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& DEVELOPMENT CORPORATION

AUSTRALIAN LONGANS

Market Opportunity, Identification and Analysis of the Domestic Market

A report for the Rural Industries Research and Development Corporation

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Foreword

Presented in this report is a detailed analysis of the domestic market for Australian longans and a marketing plan to assist the industry to expand and improve its current market position.

Longans are an exotic fruit introduced from South-East Asia. Commercial production was 1200 tonnes in 2000, and continues to grow. This report investigates the current market for longans and potential new market segments.

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Peter Core
Managing Director
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Executive Summary

Presented in this report is a detailed analysis of the domestic market for Australian longans together with a marketing plan to assist the industry to grow its markets.

Longans are a tropical fruit originating from Southern Asia, and in 2000 production by the expanding Queensland and northern New South Wales industry reached 1,200 tonnes. Almost all fruit is sold to ethnic Asian consumers in Sydney and Melbourne through wholesale agents specialising in exotic fruits. There is a national industry organisation, Longan Association Australia, but no co-ordinated marketing system. As a result the industry lacks a mechanism that could co-ordinate supplies to support market development, control quality, carry out industry-wide promotion, develop a quality backed brand, and industry-wide grades, avoid competition between suppliers for the same market, and gather the market feedback the industry needs to develop new and unfamiliar markets.

The main market for longan is ethnic Vietnamese and Chinese consumers, usually as a fresh snack; a palate cleanser after meals at home and in restaurants; a religious offering; a gift, or canned as a dessert. This market is served by both ethnic and non-ethnic retailers. Demand for longans remains strong, although it competes with rambutans, lychees, stone fruit and grapes.

There is also a less defined market of ethnic consumers from other longan-producing countries, mainly in southern Asia, who are served by the same retail distribution as the Chinese-Vietnamese market.

Consumption by the mass market is rare, but is likely to develop as prices fall, similar to lychees and other fresh fruits and vegetables. The main reasons Caucasian are not buying longans appear to be high prices; lack of knowledge of how to eat or use; unappealing appearance; reluctance to try new foods; and an expensive luxury image for exotics. All major retail chains offer longans to the ethnic Asian market, usually with lychees and rambutans, and some are introducing them to the Caucasian market, usually displaying them with tropical and/or exotic fruits. Longans are mainly sold in small bunches, as the current market considers fruit on the stem to be freshest.

For expanding the market, while prices are high the high income Caucasian consumer who eats out and entertains is considered the next market to target — directly, through their children, and through the food service industry, with longans positioned as an attractive, new and different seasonal fruit to provide variety. As this high income segment is socially influential, demand should trickle down to the large middle-class Caucasian market as industry growth lowers prices. Consumer awareness is low, with almost no consumption. Acceptance by this market is likely, as first-time Caucasian consumers generally like longan's flavour, and would use it for fresh snacks, desserts, fruit salads, fruit platters, and fruit and cheese platters.

Longan's main competitors are lychees and rambutans. It has the advantages of a longer shelf life than both, and being easier to peel and eat than rambutans; but is less known, and its brown colouring is less appealing.

Higher wholesale prices at Chinese New Year indicate a small segment with stronger demand than the main current market. High retail prices are exacerbated by store markups to cover stock losses from rejected fruit by ethnic consumers, and low turnover in Caucasian markets resulting in low purchase. Retailers to the Caucasian market perceive longans as risky and unprofitable, and rarely stock them.

Specialist fruit and vegetable stores with extra sales service can promote longans to the wealthy potential segment, and consumers expect to find longans in such stores, so store staff need educational material. Retail chains reach a wider market and will do promotions of a new product provided they have co-ordinated and reliable supply.

While the current ethnic market is well aware of longans, reminder promotion via the ethnic media at start of season, and by participating in trade promotions such as Chinese New Year events, is recommended to maintain demand, improve competitiveness, and retain the youth as consumers.

As Caucasian awareness and experience of longans is low, promotion needs to concentrate on educating the consumer and store staff on longans. The main recommended activities are:

- trial and usage ideas through strategically timed in-store tastings and demonstrations;
- informative recipe cards for when tastings are not available;
- labelling;
- information kits for the trade;
- participation in industry promotional activities, including to schoolchildren;
- media publicity through specialist food writers and television chefs;
- publicity through the Internet;
- possibly joint promotions with other exotics such as lychees and rambutans.
- Target the food service industry through providores; food festivals attended by chefs, chef training institutions; restaurant promotions, chef competitions; and the food industry's trade press.

Key weaknesses and opportunities identified by the marketing research, which the industry needs to consider, include:

Weaknesses

- A fragile perishable fruit which darkens readily.
- Inconsistent product quality
- Inconsistent grading with lack of national quality and grade standards
- Lack of a lower priced grade
- Lack of consumer advice about use of sulfur dioxide
- Lack of information to trade on storage and handling
- Inconsistent supply
- High retail margins from stock losses
- Consumer resistance to high prices compared with substitute fruits
- Lack of product information for trade or consumer
- Little communication between producers and retailers

Opportunities

- Demand for smaller bulkpacks and possibly giftpacks
- Expand distribution to Asian communities outside Sydney and Melbourne
- Develop markets outside ethnic Asian segment, starting with higher-income Caucasian consumers who use new foods when entertaining
- Concentrate research, development and variety selection on high flesh recovery, small seed, and longer shelf life
- Provide grades and packaging to target different markets, including sample packs of exotics
- Educate the supply chain on storage, handling, and product options
- Provide reliable supply to pro-active trade
- Improve grower costs to allow lower retail prices
- Tighten grading to secure higher wholesale prices
- Use promotion to create awareness and consumption in new markets

The marketing plan in this report aims at focussing on markets with the most potential, providing affordable products to meet the specific needs and expectations of each target market. This would require developing a competitive position for longans with each consumer group, on product attributes and quality, at prices within the consumer's capacity and willingness to pay. It also recommends suitable promotional activities and distribution channels to maintain current markets and profitably develop the Caucasian market, by creating consumer awareness, and influencing them to adopt longans. Underlying all activities is the need to develop communicative relationships with supply chain participants to modify the marketing effort where necessary.

1. Introduction

This report presents the findings from a research study on the Australian domestic market for longans, conducted in 2000. Its purpose was to identify potential new domestic markets for longans, particularly undeveloped ethnic markets to target as the current market matures, and to provide the Australian longan industry with a detailed analysis of the market potential of these segments, together with possible market development strategies.

The field research was conducted in Sydney and Melbourne, the main metropolitan markets for longans in Australia. Sources of information for the report were wholesalers, retailers, provedores, consumers and food marketing specialists in both cities; literature pertaining to longans; and a steering committee of longan growers.

The research was carried out on behalf of the longan industry of Australia.

Background

Longan (*Euphoria longan*) is a subtropical tree that will crop at higher altitudes in the tropics, and is believed to be native to subtropical China or the region between Burma and India. It is from the same family as lychee, and the fruit is high in calcium and phosphorus (Vinning & Moody, 1997).

Chinese immigrants introduced longans to Queensland in 1884. They were first grown commercially in 1913, but significant commercial plantings began only in the 1970s when more commercial varieties were introduced from Thailand, China, Hong Kong, Taiwan and Florida (Menzel, Watson & Simpson, 1989).

Australian longans are produced in elevated eastern regions between the Atherton Tableland in far north Queensland and northern New South Wales. The Northern Territory is trialing tropical varieties. A large proportion of growers are members of the national producer association, Longan Association Australia.

World production

Annual world production is around 300 000 tonnes, mainly in the region bounded by Sri Lanka, China and Taiwan, with China, Thailand and Taiwan the largest producers.

Australian production

The domestic industry is in its growth phase, characterised by continuing new plantings and an increasing number of producers, but as yet no development of a processing sector.

Table 1. Australian longan supplies and exports, 1997–2001 (tonnes per annum)

	1997	1998	1999	2000	2001
Production	148	289	100	1200	500 (forecast)
Exports	Trials	10 (approx.)	Nil	10 (approx.)	

Source: Longan Association Australia

Fluctuating volumes from year to year reflect biennial bearing and seasonal factors. Technical research into annual bearing, small fruit size and postharvest treatment is being carried out to improve yields, reliability and product quality.

Most Australian longans are sold through the Sydney and Melbourne wholesale markets, though some are marketed in Brisbane. In recent years small volumes have been exported, mainly to Hong Kong and Singapore. However, in 2000 Thailand developed production techniques to extend its harvest season into that of Australia, and exported lower-priced Thai longans to markets where higher-priced Australian product could not compete. As a result almost all the Australian industry's latest harvest was sold in the domestic market.

The industry has not yet carried out active promotion, uses little branding, and has not adopted industry-wide quality standards or gradings.

Longan is consumed mainly fresh or as canned flesh (imported to Australia for sale through Asian food stores and restaurants). It can also be quick-frozen or dried in or out of its shell.

Research issues

The industry has been concerned that increasing longan production will overtake demand from the current Asian ethnic market segment, and that it needs to develop new markets ahead of saturation of the current market.

Research objectives

The research for this report had the following objectives:

- to identify a market segment or segments with requirements that could be supplied by longans;
- to determine whether there is an awareness in these segment/s that longans could meet such requirements;
- to determine the likelihood that these segment/s would purchase longans;
- to determine what distribution changes would be needed to reach the segment/s in question;
- to identify the communication channels by which the industry could reach the segment/s with promotional messages;
- to determine the demand for longans.

Methodology

A preliminary study of the longan industry was carried out through desk research, and through interviews with members of Longan Association Australia, the trade and consumers.

The desk research involved reviewing industry journals and statistics from the Australian Bureau of Statistics (ABS).

Trade interviews were conducted with wholesalers, supermarket buyers, independent fruit and vegetable retailers, hotel buying managers, provedores, a marketing consultant and marketing managers from the Sydney and Melbourne wholesale fruit and vegetable markets and Melbourne's Prahran Market. Ninety-three consumers were interviewed, and given taste testings, in six fruit and vegetable stores across Sydney.

The research findings were used to produce a marketing plan to develop current and potential market segments.

2. Research Findings

Market segments

Ethnic Asian market segment

Size and profile
The current market, across all income and geographical areas, is comprised almost entirely of ethnic Vietnamese and Chinese, for whom longans are a traditional food, familiar from the country of origin and eaten since childhood. Fresh longans are also consumed in ethnic Asian restaurants.

The potential size of this market can be gauged from ABS statistics from the 1996 census, which indicate that Sydney had 190 559 and Melbourne 109 234 people born in China (excluding Taiwan), Hong Kong, Singapore and Vietnam.

There is a subsegment of Chinese consumers who buy longans only at Chinese New Year.

The typical shopper is a middle-aged to older middle income female, not in paid employment, buying for the family, and buying small volumes frequently to use the same day. Her main shopping days are Thursday, Friday, and Saturday.

Product usage
Fresh longans are eaten as snacks and occasionally as an ingredient in Asian-style dishes, and canned longans as dessert. Longans are also one of the fruits traditionally eaten as a palate cleanser: acid fruits such as citrus are first used to loosen any fatty foods, then followed by juicy fruits such as longans and melons. The Chinese also use longans for religious purposes, offering them as prayer fruit at the altar at Chinese New Year. Longans bought for this purpose are sometimes eaten and therefore need to be edible. Chinese consumers also use longans as a traditional gift.

A Chinese consumer in Sydney commented that in China, because longans are expensive they are traditionally consumed only by women who have been ill or have recently given birth, to restore their strength.

Demand and seasonal trends
Trade interviews found conflicting opinions regarding the outlook for longan demand in the Asian market segment in Australia. However, the strongest demand was identified as the period leading up to Chinese New Year. Demand falls in the week after Chinese New Year as retailers and consumers take holidays, then resumes for the remainder of the season (the season is January to May).

