that exist. Whilst the industry is quickly moving towards standardised global systems, these currently aren't well recognised or accepted which is a factor slowing down global trade in organic food. Consumers lack confidence in the authenticity of labelling of organic products.
7. Another factor affecting global trade in organic products is that market access for many products has restricted phytosanitary requirements, which require chemical treatment. This compromises or negates the status of the organic product.
8. The report has identified some key determinants which can predict Australia's opportunities in organic foods. These where:
  - Australia is a cost-competitive producer in the conventional version
  - Australia has a capability and integrity supply chain
  - Australia is in close proximity to markets
  - there are seasonal windows of opportunity
  - Australia has unique and differentiated products.

9. In terms of assessing the market potential for organic foods in global markets, the report has concluded that the key factors that indicate opportunities are:
  - population size of the country
  - the total market size for organics at present
  - the rate of market growth in organics
  - the affluence and sophistication of the consumer group
  - the availability of a strong local industry with a structured supply chain.
10. The report concludes that the markets with the best prospects for Australian products include Japan, Continental Europe, the UK, the US and Southeast Asia.
11. Japan is currently the biggest market for Australian organic products and it is predicted that the growth of the Japanese market will continue. The market opportunities in Japan are mainly for processed products, beverages, juices and meat with limited opportunities for fresh and perishable products. In particular, there is only a limited opportunity for fruit and vegetables, mainly because of very strict phytosanitary requirements, together with the distance to market. Longer term it is concluded that there may be growth opportunities for organic wine.
12. Continental Europe is considered to have good market prospects for Australian organic products, particularly Germany and France. These countries are amongst the biggest consumers of organic foods and are driven by a high level of affluence and a sophisticated, environmentally and health concerned consumer base. Market opportunities here include cereals, animal products, including some meats, beverages, including wines, spices, processed products, particularly grain-based products, sugars, some vegetables, fruits and nuts. Despite the distance there are opportunities for some fruits, vegetables and nuts because of the seasonal windows of opportunity, eg: onions.
13. The UK is considered to have good growth potential for similar reasons to Continental Europe, eg: affluence, sophistication and growing consumer health and bioethical concerns. The growth opportunities in the UK include cereals, meat and animal products, beverages, spices, processed products, sugars, vegetables and wine. Examples of key processed food include dried fruit, condiments, confectionery, and wine. Opportunities for fruit and vegetable products in the UK are believed to be limited because of the distance and because of Australia's declining competitiveness in the light of competition from South Africa and South America.
14. The US offers excellent growth opportunities for processed Australian organic products because of the size of the market, the high percentage of affluent and health and environmentally concerned consumers. A limiting factor for Australia in this market is the distance and the competition from South America. As for the other countries, the key products here are likely to be processed products and red meat. Perishable and short shelf life products are not viable.
15. The best prospects in Asia include the more affluent and westernised countries, including Singapore, Malaysia and Hong Kong. Opportunities in the lesser-developed countries, including Indonesia, Brunei, the Philippines, etc. are limited but still exist. The Southeast Asian consumer is less receptive to organic products and is much more price sensitive than other markets – this limits the demand. Notwithstanding this, there are a band of affluent local and expatriate consumers who are buying organic foods. The Southeast Asian market provides opportunities for perishable products, including fruit and vegetables and fresh dairy products because of Australia's proximity to these markets making it affordable to air freight or ship by sea. These markets are limited by the size of the population and the lower propensity to buy organic products because of price sensitivity.
16. The products with the best potential for Australia have been identified as cereals and cereal products driven by the fact that Australia is a globally competitive producer of cereals.

17. Australia's FMD and BSE free status gives it an attractive opportunity to market into many countries. Australia has a comparative advantage in lamb, even in more distant markets such as the US and the UK.
18. Opportunities for chilled dairy products, including fresh and modified milk, yoghurt, ice cream, cheese, etc would be limited to markets in the closest proximity because of cost of freight and short shelf life. Opportunities for shelf stable dairy products including dry, powdered and other processed products are limited in the US and the UK because of the large supply of local product in the market and Australia's distance from these markets.
19. There is good potential for honey in many markets, particularly the unique and varietal types.
20. Australia's competitiveness in dried fruit is declining in the face of competition from Turkey, Greece and other countries with lower production costs. There is, however, an opportunity for organic dried fruit products. The issue here is the limited supply.
21. Whilst there are market opportunities for fruit and vegetables, these are reducing because of Australia's overall declining competitiveness in the face of strong competition from emerging low-cost producers, notably South Africa, South America and China. Nevertheless there are some opportunities, particularly in terms of seasonal windows of opportunity, for products such as citrus, stone fruits and some tropical fruits. Opportunities for some organic apples and pears are more likely to be confined to the Southeast Asian region.
22. There is an opportunity to be a major supplier of organic fruit and vegetable drinks, particularly in the Southeast Asian region.
23. Demand for organic wine is predicted to take off, piggy-backing on the great success of Australia in global markets, particularly the UK, the US and increasingly Continental Europe and Asia.
24. There is strong interest in organic infant foods, particularly dairy-based products. This interest is particularly strong in countries such as China, Japan and South Korea. Australia's low-cost dairy industry gives it an opportunity here.
25. The market for organic skincare products is taking off and is very strong in Asia. Australia has been successful in many markets with products like Jurlique. There is opportunity to expand this area.
26. There is a strong market opportunity for organic animal feeds, including hay and pellets, and Australia is highly competitive in this area.

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# Abbreviations

ABARE:	Australian Bureau of Agriculture Resource Economics
ACO:	Australian Certified Organic
ANS:	Australian National Standard for Organic and Biodynamic Products
AQIS:	Australian Quarantine and Inspection Service
AVA:	Agricultural and Veterinarian Authority
BDRI:	Bio-Dynamic Research Institute
BSE:	Bovine Spongiform Encephalopathy
COA:	Taiwan Council of Agriculture
DAFF:	Department of Agriculture, Fisheries and Forestry
DEFRA:	Department for Environment Food and Rural Affairs
DPI:	Department of Primary Industries
EU:	European Union
FAO:	Food and Agriculture Organisation of the United Nations
FIBL:	Research Institute of Organic Agriculture
FMD:	Foot and Mouth Disease
FTA:	Free Trade Agreement
GAIN:	Global Agribusiness Information Network
GDP:	Gross Domestic Product
GMOs:	Genetically Modified Organisms
HPB:	Singapore's Health Promotion Board
IBS:	Basic Standards for Organic Production and Processing
IFAD:	International Fund for Agricultural Development
IFOAM:	International Federation of Organic Agriculture Movement
JAS:	Japanese Agricultural Standard
JOAA:	Japan Organic Agriculture Association
KFDA:	Korean Food and Drug Administration
MAFF:	Japanese Ministry of Agriculture, Forestry and Fisheries
NAQS:	National Agricultural Products Quality Management Services
NASAA:	National Association for Sustainable Agriculture
NOP:	National Organic Program
OFA:	Organic Federation of Australia
OFC:	The Organic Food Chain
OFDC:	Organic Food Development Centre
OGA:	Organic Growers of Australia
OTA:	Organic Trade Association
QRC:	Quick Response Code
RIRDC:	Rural Industries Research and Development Corporation
SARS:	Severe Acute Respiratory Syndrome
SFQ:	Safe Food Production Queensland
SMEs:	Small and Medium Enterprises
TOP:	The Tasmanian Organic Producers
UK:	United Kingdom
US:	United States of America
USDA:	United States Department of Agriculture
WHO:	World Health Organisation