Factors identified as contributing to reduced future demand include:

- a decline in the number of Asian retailers buying longans — now down to around 30 retail buyers in Sydney;
- the fact that Australian-born children of Asian immigrants are moving away from consuming traditional foods such as longans, although there is still demand from this generation.

Factors identified as contributing to an increase in future demand include:

- the presence in most Australian cities of an ethnic Asian community;
- the fact that more agents want to handle longans to serve the growing ethnic Asian population;
- continuing strong demand from this population for traditional and familiar foods such as longans.

However it appears unlikely that longan consumption by individuals will rise because of a belief in the Chinese culture that excessive amounts of longan overheats the blood.

Competitiveness
The main competitors to longans as an eating fruit are lychees and to a lesser extent rambutans, although the Chinese market tends to prefer longans over both lychees and rambutans. Ethnic Asian retailers usually sell longans, rambutans and lychees at similar prices. As a prayer fruit for Chinese New Year longans compete with rambutans, citrus, custard apple, lychees, pomelo, soursop and breadfruit.

The short season for longans was perceived by some to be an advantage as wholesalers tended to promote it because of its limited supply period and because it provided variety from fruits available throughout the year. Others said today's consumer expects a fruit to be available all year round.

Potential new ethnic market

Size and profile
Other ethnic consumers familiar with longans are believed to be already buying them, either because they live in areas where longans are available or are travelling to 'ethnic' areas to shop in familiar surroundings. Ethnic Indian, Malay, Sri Lankan, Filipino and Indonesian consumers tend to be more price-driven than those of Chinese and Vietnamese origin, and while some shop in their local area, most generally seek out cheaper fruit — for example from Paddy's Markets at Flemington, Sydney, and the Victoria Markets in Melbourne.

Outside the Chinese countries and Vietnam, desk research identified the countries most likely to have substantial domestic markets for longans to be Burma, India, Indonesia, Japan, Laos, Malaysia, Philippines, Sri Lanka and Thailand. Of these the ABS reports that in 1996 residents of Sydney and Melbourne included respectively 122 080 and 199 559 people born in India, Indonesia, Malaysia, Philippines, Sri Lanka and India, indicating a substantial ethnic segment outside the main Chinese and Vietnamese market. The geographic distribution of these ethnic segments in the two cities is shown in Appendix 4, and confirms that areas with these ethnic populations usually also have a substantial Chinese and/or Vietnamese population.

Demand
According to the trade, demand in this segment is generally met by current distribution, so targeted market development is better directed towards the much larger Caucasian market. However, according to a Sydney fruit and vegetable retailer and a provedore, the industry should concentrate on expanding this segment, as it is already familiar with longans, as current prices are too high to develop the Caucasian market.

Potential Caucasian market

Size and profile
Sydney and Melbourne represent large potential markets, with populations of 3 350 556 and 3 077 422 respectively according to the 1998 census.

- According to the trade interviews carried out for this report, they recommended initially targeting the 'non-ethnic' market, while volumes are lower, and the high-income consumer — typically couples with two disposable incomes who like to eat out, entertain at home occasionally, and entertain corporate guests. Price would not be a barrier in this segment, where quality is valued more. Such consumers are likely to:
- live in Sydney's eastern suburbs, e.g. the lower and upper North Shore and the inner west; ; 'innovative' areas such as Sydney's Balmain and East Sydney; Melbourne's higher-income inner south-east region that includes Toorak, South Yarra; Prahran, and Melbourne's Preston and South Melbourne;
- have a lifestyle of keeping up with trends and wanting to be first with everything;
- shop at specialist retailers, such as boutique fruit and vegetable retailers on Sydney's North Shore and in Melbourne's inner south-east region — for example at Prahran Market, where the typical

shopper is a female professional, English-speaking, aged 32 to 55, with a higher income; lives in one of Melbourne's wealthiest suburbs; buys fruit and vegetables at Prahran market at least weekly; and wants higher quality food, variety and personal service (Prahran Market, 2000, *A Profile of Prahran Market Consumers*).

This sector is socially influential, so awareness of longans among such consumers would be likely to trickle down to the large middle class Caucasian market as prices came down with increasing volumes. Appendix 8, showing Sydney and Melbourne's areas with highest household income according to the Australian Taxation Office, indicates the areas most likely to prove responsive to initial market development.

It was recommended that this sector be targeted through both the eat-at-home segment and the food service industry. Also, children should be targeted because they are heavy fruit consumers — a tendency encouraged by parents — they like sweet fruit, and they tend to take food at face value. Awareness and recognition in children would stimulate demand from their parents when shopping. (Trade and marketing specialist interviews, 2000)

As sales volumes grow the recommended targets are:
- the younger and more adventurous shopper who tends to shop in pairs and families on the weekend;
- middle class families who would buy larger quantities for the family, in wealthier areas such as Chatswood in Sydney.

At present there is at best only limited consumption of longans by consumers outside the traditional markets. The reasons given for this were lack of awareness, unappealing appearance and flavour of the fruit, high price, and reluctance to try unfamiliar fruits. There is also competition from cheaper fruits and more attractive and better known fruits such as lychees.

The survey of Caucasian consumers found that only 13% recognised the fruit as a longan; 25% thought it was a lychee; 36% had no idea, and some guessed that the samples shown were fruits, nuts or vegetables. Only 25% had noticed longans before, mainly at fruit stores, ethnic greengrocers or overseas, despite the fact that longans were being sold at most of the venues where interviews were conducted. Ten percent had tasted longans but only one person had ever bought them — at a Vietnamese store at Cabramatta. This indicates low awareness and knowledge and almost no uptake.

Demand trends
For the moment longans are likely to remain a minor line for stores outside non-ethnic Asian areas that seek to offer variety to the consumer. Slow sales are resulting in product waste and markdowns, with a result that stores are not getting a sufficient return on investment. Two upmarket retailers in Sydney and Melbourne have ceased stocking longans after unsuccessfully trialing them for several years. However some supermarkets and specialist stores have found that consumers will buy longans if they are given a tasting. (Trade interviews, 2000)

One agent has found that Caucasian retail buyers will themselves eat longan, but consider it too expensive to buy for their own consumption, even at $3 to $4/kg wholesale.

According to one major retailer, longans are likely to become a 'mainstream' fruit as the price comes down, as have lychees and avocados. According to a wholesale agent they should follow the same path as lychees, which have grown from an infant industry to a mainstream item over a 15-year period. He said lychees currently sell better than longans because they look better, are easier to handle, have a more acceptable taste, and are known to consumers through the canned fruit served in ethnic restaurants, and through retail promotions and wide distribution. The main barriers to increasing longan consumption were thought to be lack of recognition; lack of knowledge of how to eat or use them; consumer reluctance to try new foods; and a younger generation unadventurous about such foods (Trade interviews, 2000).

Factors suggesting that demand for longans may grow include:

- their short season, which would provide interest and expectation without giving the palate time to become jaded;
- the fact that when Caucasian consumers were given a tasting of longans 33% liked it strongly (a potential market), 50% somewhat (a possible market), and only 6% disliked it (11% had no opinion either way) (Consumer survey, 2000);
- the fact that following the tastings, 24% of respondents said they would definitely buy longans and 36% probably or maybe. (Another 24% said they probably or definitely would not and 6% were undecided.) Likelihood of purchase was consistent across age groups and sex. The broad range of reactions — from 'very tasty' and 'strong' to 'not much flavour'; 'too sweet' to 'savoury'; 'similar to lychees' to 'unusual and distinctive'; and 'refreshing' to 'not refreshing' — indicated no specific barriers to the attributes of longans. (Consumer survey, 2000). The results indicate that demand for longans is likely to expand provided consumers are given an opportunity to experience their taste;
- Australians' changing tastes as they travel and encounter Asian fruits;
- the popularity of Thai food, with consumers not only eating it in restaurants but cooking it at home;
- growing Caucasian participation in Chinese New Year.

Factors inhibiting demand include:

- relatively higher prices;
- competition from plentiful better-known fruits, including stonefruit and grapes;
- the fact that (according to a wholesaler) in a well-stocked fruit store with an attractive display, consumers ignore exotics because they are usually displayed as a specialty line, which gives them an image of exotic and high-priced. As a result consumers are likely to try them only for entertaining;
- comments by several consumers that longans are unattractive, even ugly — indicating that they lack visual appeal to consumers (Consumer survey, 2000).
- limited distribution outside localities with ethnic Asian communities.

The mass market tends to buy bananas, then apples and oranges, then stonefruit and grapes, and considers fruit a luxury, particularly exotics (Trade interviews, 2000).

Product usage

Consumers identified the following ways in which they would use longans: fresh (47%), as a dessert (19%), in fruit salad (11%), in fruit and cheese platters (9%) and in fruit platters (5%) (Consumer survey, 2000).

A food specialist suggested that the fresh, non-acid taste of longan made it an ideal palate cleanser, for example after seafood or spicy food.

Competitiveness

Fifteen percent of consumers interviewed commented that they preferred lychees to longans, while only two said they preferred longans to lychees (Consumer survey, 2000).

Potential food service market

Size and profile

Provedores are supplying longans to mainly ethnic restaurants, and are in a position to promote them to the wider food service industry.

The food service industry tends to introduce consumers to new foods. Recommended potential targets are:

- the fruit platters offered by five-star hotels;
- fashionable restaurants with innovative customers who seek new food experiences. While the chef of one high-profile Sydney restaurant was unaware of longans, the restaurant serves individual fruit platters, uses rambutans, and is interested in offering customers new foods;
- institutions such as TAFE colleges that offer training courses for chefs;
- innovative stores such as Coles' new category 'Let's Eat' shop, wine bar and delicatessen in Prahran market serving the Prahran region's innovative and high-earning population;
- 'trendy' restaurants with a regular and high-earning clientele in city areas of Sydney and Melbourne and upmarket suburbs such as Sydney's North Shore, Balmain and East Sydney, and Melbourne's Southbank, Chapel Street and Brunswick Street;
- better class restaurants, and large hotels with smorgasbords.

Demand trends
Factors indicating likely demand for longans in the food service sector are:
- the shift among consumers from traditional home-cooked dinners to regular eating out;
- the fact that when eating out consumers seek new experiences and often eat desserts;
- the fact that chefs, though often unadventurous, like to use exotics;
- the growing number of Thai restaurants where longans could be offered to follow spicy food;
- a tendency among city consumers (according to a marketing consultant) to pass up rich desserts in favour of fresh fruit.

(Trade interviews, 2000)

Price would probably preclude the use of longans as an ingredient. However, according to one chef, in the case of exotic fruits, where only small quantities are used and freshness is essential, quality is more important than price.

Competitiveness
Longans will have to compete against lower-priced commonly used fruits such as melons.

Recommended positioning
Exotic/novel
- as a new, 'trendy', interesting and novel fruit;
- as a seasonal alternative to mainstream fruits;
- as Australian-grown, clean and healthy;
- as having eastern origins, and suitable for eating with Asian food, for example Thai dishes;
- as an exotic tropical fruit. (A similar survey for rambutans asked consumers their opinion on the term 'exotic'; 72% liked it; 14% thought 'exotic' indicated expensive; and 20% preferred 'tropical'.)
- as giving an exotic touch to standard dishes such as salads and fruit platters;
- as an Australian fruit in Australian food settings through restaurants selling kangaroo and crocodile, catering to tourists, visitors and their local escorts;
- as paired with a suitable food as a dessert, e.g. in a joint promotion with another product such as icecream; or with an already popular fruit such as melons. However, pairing longans with a luxury food should be avoided, as this can suggest that the pairing is essential and give an expensive image.

Palate cleanser
- as delicious and refreshing; the ideal palate cleanser following a meal; or between courses like a sorbet;
- as similar to the more familiar lychee. In the consumer survey, consumers frequently compared longan with lychee, particularly on similarities in flesh (40%), flavour (5%), and external appearance. Six per cent of respondents suggested describing longans as similar to lychees;

- for restaurant desserts and fruit platters, until prices are low enough for longans to be used as an ingredient.
- as complementary to a 'trendy' alcohol such as gin, supported by a winemaker explaining how the palate functions and reacts to eating longans between drinks;

General benefits
- as Australian-grown, clean and healthy;
- as nutritious;
- as convenient and simple to peel and eat, and versatile to use;
- as a sweet, juicy, and a small fruit.

Product

A product description is provided in Annexure 2.

Preferred product attributes
The ethnic Asian consumer's main buying criterion for longans is large size. Prices for large fruit are double those for small, even if the small fruit are a preferred variety. According to one agent, Australian Chinese expect large fruit because China's varieties are typically 4 cm in diameter, the smallest of them being about the size of Australia's largest. Retail buyers will not purchase small longans if large ones are available, so small fruit sells slowly. According to two major agents, the main cause of large volumes of small longans (mostly the variety *Kohala*) is inadequate pruning while bunches are growing. (Trade interviews, 2000)

Good flavour is considered the second key buying criterion. The current market wants fruit with good flavour, sweet and not tart; with firm, crunchy, juicy, even watery, texture; and with a small seed. Ethnic Asian buyers and consumers always taste-test at least one longan before buying to check flavour, sweetness, and seed size. Vietnamese buyers distinguish small-seed from large-seed varieties, although most of the fruit supplied is small with large seeds, the seeds accounting for 60% of the fruit volume in some varieties. Immature early fruit and overmature late fruit supplied to extend the season are not wanted in the market. Even at Chinese New Year, when longans are not necessarily eaten if used as prayer fruit, they should be mature, otherwise Chinese customers will buy only tiny quantities. (Trade interviews, 2000)

Although appearance is less important than flavour, the fruit needs to look fresh and have clean, bright, light-coloured green-tinged skin. Asian buyers will buy large green-tinged longans by the pallet. The market will also accept light brown skin (often caused by sulfur dioxide treatment), while some retailers expect the skin to have this brownish-yellow colour. While dull, dark skin is considered a sign of ageing, it is also caused by packing the fruit wet, and some perfectly edible fruit was downgraded in 2000 because of its dark skin. Skin preferably should be free of blemishes which, while not a critical factor, tend to accentuate longans' unattractive appearance. (Trade interviews, 2000)

The quality of longans supplied to markets needs improving, particularly at each end of the season. Quality ranges from satisfactory to unreliable. In the 2000 season it was very inconsistent and buyers, including large retailers, had to inspect every box. One large retailer ceases handling longans during the last month of a season due to low quality and shortage of panicles (small bunches). (Trade interviews, 2000)

The preferred varieties are *Biew Kiew* due to its large, firm, sweet, juicy, good eating fruit; *Champoo* for its good quality sweet fruit; and *Haew* for eating quality and large size. *Kohala*'s smaller size, lower proportion of flesh to seed, thinner skin and inferior flavour mean that it can compete only when *Biew Kiew* and *Champoo* are unavailable in the marketplace. However, one retailer felt that because consumers will pay reasonable prices for *Kohala*, they consider its flavour more acceptable than some varieties. *Homestead* is the least preferred variety, and is difficult to sell. According to agents, the industry is producing too many inferior varieties, which it should eliminate as unwanted fruit will not sell at any price. While Vietnamese consumers want familiar varieties, and their buyers know and buy by variety, growers often fail to label packs by variety, particularly in peak season where several varieties are competing in the market. Other ethnic consumers and retail buyers appear to be unaware of the differences between varieties, though they recognise small-seeded lychee varieties. (Trade interviews, 2000)

Demand is shifting to first grade longans and slowing for those of lower grade. The trade wants better grading, and preferably volumes in each grade (although acknowledging that this is difficult for smaller farm packsheds). One major retailer recommended grading fruit by size into Class 1 and Class 2, with a sticker such as a red dot to subtly indicate premium grade as a guide to buyers.

The current market requires longan on the stem, and preferably the bunch, to signify freshness, so retailers also want fruit on the stem to protect their reputation for quality. The industry supplies most fruit on the stem, as subpanicles (small bunches), which extends the shelf life while reducing packaging costs. The large leafy bunches supplied for Chinese New Year meet consumer requirements; outside Chinese New Year demand for large panicles has been slow, but shows signs of growing. According to one retailer, panicles should be acceptable to Caucasian consumers because they are more attractive than loose longans, they provide a strong point of difference, and lychee panicles are proving acceptable (Trade interviews, 2000). Fifty-two per cent of Caucasian respondents commented favourably on the panicle; 27% disliked it; and a few respondents were concerned the stem might tear a plastic bag (Consumer survey, 2000).

For everyday use the current consumer wants small, tight, dense and well-presented bunches of large fruit that sit well both on display and on a fruit platter, although some variability is accepted at the beginning and end of the season. According to one agent, fruit of a consistent, medium size improve the appearance of a panicle, while another agent considered size variation to be irrelevant because shoppers take only the larger fruit from the panicle. Outside Chinese New Year, panicles that have leaves and a heavy stem are not acceptable. Consumers resist paying for the stem by picking off the fruit and leaving the stem, together with any loose fruit. Retailers perceive this as waste and therefore lower the fruit price of woody panicles. According to one boutique retailer, the stems left behind also make displays difficult to maintain. Vietnamese retailers often buy mixed packs with large bunches which they cut down into panicles, re-tie into 0.5 to 1 kg bundles, and usually display suspended over the counter. However, the market is receiving a substantial amount of stem, resulting in constant complaints to wholesale agents from retail buyers. (Trade interviews, 2000)

While loose fruit with stem is supplied, generally in bulk packs, there is no demand from the high quality market, and because large volumes drag down price drastically the market may refuse to accept it. However, demand is stronger in more price-sensitive markets where some customers consider it better value than fruit with stem, and retailers usually bag it and discount it for quick sale. Suggestions for marketing loose fruit include a different pack rather than colour-coding, and use of mechanical grading. (Trade interviews, 2000)

While berry shatter (fruit dropping off the stem) causes a significant incidence of stemless fruit, there is no demand for loose longans without stems, so most agents do not want to handle them. However, according to one agent loose fruit without a stem has potential as a second grade, and two major agents use it as giveaways to promote fruit on the panicle. In Thailand resistance to stemless fruit on freshness grounds is declining due to increased refrigeration and consumer sophistication (Alexander, Scholefield & Frodsham, 1982).

Trimming of nubbins (small undeveloped fruit) and flower stalks needs improving, as their presence detracts from the panicle's appearance, and at the same time increases its weight (Trade interviews, 2000).

Sulfur dioxide postharvest treatment
The trade accepts sulfur dioxide treatment as preventing the skin from darkening, and extending flesh quality for at least two weeks; one agent receives orders only for treated fruit from the Vietnamese market, and his buyers appear to like the yellowing effect on the skin. Some agents have noticed a slight taint to the flavour (though less than in the early days of the treatment), which they expect consumers and buyers, particularly ethnic Vietnamese, to detect and resist. Larger retailers accept the treatment, provided it complies with a recognised quality assurance system such as SQF, but expect package labelling to advise consumers of the use of sulfur dioxide treatment, as in the case of grapes, as required by the Food Standards Code of the Australian New Zealand Food Authority (ANZFA). (Trade interviews, 2000)

Agents said that consumers and their retail buyers were unlikely to be aware that sulfur dioxide is used to treat longans, and expected strong resistance to treated fruit, particularly from the ethnic Asian market because of apparent negative attitudes to chemical treatments of food generally. Two ethnic Chinese consumers were pleased to find that longans were grown in Australia as they thought fewer chemical treatments would be used on them than on fruit imported from other countries (Trade interviews, 2000). A consumer from Hong Kong said Hong Kong shoppers will not buy sulfur dioxide-treated fruit as they do not consider it fresh and healthy (Consumer interviews, 2000).

One agent expects Australia to follow bans by the United States and Singapore on the use of sulphur dioxide (although treated fruit trucked from Thailand is retailed in Singapore).

Packaging
Longans are considered difficult to pack because the stems tend to puncture and damage the fruit. Packaging needs to be improved to meet consumer requirements. (Trade interviews, 2000)

The preferred bulk pack is the 8 kg plastic basket, which wholesalers described as 'the industry standard' and 'the container of the future' because it is the ideal size for sub-panicles; minimises handling; is durable; generally resists crushing during transport (although one retailer has received it squashed); stores well while allowing air circulation to maintain top quality fruit in perfect condition; allows sulfur dioxide treatment; has superior appearance and displayability; is recyclable; can be inspected from all sides without opening; can be used for retail display of panicles as 'loose sell', either in the carton or from an inverted carton; and can be sold whole to some consumers. However, the current fastenings have resulted in pilfering and in swapping of fruit between trays, and make it difficult to tie the lid back properly after inspection without revealing that the tray has been opened. (An Asian buyer will not buy a tray that has been opened and rejected by another). Current labelling does not describe the contents, so buyers have to open the container. Another disadvantage of the 8 kg basket is that because of its size it can be too expensive for consumers wanting a take-home pack. (Trade interviews, 2000)

The 5 kg tray is also acceptable, and also considered by some to be the industry standard. Advantages include suitability for sub-panicles; minimising of handling; retail display as 'loose sell' in the carton (or an inverted carton); and the fact that it is a more economic take-home pack. However it is more difficult and laborious to pack than the 8 kg trays; is prone to crushing during transport and handling; accumulates condensation which blackens the fruit; generates heat while reducing air flow, thereby reducing fruit quality and shelf life; and is prone to leaking. The trade expects hardened cartons such as the 5 kg mango tray to be used for expensive fruit. The trend among Australian consumers towards buying small quantities more frequently, to ensure fresher fruit, indicates that demand for bulk packs is unlikely outside heavy consumers in the ethnic Asian market. (Trade interviews, 2000)

There is demand for a smaller, flatter box, preferably holding no more than 2 kg of fruit, to allow easier handling and permit retailers to buy small volumes more often and so reduce waste in developing markets with slow turnover. (Trade interviews, 2000)

Demand for loose longans is likely to continue among ethnic Asian consumers, who prefer to select their fruit (Trade interviews, 2000). Caucasian respondents considered an open display of loose fruit preferable (38%) or acceptable (15%), mainly because it allows choice of fruit and volume, and looks natural and fresh. However 11% disliked the open display, and a further 20% suggested that it did not enhance the fruit's unattractive appearance. (Consumer survey, 2000)

There has been little pre-packaging, except an occasional 250 g punnet or 1 kg bag of loose fruit sold in ethnic stores to prevent shoppers picking over the fruit. However, one retailer foresees some potential for a small punnet — for example 100 g — for the ethnic Asian market.

Australian retail chains are reducing pack sizes to meet the strong growth in demand for punnets of delicate fruits such as strawberries, resulting in better protection of the fruit and larger unit purchases. The tidier appearance of pre-packs has some potential in the emerging Caucasian market; possible examples include punnets, plastic trays, Netlong nylon mesh bags with swingtab labels (which would depend on consumer reaction, and should be clear, not coloured), or snackpacks with other fruits, but not very small packs. Whether retailers would offer pre-packs of longans would depend on whether the fruit could be packaged successfully, and whether consumers would resist the higher price, as they have with other products. According to a food marketing specialist, while retailers offer packaging for variety, the consumer's conscience tends to trade a desire for the freshest product against overuse of packaging.

Large retailers expect growers to supply all panicles and loose fruit in bulk packs, e.g. 12 kg, for the retailer to repack into pre-packs and retain any premium for value-adding; this saves time and expense, limits the breakdown of loose fruit, and reduces the risk if consumers reject pre-packs.

In the market survey 49% of Caucasian respondents preferred the punnet for its superior presentation, appeal and convenience, while another 10% said they liked it; 13% disliked it, and some commented that it would be dearer and a waste of unnecessary packaging, and would not enhance the fruit's appearance (Consumer survey, 2000).

A special Chinese New Year pack such as a gift box and/or a religious box might find some demand, and might give a competitive edge. Similar packs for other fruits have sold —for example red gift boxes for mangoes to Chinese consumers wanting to impress friends with good quality and good presentation, and a cherry pack retailed by stores in ethnic areas; however, demand has been falling for gift packs. One retailer who has sold mango gift boxes suggests a 1 or 2 kg box in a rich Asian colour, similar to that used for lychees. Any new package design should be developed in consultation with retailers from Cabramatta and Bankstown, as they are the main retailers to Sydney's Chinese New Year market. (Trade interviews, 2000)

There is a lack of labelling, particularly on plastic trays. As a result buyers have to examine the contents of trays, or receive presentations such as mixed boxes containing large bunches, that do not suit their consumers or display facilities. Retailers recommend that for labelling to be effective it must be displayable in the target retail outlet, and kept small yet visible.

Cool chain

Longans are highly perishable, and need improvements to the cool chain, starting with pre-cooling before shipment as packs often contain fruit of varying age (Trade interviews, 2000).

Road and air transport are usually delivering longans to the markets in good condition. However, late season fruit trucked to Sydney has arrived with brown or black skin, probably because temperatures were too low, causing condensation and blackening. (Trade interviews, 2000)

Longans are being cool-stored in a variety of temperatures, according to a sample of the temperatures of agents' and retailers' coolrooms and retailer's display wall cases: temperatures range from 5° to 10°

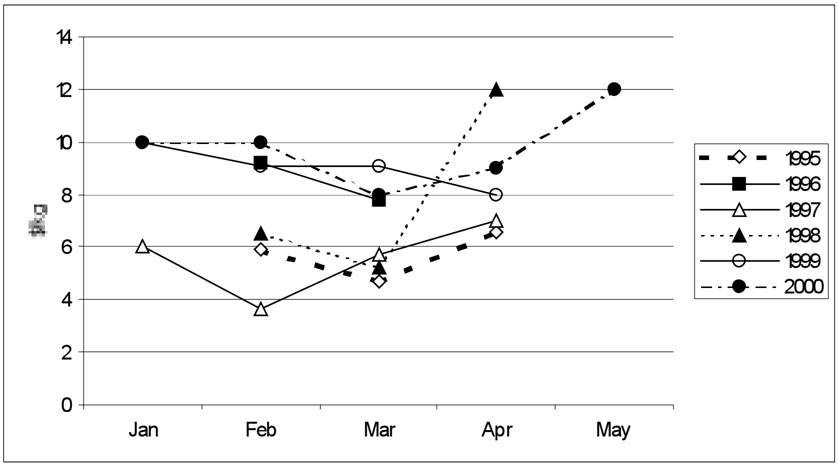
Celsius for untreated longans and from 8° to 15° for longans treated with sulfur dioxide. (Trade interviews, 2000)

There is a lack of information on storage, handling, quality standards and cool chain management across the distribution system. The industry could work with wholesalers to distribute such information on the carton; in information pamphlets (approved by retailers) within the pack to educate all store buyers and handlers who open the box; on posters in packing areas; and perhaps in the stores themselves. (Trade interviews, 2000)

Branding
Branding is proving an advantage to some growers, for example by providing price premiums, and in one case leading to pre-ordering of a grower's fruit. It is less important where growers use a joint packing shed and lose control over their product quality. (Trade interviews, 2000)

Pricing

Figure 1. Average monthly prices for longans, Sydney Wholesale Markets, 1995–2000



Source: Moody, T., *Fruit, Vegetables, Cut Flower, Asian & Exotics, Prices and Receivals*, *Sydney Market*, NSW Agriculture, 1994–95, 1996–97, 1997–98, 1998–99, 1999–2000

The market pays higher prices (up to $20/kg retail), for the first longans into the market, at Chinese New Year, and when volumes decrease.

The average price has remained stable. However, wholesale prices dropped in 2000 to $3/kg when a new merchant entered the market and targeted the ethnic segment.

As the lychee industry has grown prices have fallen by 50%, and as a result sales have grown exponentially. According to the product life cycle theory (Kotler & Armstrong, 1988, p. 288) longans are likely to follow the same course as supply increases.

Observation of various retail outlets in Sydney and Melbourne during peak season (March) in 2000 (see Appendix 5) found the usual price for longans to be $7–$8/kg for both sub-panicles and sub-panicles tied into bundles. A supermarket in a Caucasian area had a single tray of poor quality fruit at $20/kg, while another supermarket, also in an upmarket Caucasian area, had longans retailing at $7.99/kg.

The current market for longans is quality-conscious and price-sensitive.

Higher prices of $9–$10/kg are paid for large green-tinged longans, on the stem. Lower prices of $7–$8/kg are paid for small, brown-skinned longans, and around $3/kg for plastic bags of loose fruit (Store observations, 2000).

The Chinese market is prepared to pay higher prices at Chinese New Year, indicating relatively inelastic demand for longans as prayer fruit and gifts. However, in the 2000 season strong competition from other traditional fruits, combined with large volumes of longan in the market, brought prices down, despite good demand. Also, Chinese consumers will pay high prices only for fruit that is edible, and will purchase only very small quantities if longans are too immature to eat. (Trade interviews, 2000)

Prices tend to be lower at stores with large turnover (i.e. ethnic Asian stores and stores with an ethnic clientele) than in stores serving other market segments. However, some retailers, particularly in strongly ethnic areas, also mark up longan prices to compensate for stock losses from unsold stem and smaller fruit (around a fifth of the volume). (Trade interviews, 2000)

Prices are usually higher in stores targeting the Caucasian market, reflecting price mark-ups to cover stock losses from slow turnover. This appears to be one of the main barriers to crossover into this market, since the higher prices give longans the image of a luxury fruit. According to a retailer, Caucasian consumers observed tasting longans in Sydney fruit and vegetables stores did not buy them, and consumers who have bought longans in Asia are not prepared to pay Australian prices. The trade recommends targeting consumers who have high incomes and value quality over price. (Trade interviews)

Also, retailers are reluctant to re-order a loss-making product, inhibiting the development of retail distribution to other market segments.

The Asian ethnic market is considered price-sensitive in all areas. Longans sell well at $6.99/kg, and consumers will pay higher prices for a short period. The price ceiling appears to be around $9.99/kg, above which the more price-sensitive consumer tends to switch to other products such as canned lychees, and popular cheaper fresh fruits e.g. stonefruit and grapes. There is a particularly price-sensitive sector that will buy lower grade longans (Trade interviews, 2000). One retailer in a strip of ethnic Asian stores was observed offering 1 kg bags of loose fruit at $3, as well as longans of higher quality.

According to one agent, consumers understand that prices fluctuate for seasonal fruits, and match purchases to their budgets, so the current 'boom and bust' in prices will continue. Another agent recommended that coordination of supplies is needed to avoid severe price swings. High prices and inconsistent pricing are barriers to market development for longan, particularly for supermarkets, which need an everyday low price to attract new consumers. Longans should become more saleable as prices fall, for example through lower production costs from larger-scale farm production, as happened with lychees, where retail prices fell from $23 to $10/kg and sales grew strongly as a result. Meanwhile, the trade recommends targeting consumers who have high incomes and value quality over price. (Trade interviews, 2000)

Introductory pricing was recommended to develop the Caucasian market, and one major retailer has used discounting to support a program of in-store product demonstrations.

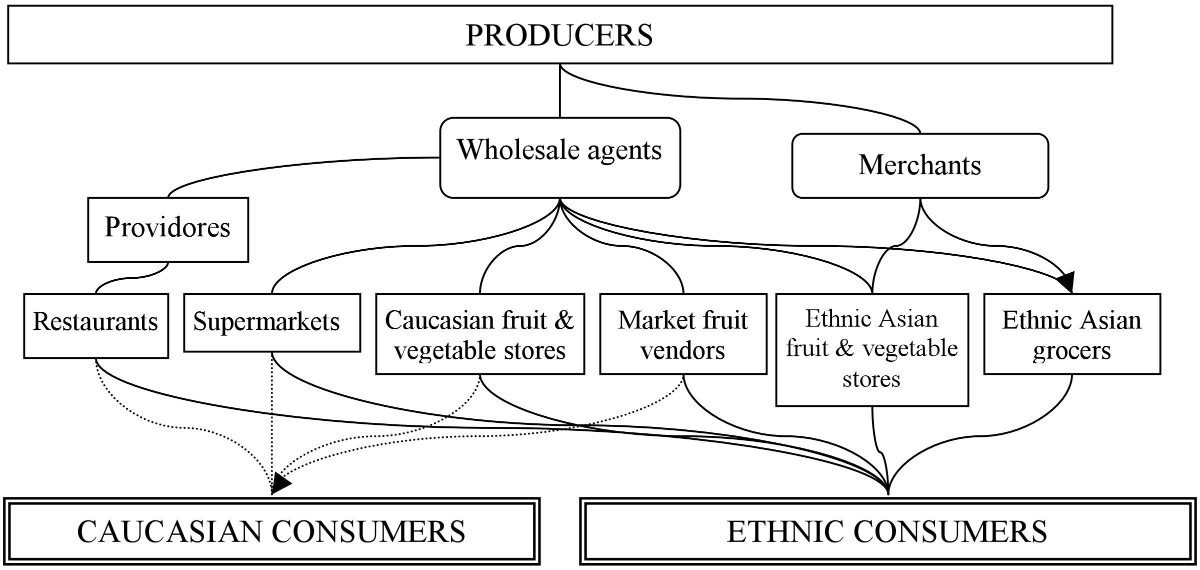
In the food service industry, use of longans has not expanded beyond ethnic restaurants. Relatively high prices are restraining some hotels and restaurants: for example a city hotel hosting ethnic Asian visitors will not include longans in its menus unless prices drop to prices similar to those of melons. However, according to a provedore, while prices would probably prohibit use of longans as an ingredient, they would not prevent their use for desserts and fruit platters. (Trade interviews, 2000)

Most Caucasian consumers were unaware of the peak season price for longans. For sub-panicles, three said longans would cost $5/kg, four $6 and four $7, while for 250 g punnets three estimated $3 and two $4. (Consumer survey, 2000)

Distribution

The following diagram depicts a conventional indirect distribution channel for longans in Sydney and Melbourne in the 2000 season.

Figure 2. Distribution channel for longans in Sydney and Melbourne, 2000 season



Most wholesale agents handling longans specialise in exotics, including rambutans, lychees, mangosteen, durian, persimmon, breadfruit, jackfruit, and less well-known fruits. Longans are a major line for only a few agents, and some buy from specialist agents in the market only to fill orders. Some have been handling longans for many years while others started only in the 2000 season. According to one agent, more agents want to handle longans to access the growing ethnic Asian market.

Some wholesale agents supply 70% to 90% of their longan stock to Asian fruit and vegetable retailers and grocers in predominantly Vietnamese areas such as Sydney's Cabramatta and Bankstown suburbs and in Melbourne's Richmond, and in Paddy's Markets on Fridays at Flemington, and at Haymarket on Friday and Saturday. The balance is sold through non-Asian fruit and vegetable retailers with mixed Asian and Caucasian clientele; supermarket chains, mainly those serving Asian customers, and buying longans through their approved suppliers; and provedores. In 2000 a broker also supplied ethnic retailers in Sydney and Melbourne.

Longans are sold through all the retail chains, usually in areas with an ethnic Asian population. One major chain offered longans to all its Sydney stores in the 2000 peak season. However, outside ethnic areas sales volumes have been small, usually one carton per store (Trade interviews, 2000). The major retail chains have wide penetration into all market segments, with a total of 155 supermarkets in Sydney and 189 in Melbourne (Telstra white pages). The increasing number of agents and retailers selling longans, together with the expansion into the mass market, indicates an expanding distribution system.

However, according to major retailers, supermarket store managers usually have the discretion to decide which products to carry, and in what quantities, and retail chains are having difficulty persuading their store buyers in non-ethnic areas to handle longans, even at Chinese New Year, because slow sales have made longans a loss-maker. Also, awareness of longans amongst fruit and vegetable retailers is insufficient. According to one wholesale agent, the large number of agents selling longans in the Sydney wholesale market is allowing buyers to compare agents' prices, therefore lowering prices. He recommended that the industry expand its distribution to other parts of Australia to alleviate this situation.

With the shift to weekend trading, the main shopping times for specialist fruit and vegetable stores are now Thursday and Friday nights and Saturday. Stores with high longan turnover typically buy in stock every two days. Large retailers aim at maintaining freshness, with some preferring fruit to be distributed rapidly from grower to store rather than being stored in agents' coolrooms.

While some chains are trying to move close to the producer, they are unlikely to directly source fruit with a short shelf life such as longans. (Trade interviews, 2000)

Greengrocer.com, an Internet-based company which operates a home delivery service of fresh produce to Sydney and Melbourne consumers, has not handled longans, but sells lychees both in punnets and in fruit packs, and trialed rambutans in the 2000 season. It would consider longans, provided it could buy fresh fruit daily at the central markets.

There appears to be little cooperation within the distribution channel, with communication rarely extending beyond the next level, and no feedback mechanism from markets to grower.

While supply has been erratic from year to year, some wholesale agents saw this as a constant problem, others as a point of difference. According to wholesalers, a coordinated supply would make possible the development of new markets and help agents fill large orders. However, an attempt to develop a coordinated marketing approach involving growers, agents and an exporter failed through lack of commitment.

Stores in upmarket areas are stocking exotics such as longans in order to provide a good range to meet their customers' requirement for convenient one-stop shopping. Supermarkets typically display longans in the tropical section, e.g. on a dedicated bench or half-bench, so customers know where to locate this type of fruit. Some retailers display longans with exotics, while one major retailer indicated that he would place them near berries.

The consumer survey was carried out in stores that carried a wide range of fruit and vegetables, including specialist Asian products. Of the respondents, 90% said they usually bought fruit and vegetables from a specialist fruit and vegetable store, while the remainder usually bought from supermarkets. When asked where they would expect to find longans, 67% suggested their usual fruit and vegetable store (58% of respondents were being surveyed in their usual store), 16% ethnic fruit and vegetable stores, and 7% supermarkets. This indicates that longans are perceived to be an ethnic fruit, targeted at the ethnic Asian market.

Competition

Competitor	Competitive advantages of longans	Competitive disadvantages of longans
Lychees	• Don't change colour with age; lychees turn brown • Bunch suitable for fruit platter • Some varieties have chicken-tongue seed, like lychees • Preferred by ethnic Asian consumers	• Brown colouring less appealing than red or pink • Less known than lychees • Slightly higher prices, e.g. $8/kg compared with $5–7/kg for lychees in ethnic Asian stores • Higher prices, e.g. up to $20/kg in non-Asian areas • Poorer proportion of flesh to seed than small-seed lychees • Shorter supply season • Newer industry, fewer growers • Lychee industry has coordinated marketing • Smaller, so require more effort to peel • Compete in same ethnic market, without mass market of lychees • Limited distribution outside ethnic Asian market
Rambutans	• Don't change colour with age; rambutan skin and spinterns blacken • Similar prices • Less effect from exposure to air-conditioning • At similar stage of industry growth • Preferred by ethnic Asian consumers	• Brown colouring less appealing than red or yellow • Fruit deteriorates once stem is detached, and prone to falling off the stem • Few packaging options • Rambutan industry has coordinated marketing • Smaller, so require more effort to peel • Non-adherent seed, while rambutan testa (seed-coat) can cling to the flesh • Same market

A Chinese female shopper in Sydney commented that longans are more beneficial to health than lychees, though less flavoured.

Promotion

Current ethnic Asian market

While existing consumers have high awareness and knowledge of longans, promotion is needed to maintain and increase consumption and to compete against potential substitutes. For existing consumers the trade recommends that the industry alert consumers to the peak season using the media (see Appendix 6 for a list of the ethnic press) and through marketing staff of the wholesale markets. The industry could also participate in appropriate industry promotions: for example the Sydney Markets Authority includes rambutans for ethnic schools in its children's program, and sponsors a dragon and snacks at a Chinese New Year promotion for Paddy's Markets.

Non-ethnic market

To the large Caucasian market, longans are new and unknown, and generally these consumers will not buy an unknown food. However, according to one retailer, promotion has succeeded in shifting a number of foods, such as avocados, lychees, mushrooms, Gayndah Imperial mandarins, kiwifruit, sugar snaps and snow peas, from unknown to well-established status, and should do the same for longans.

According to a major retailer, consumers will try a new fruit once it is explained to them. Education should lead to consumption, through creating consumer awareness and providing literature on how to use and eat longans.

Promotional messages should contain information on nutritional content and ease of preparation, and include recipes and 'how to use' ideas showing longans as easy to eat, and depicting them against a colour that improves and enhances the appearance of the fruit (Trade interviews, 2000). The consumer survey found that respondents mainly wanted information about how to use longans (50%); nutrition (29%); where grown (12%); recipes (15%); how to store (6%); how to peel (2%); and suitable foods to serve with longans (Consumer survey, 2000).

It was recommended that longans be promoted by variety where possible, so that if consumers dislike one variety they will not reject all longans.

According to a food marketing specialist, marketing should seek to lower specific consumer barriers to trial and purchase by considering consumers' shopping patterns, as well as issues such as:

- the amount of preparation needed (consumers often will not eat fruit unless it is cut up first);
- concern for their children's safety — particularly whether the fruit has a seed;
- whether a fruit is messy to eat (a perception affecting some kinds of fruit).

Typically consumers will ask how a new food would fit into their lives, so they need a product demonstration.

Point of sale

Labelling, for example on cartons and pre-packs, was considered an appropriate medium to distribute product information to consumers, store staff and others in the supply chain. In addition, 6% of consumers suggested labelling as an information source for longans (Consumer survey, 2000). However, one wholesale agent said customers do not read labels on packaging.

Recipe cards were recommended as a particularly effective tool to educate consumers on new fruits. According to a wholesale agent, they are often the only point-of-sale material needed, customers buying the fruit after reading the cards. The consumer survey found that 50% of respondents would use recipe cards to learn about longans. Retailers recommended that recipe cards include nutritional content, whether longans can be used in cooking, a description of the flavour, and innovative recipes that could also include other seasonal fruits such as strawberries and other berries. A food marketing specialist suggested that recipe cards (and posters) should depict cut fruit in a suggested setting, e.g. on a fruit platter with other exotic fruits. Another food marketing specialist suggested good quality black and white photographs or a duotone such as red and black as a cost-saving option, provided they were displayed with the fruit.

Major retailers would welcome a longan recipe card. Most retailers, including supermarket chains and specialist fruit and vegetable stores, provide facilities such as display boards for recipe cards, and are more likely to display smaller standard-size recipe cards near the fruit, while fresh produce markets would need pads of cards that could be suspended near the fruit. Recipe cards are usually supplied by the individual industry, or until recently by the Sydney Markets Authority. The industry would need to liaise with major retailers to ensure that any generic recipe card design conforms with their different design standards, formats and display capabilities.

According to a retail chain, if the industry supplied recipe cards the chains would provide them to all stores retailing longans. However, according to a wholesale agent, recipe cards have proved to be easily lost, and often have not reached the supermarket chains, so one option is to pack, say, five flyers in each box.

The Melbourne Markets Authority can include promotional material in its monthly newsletter to 800 Victorian retailers, including 400 specialist greengrocers. The industry would need to make arrangements pre-season, supply 1200 flyers, and pay the insert fee, and could have the Authority handle re-orders.

According to the consumer survey 11% of consumers would look for store displays and signage on a new product such as longans, as a source of information.

Personal selling
According to specialist retailers, regular customers expect to find new products in specialist fruit and vegetable stores, and ask the staff to explain what's new and how to use it, so some stores in wealthier areas maintain high staffing levels to provide this service, and approach customers interested in a new product to offer a tasting. The consumer survey (conducted in fruit and vegetables stores) found that 10% of respondents would ask sales staff for information on a new fruit. Some retailers said they were reluctant to offer free tastings of longans, despite lack of sales and the belief that sampling increases sales, because of the high wholesale price. These factors indicate that retail staff need to be given information on any new fruit. According to major retailers, if the industry supplied retailer information kits, supermarket buying offices would distribute them to their store buyers or advise managers that the kits were available.

Prahran Market in Melbourne suggested that the industry develop a vendor in the market as an authority on longans, similar to one of its vendors who has become a recognised authority on mushrooms.

Sales promotions
The trade considers taste testings and product demonstrations to be effective means of creating awareness, educating the consumer, and building sales in a new market, particularly for highly perishable fruits such as exotics where retailers need rapid turnaround. When the consumer survey asked respondents if they would buy a new fruit such as longans without having tasted it first, 12% said they would, 9% said they might, and 75% said they would not. (However, only one respondent had ever actually bought longans.) While one agent suggested the industry provide retailers with one tray in 10 (depending on the size of the retailer) as giveaways for sampling, another recommended that retailers not be relied on to hand out longans.

Most retailers hire demonstrators or have their approved suppliers run an in-store promotion, and would readily support any such promotions organised by the industry provided the industry committed to doing it properly, i.e. buying quality fruit in the market; providing supporting point-of-sale material; planning the promotion with wholesale agents (not too many) to coordinate supply; and hiring skilled professional demonstrators to cut and discuss the fruit and offer tastings. (One agent recommended that the demonstrator be verified by the agent). According to a retailer, timing of any promotion needs to ensure that consistent supply will be available.

Demonstrations should be timed for the main shopping days of Friday and Saturday, and busy times such as Easter holidays and school holidays, to reach children who are most likely to want to try a new food. The following venues were recommended for demonstrations:

- According to one independent retailer, demonstrations should include independent fruit and vegetable chains, as these retailers are most likely to introduce new fruits. A food marketing specialist recommended leading fruit and vegetable stores, e.g. on Sydney's North Shore, supported by point-of-sale material and media publicity.
- According to a wholesale agent, supermarket chains need demonstrations to increase their sales volumes. A food marketing specialist in Sydney also suggested the Sydney Fresh Food Market, all day Saturday at Flemington Markets (very multicultural, where taste-testing could cross over into other segments); Paddy's Market at Flemington Markets, on Fridays for the bargain shopper; Paddy's Markets at Haymarket (Sydney's Chinatown); and tourist venues.
- Food marketing specialists in Melbourne suggested targeting consumers interested in new foods at the Melbourne Wine & Food Festival and the Prahran Market food festival.

According to a major retailer, in a recent promotion for longans in Sydney supermarkets and independent stores during peak season, when volumes and quality were at their highest, demonstrators cut longans, gave tastings and handed out information leaflets, supported by an in-store price special. The promotion successfully produced longan sales in both ethnic and non-ethnic areas.

Similar promotions at events such as food exhibitions, festivals, and food and wine shows created strong demand for mushrooms from both consumers and the food service industry.

Advertising
One retail chain recommends advertising, for example featuring longans as a mid-week supermarket special when volumes are higher and prices lower, similar to a recent lychee campaign that included full-page newspaper advertisements.

A Melbourne wholesale agent recommended targeting the 30-plus shopper with a campaign of daytime radio advertising (copy produced by the station itself), television cooking programs, and newspapers, timed when high volumes are expected — similar to recent successful campaigns for bananas and Queensland strawberries.

Publicity
According to a food marketing specialist, regional food is topical, and food writers are always looking for new food story ideas. The consumer survey found that 5% of respondents would expect to see information on longans in magazines and 4% in newspapers. According to a wholesaler, the media have greater consumer reach than product tastings. According to specialist retailers, the media, particularly magazines and television chefs, are very effective at building awareness, demand and knowledge, and the ethnic press can be used to target the current ethnic Asian market. Appendix 6 lists media and their target markets. Options include:

- supplying media releases to food writers, — for example inviting them on farm tours for 'producer to plate' stories. Suggested content includes quotations from a chef, for example on how eating longans affects and changes the palate, like wine;
- supplying stories to the Sydney Markets Authority to be included in weekly talks on Radio 2UE and ABC Country, where price fluctuations can also be explained;
- hiring a public relations company.

The trade recommends targeting the Caucasian market via:

- retailers' consumer magazines sold in their stores, i.e. Coles' *Australian Table* and Woolworths' *Good Taste*;
- newspapers, e.g. 'Sydney Food & Wine' in Wednesday's *Daily Telegraph* featuring new food lines; and Melbourne's *Herald Sun*, *Sunday Age*, and *The Age* food section where chefs provide how-to-use ideas to persuade consumers to explore new foods;
- women's magazines such as the food features in *Women's Day*, for strong demand from a mainly female readership;
- cooking shows for cost-effective access to female shoppers.

A major fruit and vegetable retailer recommended introducing longans by first publicising the fruit through the food features in the 'Good Weekend' supplements to the *Sydney Morning Herald*, the newspaper's Tuesday edition and Melbourne's *The Age*, to position it as a 'trendy' fruit through food writers. The ensuring publicity would generate demand from retailers by their consumers; the retailers in turn would order in supplies, and conduct in-store taste-testings supported by basic information such as recipe cards. This in turn would stimulate an increase in production at lower prices because of improved economise of scale; then more consumers would trial the fruit at the lower prices.

Internet
The Sydney Markets Authority suggested that the longan industry link a stand-alone home page to the Authority's website, including its award-winning Kids Education page — www.f&vforme.com.au.

While Greengrocer.com has not yet offered longans, it provides consumers with introductory information on new fruits, through twice-a-week newsletters, and recipes on its recipe site.

Only one consumer suggested the Internet as a likely source of information for longans, indicating that uptake for this purpose has not yet developed.

Branding
The only branding by the industry is individual grower brands.

Food service segment
Restaurant promotions can create awareness in both consumers and chefs, and chefs often seek information about new products. According to a major retailer, this has been particularly successful for the mushroom industry. Longans could be promoted to the food service industry via:

- provedores;
- special events such as food festivals attended by chefs;
- fashionable city cafés and restaurants such as on Sydney's North Shore; Coles' 'Let's Eat' at Prahran; and popular restaurant areas such asMelbourne's Southbank;
- better-class restaurants and large hotels with smorgasbords;
- chef's associations, to reach chefs and food service organisations;
- demonstrations by Melbourne Market Authority and Prahran Market to food service training institutes;
- hospitality magazines and newspaper features, e.g. 'Epicure' in Tuesday's Melbourne *Age*;
- food writers targeted through the Prahran Market monthly food forum where guest speakers, including television food celebrities, talk on food issues.

A food marketing specialist suggested a restaurant promotion to develop awareness and trial by consumers from double-income households who eat out regularly at selected upmarket cafés and restaurants of Sydney and Melbourne, to stimulate a trickle-down effect to the mass market. The promotion would start with a written proposal to the restaurants, followed by a media promotion at the start of the season, publicising each participating restaurant in its local suburban newspaper and major dailies such as the *Sydney Morning Herald* and Melbourne's *Age*. A co-ordinator would supply the restaurant with sampling fruit, storage and technical information, posters, and suggested recipes so that longan could be included in the menu, and would coordinate distribution of longans to local fruit and vegetable stores and gather feedback from those retailers. There is also potential for Queensland Fruit and Vegetable Growers to run this as a 12-month campaign e.g. with quarterly promotions of different fruits as their seasons start, as this would have more lasting momentum and anticipation than one-off promotions.

Chef competitions also attract attention to new products: for example a recent Prahran Market risotto competition attracted chefs Australia-wide, entries including a highly decorated tropical fruit risotto.

Promotion to children
A children's campaign would educate children to consider longans as an everyday fruit. The Sydney Markets Authority runs an ongoing children's program to increase fresh fruit consumption by linking it with health and sport to create awareness and liking for fruit, so that children will ask their parents for it. Activities include demonstrations at primary schools (including longans at multicultural schools), working with school canteens, health breakfasts, and school sponsorships. The industry could also supply the Authority with longans for events such as school sports carnivals.

The Melbourne Markets Authority and The Dieticians Organisation of Australia are also promoting fruit consumption to children, while one retail chain is refocusing its fresh fruit and vegetable campaign towards children.

Integrated promotional campaigns

According to a major retail chain, consistent promotion is the best means of creating social awareness. It recommends an educational campaign of media publicity and product demonstrations and tastings, supported by point-of-sale display and literature.

According to a food marketing specialist, an industry-wide promotion for longans would enable individual growers, wholesalers and retailers to work together without competing amongst themselves.

A major retailer invited the industry to tie into its ongoing promotional campaign for fruit and vegetables, which includes recipe cards, advertising, and a customer catalogue that already features lychees.

Asked about the prospects of a joint exotics promotion for longans, lychees and rambutans, two major retailers said such a promotion should be successful — longans and rambutans for variety and lychees for volume —as was a recent promotion of a large range of exotics in fruit baskets.

3. SWOT analysis

Table 2 SWOT analysis of longans in the Sydney and Melbourne markets

Strengths	Weaknesses	Opportunities	Threats
• Ethnic Asian market with strong stable demand • Can supply Chinese New Year, as a traditional ritual fruit • A traditional fruit for immigrants from several Asian countries • No competition from imports • Varriety awareness & preference from buyers, not consumers • Current product attributes and form (panicles) acceptable to current and potential market segments • Bulk packs acceptable to trade • Caucasians associate with better-known lychees • Longan Association internal levy for R&D and promotion • Sulfur dioxide treatment extends shelf life with little effect on appearance or taste • Market premiums for quality and preferred varieties • High and stable prices, compared with most fruit • A specialist trade experienced in handling perishable exotics • Growing wholesale and retail distribution • Some trade promotion	• Low awareness and adoption by Caucasian market and trade • Highly perishable product • Variable quality, e.g. small size, berry shatter, blackening of fruit, heavy stem, weak flavour, in a quality-conscious market • Immature and overmature fruit at extremes of season • Lack of national quality and grading standards and grades • Retailer frustration with consumers taking only choice fruit from panicle • Inadequate labelling as to contents and variety • Current packaging prone to crushing (cardboard) and pilfering (plastic trays) • Current bulk packs too large for take-home packs and for retailers with slow sales • Trade lacks product information • Sulfur dioxide treatment causes loss of green skin colour • High retail margins because of stock losses • Caucasian resistance to relatively high prices • Some ethnic Asian price resistance • Price-chasing causing market saturation and price fluctuation • Little communication and cooperation in supply chain • Little promotion by industry or trade • Erratic supplies	• Growing ethnic Vietnamese population • An Asian community in most cities • Undeveloped markets outside main cities • Demand for new foods and for variety • Research and development to improve size, flavour and adherence to stem • Possible uses for low grade, stemless fruit, e.g. as a food service ingredient • Potential to use loose fruit for sampling. • Mechanical grading of loose fruit for consistent size and lower costs • Differentiate higher quality by branding • Pre-package to reduce berry shatter, use loose fruit and avoid waste • Demand for smaller tray for take-home, retailers with slow turnover, and Chinese New Year gift pack • Consumers buying smaller volumes more frequently, and more pre-packs • Sample packs of exotics to encourage trial of longans • Better returns from more grades, tighter grading • Caucasians less likely to demand stem for freshness • Reduced price margins through efficiencies in production, packaging, transport etc. • Chains expanding their range of exotics • Promotional opportunities targeting consumers and trade	• Low uptake by Australian-born ethnic Asians • Loss of export markets channelling all fruit to the domestic market • Sulfur dioxide treatment can raise health concerns • Potential consumer resistance to sulfur dioxide treatment • Legal requirements to warn consumers of sulfur dioxide treatment not being met • Potential resistance by Caucasians to pre-packs • Difficulty of raising prices that have fallen • Cheaper substitutes and competitors, e.g. lychees, canned longan, apples • Low awareness by Caucasian trade • Resistance from retail buyers because of slow sales • Competition between growers and distributors for existing markets

4. Marketing Plan

Introduction

This marketing plan has been developed from the preceding marketing research. It sets out a strategic direction, and outlines specific activities that the longan industry can implement to meet the needs and expectations of both its current market and potential new markets.

Key issues

- main market is ethnic Chinese and Vietnamese, with consumers from other nationalities also believed to be consuming longans;
- very low recognition and almost no adoption in potential Caucasian market;
- little educational activity carried out in Caucasian market;
- longan attributes and current forms of presentation acceptable to potential market;
- lack of grades and quality standards for targeting specific market segments;
- lack of information on handling and storage throughout the supply chain;
- current prices high compared with those of most fruits because of relatively inelastic demand from current ethnic Asian market;
- current high prices a barrier outside the wealthier segment of the mass market;
- retailers marking up price to cover stock losses from self-selection by the ethnic Asian market and lack of sales to the mass market, exacerbating price-resistance and causing resistance by retailers;
- various opportunities for low-cost promotions including point-of-sale material, media publicity, participating in existing promotional campaigns, and supporting in-store product demonstrations.

Marketing objectives

1. Maintain the current ethnic market by maintaining awareness, meeting quality requirements and offering lower-priced grades to counter price-resistance.
2. Raise awareness of and interest in the high-income Caucasian market to develop extra demand, and penetrate the mass Caucasian market.
3. Increase product acceptability by improving quality and packaging and introducing more quality-based grades to target various market segments, and by building cooperative relationships with supply chains.

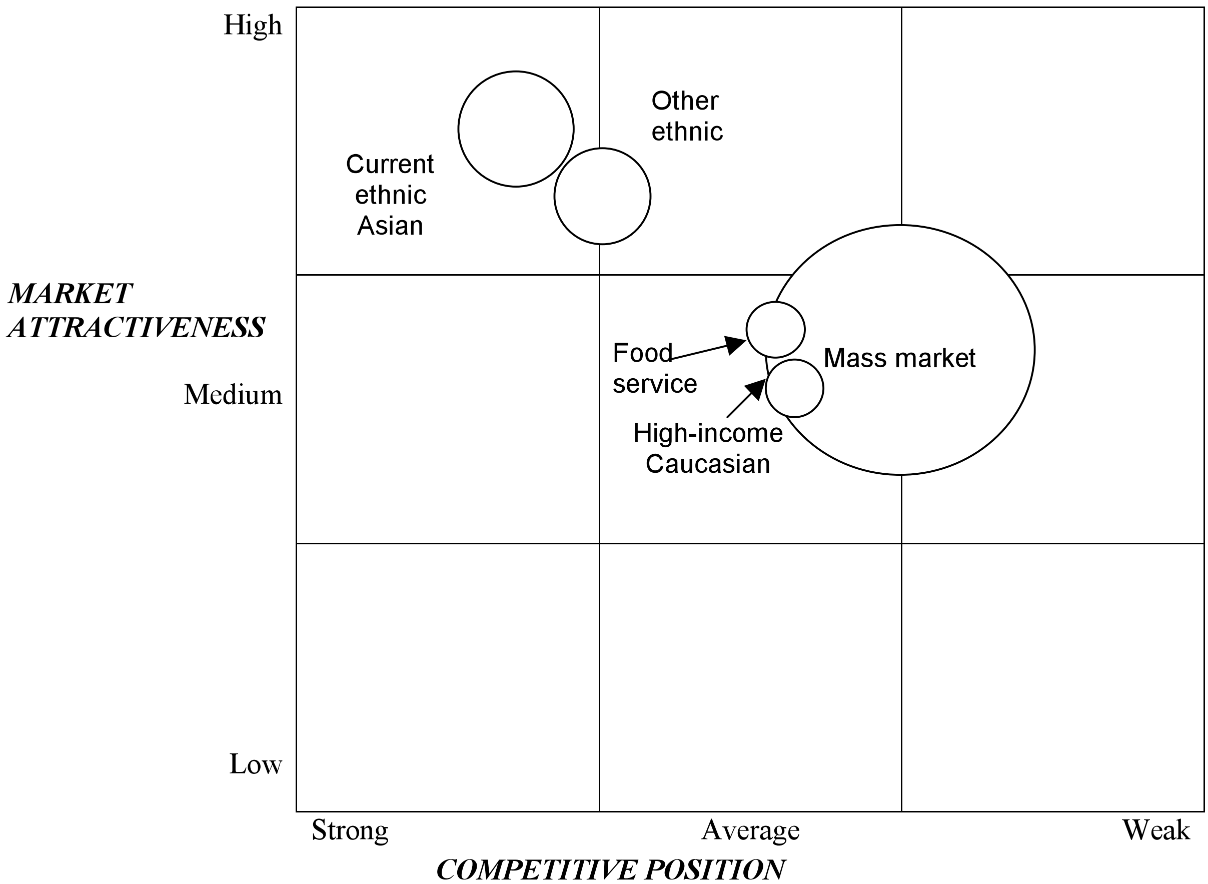
Target markets

The following target segments were identified from the market research:

- The ethnic Chinese and Vietnamese segment;
- The secondary ethnic segment;
- The mass undifferentiated market;
- Upper income Caucasian — most likely to be early adopters, willing to try new foods and capable of paying higher prices;
- Children, as potential consumers and to influence shoppers' food purchase decisions;
- The food service industry.

The following matrix of market attractiveness and competitive position is based on the research data for each segment (see Appendix 7 for matrix criteria).

Figure 3. Longans - matrix of market attractiveness and competitive position for current and potential market segments



The matrix indicates the longan industry has:

- a strong competitive position in the most attractive market segment of ethnic Chinese/Vietnamese;
- a reasonably strong competitive position in the attractive ethnic Asian segment outside the previous segment.
- more likelihood of developing a competitive position in the upper income Caucasian segment and the food service segment than the less attractive mass market.

Note: Size of circle indicates size of potential market.

Marketing strategy and tactics

Any marketing strategy needs to meet the industry's requirements for profitable returns during its growth stage, by satisfying consumer needs in each sector. A concentrated marketing strategy would enable the industry to focus its resources on a few segments to expand the market.

MARKET POSITIONING
Goal: Focus on market segments where demand is strongest. Develop and maintain them with product, pricing, distribution and promotion strategies. As a segment matures, develop a new segment to keep pace with growing production volumes.

PRODUCT STRATEGIES	
Goals: Meet needs of target markets by defining consumer needs and wants and satisfying them Obtain a strong market share Make a profit, within the means of the industry to invest in product development for specific segments, and to maintain a competitive position in each segment.	
Strategies	**Activities**
Product quality	Establish quality benchmarks, and monitor to ensure, so that all product meets consumer's expectations, and can be used as the consumer intended.
	Implement auditable food safety assurance systems, e.g. SQF 2000/Freshcare, to meet retailer requirements.
	Work with supply chain to monitor all stages of the cool chain, identify specific areas of current and potential breakdown (i.e. picking, packing, transport, storage and retail display) and develop procedures and packaging to remedy.
	Provide handling and storage information throughout the supply chain, e.g. handling manuals for wholesale agents and retail purchasing division, posters for retail backroom staff, and consumer information via recipe cards.
	Focus research and development on varieties with large size, small seed, flavour, longer shelf life, and less berry shatter.
	Avoid selling immature and overmature fruit at extremes of season.
	Provide only top quality fruit for sampling, to ensure that it provides the product benefits (usually appearance, flesh quality and flavour) that the target consumer would require if the fruit is to be used as intended (e.g. fruit platter for guests).
Increase product options to markets that will pay for them	Implement a grading system of several levels based on attributes that determine product performance — e.g. size, appearance, flavour, flesh texture, seed size, uniformity, compactness of panicle — to target different market segments, and enable the trade to establish price differentials. Options include: • Large, good-flavoured green-tinged fruit on sub-panicles for ethnic Asians • preferred variety for Vietnamese; • sub-panicles or loose for Caucasian market and food service industry.
	Introduce lower-priced variations, e.g. smaller fruit and packs of loose fruit with stalks for the price-sensitive.
Packaging	Use high quality packaging, of a size, shape, material and colour to support marketing strategies to each segment, e.g.: • plastic trays or reinforced cardboard packs to minimise damage, maximise shelf life, prevent pilfering and interference, allow inspection, and improve product performance through optimum appearance and flesh quality; • small packs in traditional colours for Chinese New Year.
Labelling	Label packs so buyers can identify the product and any brand.
	Include product information for trade and consumers, e.g. place of origin, date of picking, form of contents, variety, storage information.

	Provide health warnings, e.g. use of sulfur dioxide, to comply with food safety laws
Customer service	Distribute product and package range to retailers.
	Provide supply forecasts to wholesaler agents so they can plan promotion to buyers.
	Provide higher level of service to higher-price markets that require it.
Goal: Adoption by consumers of a preferred supplier through a branding strategy that they will recognise as associated with high quality product and service	
Strategies	**Activities**
Provided quality benchmarks and controls are in place, develop a brand that assures consistent quality	Implement a brand with a name, symbol and design that are sufficiently memorable and distinctive to identify the supplier, indicate the product's benefits and qualities to buyers, add value (e.g. a price premium or sell first), and that can be registered. It is important that a consistent quality as required by the trade and consumers be deliverable prior to branding. Options include grower brand; grower cooperative brand; retailer brand; and co-brand (e.g. grower and retailer).
	Supply quality-assured product (quality is usually a leading buying criterion, together with price) with consistent quality and sought-after attributes, i.e. size, flavour, texture.
	Support with brand and logo on the packaging, and marketing communications.

PRODUCT POSITIONING STRATEGIES	
Goal: Compete in each segment by targeting its consumers and positioning longans as an attractive product to that specific consumer group, on product attributes and product benefits, while ensuring that industry can deliver product of the required specification	
Strategy	**Activities**
Position on product attributes	Promote attributes, e.g.: • different, nutritious, healthy and an 'easy-to-carry snack' to Caucasian adults; and sweet and interesting, to children; • a popular traditional fruit, to the ethnic Asian market; • a fresh dessert adding variation and interest, to the food service market; • 'succulent flavour' and 'Australian-grown', to all markets.
	Promote as 'similar to lychee' to encourage trial by overcoming lack of consumer knowledge
Position on product benefits	Promote as 'a refreshing palate cleanser', to all markets.
Position by usage occasions	Promote as a summer fruit to the Caucasian market; as a 'non-acid palate cleanser' after spicy food to all markets; as 'adding an exotic touch to a fruit platter', for the upmarket Caucasian; and as a 'traditional prayer fruit', for the Chinese New Year segment.
Position by user class	Promote as ideal for entertaining, 'trendy'.
Position as better value than competing products (e.g. to de-emphasise price)	Promote as 'providing variety' rather than compete on price etc. Don't risk being positioned as expensive.
	Target the lifestyle of upmarket consumers — entertaining at home; social approval from introducing guests to a new food.
Position as meeting specific needs	Promote as an entertainment solution — different, novel, a talking point, e.g. on a fruit platter.
Position on competitive advantages against competing products	Promote as 'variety from everyday fruits', 'easy to peel'.
	Promote as a fruit with similar potential to more established exotics (e.g. lychee) to convince retailers to push longans.

Position as different product classes	Promote as fruit; decoration; health food; ritual prayer fruit.
Identify a set of possible competitive advantages on which to build a market position	Differentiate on image, e.g. with a high quality brand.
Position as a high-service industry	Supply information to trade to make the product more saleable.
	Establish a feedback mechanism from retailers and wholesalers.

PRICING STRATEGIES	
Goals: Achieve and hold market share with competitive prices that will return a profit to all members of the supply chain, by ensuring that the retail price is within the target consumer's capacity and willingness to pay Support overall marketing strategy	
Strategies	**Activities**
Position on price only where price is important to the market	Research the quality and price requirements of each target segment.
	Target each segment with products and grades in each, to provide specific benefits that meet its particular need, indicate value for money, and allow the market to establish distinct price points (quality or presentation at each point with price steps between items).
Reduce price margins	Develop demand in new segments to accelerate sales and product turnover, to reduce waste.
	Reduce retailer mark-ups to recoup wholesale cost through: • improved grading to reduce stem and small fruit that current consumers reject; • take-home packs, e.g. 2 kg, to prevent ethnic consumers picking over fruit, without overpricing the unit; • encouraging trial by potential new consumers.
Stabilise pricing	Coordination of supply by industry and with trade to avoid oversupply of individual segments, price competition between suppliers, switching by consumers to substitute products, and having to try to raise a price that has fallen.
Differentiate between longan products to position each product in the product line and improve price:value perception	Where possible, provide high quality, higher-priced product to maximise returns.
	Promote lower grade lower-priced product to price-sensitive markets. If value is more important, provide premium grade. Only position on price if price is important.
Offer a low-price by-product	Price low-value product to dispose of in another market, e.g. loose longans without stem as an ingredient for the food service industry, if acceptable; and for processing.
Plan to steadily reduce cost to improve price competitiveness	Grower cooperative to share packaging, freight and promotional costs.
	Mechanical grading of loose fruit.
	Reduce packaging costs by reducing labour e.g. through bulk packs, panicles; avoid over-packaging which increases costs and pack overweight containers which reduces returns.
	Monitor prices of competing products, e.g. lychee.
Satisfy consumer buying criteria	As price is a key selection criterion, support discounting to attract attention and encourage switching from other products.
	Estimate demand and cost at each price.

DISTRIBUTION STRATEGIES	
Goal: Ensure an efficient low-cost distribution system that makes longans available to the consumer as and when required, where each channel activity is performed by the most efficient and effective channel member for that role	
Strategies	**Activities**
Ensure supply as markets are developed	Build production capacity
Push into more retail outlets and distribution channels	Support trade efforts to expand the market
Service to distributors	Coordinate product deliveries to wholesalers with main buying days
	Ensure supply to allow agents to supply retailers
Ensure efficient distribution with cost minimisation at each level of supply chain	Use group power to secure lower freight rates for larger volumes.
	Use experienced wholesalers with established buyers.
	Periodically monitor chain costs to identify potential cost savings.
	Coordinate supply, e.g. through a marketing cooperative, to match supply to demand and avoid market saturation.
Supply current Asian ethnic market	Supply agents who supply: • regular outlets for ethnic Asian consumers; • lower-price, low-service, low-cost retailers, e.g. supermarkets, for the habitual longan consumer sufficiently knowledgeable to select from the display; • low-price outlets, e.g. Paddy's Markets, for the price-sensitive, prepared to travel for a discount.
Supply ethnic segment outside current market	Supply agents who reach major ethnic markets, e.g. Paddy's in Sydney, Victoria Markets in Melbourne.
Supply potential Caucasian market	Supply wholesalers who serve high-service fruit & vegetable retailers who can educate potential consumers; and fresh produce markets where consumers expect to find new foods.
	Consider home delivery services, e.g. Greengrocer.com, to target high-income Caucasians who dislike shopping or are time-poor.
Supply distribution to food service industry	Promote to provedores, and to restaurants who buy direct from wholesalers.

PROMOTION (advertising, personal selling, sales promotions, public relations)	
Goals: Shift consumers from potential buyers with low awareness to longan consumers. Communicate the benefits of longans to consumers in each target segment to establish appealing image and competitive position. Influence all stages of the purchase decision towards adoption of longans by each segment.	
Strategic approach: **'Push':** Direct activities at wholesalers, retailers and provedores, using personal selling, promotion and publicity. They in turn can target the consumer with selling, advertising, promotion. **'Pull':** Direct promotion at consumer to create awareness and demand from wholesalers and retailers, who will in turn order product from the industry.	
Strategies	**Activities**
Promotional messages	Demonstrate how longans will deliver specific product benefits identified as important to each target segment, e.g.: • Practical benefits, such as flavour, shelf life, freshness; • Emotional appeal — 'be the first', 'surprise your guests'.

	Liken to similar products, i.e. lychees, to encourage trial
	Adopt a common theme for all promotional literature — posters, recipe cards, packaging, labelling, etc.
Public relations	Identify key media that reach and influence target markets, wholesalers, retailers and their staff, provedores, and the food service industry; develop media list, including trade magazines and in-house consumer magazines of supermarket chains.
	Develop relationships with food writers, TV chefs, and marketing staff of wholesale market authorities who provide media stories.
	Issue regular media releases, including start of season and before peak season, and to mark any newsworthy event.
	Supply media releases to market authority marketing staff to include in their promotions.
	Develop media kit to hand out at promotions and events; and sample packs for key media.
	Supply TV chefs with samples and information.
	Ask chefs to develop recipes using longans, e.g. for chef competitions, and supply fruit.
Sales promotion (reduce as demand develops)	Develop and distribute point-of-sale material with product and how-to-use information, e.g. recipe cards, posters.
	Attract attention and provide information through product demonstrations at stores, food fairs, chef competitions.
	Stage restaurant promotions targeting influential consumers to build demand through word of mouth. Supply information kits; coordinate promotional fruit through wholesale agents.
	Engage specialists in product demonstrations. Coordinate demonstrations in stores, food events, etc., with agents supplying demonstration fruit and sufficient stock, at venues and times to reach target market.
	Liaise with wholesalers to ensure optimum quality fruit for sampling.
	Repeat product trials until longans adopted by consumers.
	Use short-term incentives, e.g. product demonstrations.
Personal selling	Develop one-on-one interaction with trade to attract attention and persuade to carry longans. Support (e.g. with sampling material) push to retailers, and access market feedback.
	Supply trade with product information kits — product list, storage information, package options.
Advertising	Target mass market via media — probably for store discounts only, and reminding current consumers.
Cooperative promotions	Run cooperative campaigns with wholesalers, retailers, provedores.
	Provide free high-quality fruit for demonstrations, store giveaways, and promotions.
Goal: Establish awareness and understanding of any branding strategy.	
Strategies	**Activities**
If a brand can assure quality, promote strongly	Associate brand with any promotion, event, promotional material.
Goal: Evaluate effectiveness of promotion in achieving objectives.	
Strategies	**Activities**
Evaluation and control	Establish clear objectives for promotion.
	Compare results with expected performance stated in objectives.
	Evaluate overall effectiveness and revise strategies as needed, to ensure that all promotion is both effective and cost-effective.

<table>
<tr><th colspan="2">MARKETING INFORMATION</th></tr>
<tr><th colspan="2">Goal: Develop continuous mechanism within the supply chain for feedback on sales and marketing.</th></tr>
<tr><th>Strategies</th><th>Activities</th></tr>
<tr><td>Internal data</td><td>Develop systems within industry to acquire market and production data, e.g.:
• database of key information — production volumes and costs, labour costs, transport used and fees, sales per agent for each product line, prices received. Analyse to monitor consumption and demand trends in each market segment; assess profitability; and identify opportunities to improve cost efficiencies.
• set up feedback mechanism with wholesale agents, e.g. feedback sheets for each consignment, and digital photos showing product quality, where possible, to track and remedy quality problems.
• record all problems — product quality, transport, client service, price slumps, backlogs, etc.
• end-of-season interviews with agents and major retailers to determine whether product is meeting the requirements of each target segment.</td></tr>
<tr><td rowspan="6">Marketing intelligence</td><td>Develop relationships with wholesalers, supermarket and other chains through market visits, grower meetings, regular phone contact.</td></tr>
<tr><td>Use marketing group or grower group to distribute market information to all grower members.</td></tr>
<tr><td>Participate in local food promotions to obtain feedback from customers and food service industry.</td></tr>
<tr><td>Analyse sales information (price, volumes) for each product category (e.g. panicles, loose fruit).</td></tr>
<tr><td>Commission research on the quality and price requirements of target markets every one to two years.</td></tr>
<tr><td>Monitor issues such as food legislation, e.g. food safety requirements for sulfur dioxide and other treatments; quality assurance; potential imports, etc.</td></tr>
</table>

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6. Appendices

Appendix 1. Case studies – lychees and mushrooms

These case studies for lychees and mushrooms have been prepared to identify the strategies that new fresh food industries have used to develop their markets, and determine the success of those strategies. Their experiences may provide a useful guide for the longan industry in developing new markets.

Both lychees and mushrooms were available to the Australian consumer only as canned imports for many years before domestic production was established, and consumed mainly by immigrants from countries where they were traditional foods – South-East Asia for lychees and Europe for mushrooms.

Industry structure
Both industries have strong industry associations. Most mushroom producers belong to the Australia Mushroom Growers Association (AMGA) which represents the industry in wider industry issues, and allocates a voluntary grower levy across research and development, marketing, representation, education and training.

The Australian Lychee Growers Association (ALGA) spends levies collected by Queensland Fruit & Vegetable Growers on activities to further the wider industry, i.e. research and development, international market access, chemical registration, promotion and agripolitics. Most lychee growers also belong to one of two main marketing groups, which administer tight quality controls and co-ordinate supply to markets.

Supply and production
Lychee is a small developing industry, with production recorded at 3,000 tonnes in 1997, and a harvest of around 5000 tonnes anticipated for the 2000-2001 season. Lychees are grown from Far North Queensland to northern NSW, with the variety of climates, together with early mid and late season varieties, extending the season to five months. However, according to the industry, erratic and biennial cropping and pest incursion have resulted in fluctuating supply volumes which have restricted the industry's ability to service existing markets and develop new markets, and resulted in funds and industry attention being concentrated on research and development at the expense of marketing.

The mushroom industry has grown over 40 years to become Australia's third largest vegetable industry. It is able to maintain year-round stable supply by producing mushrooms in an enclosed controlled environment, independent of seasonal fluctuations. Production costs are raised by the need to handpick each mushroom. AMGA provides industry training packages to educate new and regular staff on picking, grading and packing.

Markets and competition
The main market for lychees continues to be ethnic Asians, with some use by restaurants and hotels. Findings from a 1990 market research study in Sydney, Melbourne and Brisbane indicate that while 57% of consumers had heard of lychees, only 9% of consumers interviewed had tasted (and bought) fresh lychee, mainly 26-35 year olds with higher incomes (Greer & Smith, 1990). Since then, consumption has expanded into the mass market with lychees now widely known and bought. The trade attributes this to the expansion of volumes and distribution, together with falling prices. Nevertheless, the market continues to class lychees as an exotic fruit, because of their relatively short season and high prices. In the Caucasian market retailers perceive lychees as meeting consumer requirements for new and interesting products, and retailers' need to offer variety.

According to the lychee industry, annual growth in domestic lychee sales indicates that consumer demand is broadening beyond the ethnic markets, but that the market's potential is not being realised because of insufficient promotion.

In contrast, fresh mushrooms have become a standard household vegetable in Australia, with industry research showing that 55% of Australians eat mushrooms every week.

Product strategies
Both lychees and mushrooms are highly perishable, so packaging is aimed at maintaining product quality by protecting it from water, air, heat and pressure in order to retain colour, weight, flavour and freshness. Both pack on-farm directly into display boxes to minimise bruising from handling and prolong shelf life.

Lychees
Lychees are mainly supplied loose, with leafy panicles at Chinese New Year. In Asian markets they are generally sold on the panicle, and are an option worth trialing for local markets. According to retailers, preliminary trials of panicles in the Australian domestic market have meet with a good response and a price premium. First Class lychees are usually packed in a branded box, with a generic box for Second Class. The ALGA provides a minimum grade standard, with growers and groups often grading higher.

As dehydration turns lychees skin brown or black, reducing shelf life, appearance and saleability, they are usually packed in Krispibags within a bulk box, to allow retailers to open a single bag for display, and protect the rest from air-conditioning. Although research trials have found low density polythene bags to better enhance shelf life, retailers prefer to display perforated condensation-free bags such as 'krispi' so consumers can see the fruit.

Retail chains prefer 5kg boxes, although smaller packs, e.g. 2kg, have proved suitable for take-home packs. 250g punnets have not succeeded outside smaller specialty shops, because retailers are reluctant to absorb the extra costs from labour and packaging, consumer acceptance has been low, and fruit presentation has been affected by condensation. Although a 15kg acrylic retail dispenser developed for lychees has proved successful at maintaining skin colour, its use has not expanded beyond some self-serve retail stores because large retail chains prefer to have bulk displays, and rely on speedy turnover to avoid fruit deterioration.

The lychee industry has had on-going cool chain problems. Many stores are selling lychees with low quality and poor appearance, which has lowered consumer expectations and made it difficult for the industry to establish a premium-price market position for high quality fruit. According to retailers, these problems are caused mainly by transportation with incompatible fruits requiring different temperatures, such as mangoes; insufficient pre-cooling on-farm; and air freight containers left standing in the heat. Consignments need to be co-ordinated between grower and distributor to avoid fruit being left in uncooled locations, e.g. overnight.

Over the past ten years, the major lychee marketing groups have developed quality assurance standards which incorporate food safety, interstate certification and cold chain standards, with compliance procedures. These are reviewed annually to address the entire supply chain from orchard to market floor.

The industry is continually looking to improve quality standards, improving efficiency and reliability, and find opportunities to value-add. Other options being considered include cluster packing sheds, computer-aided marketing, training of specialist contract service providers, bulk purchasing, group record-keeping, and promotion of an industry standard fruit description.

The industry is considering adopting environmental and social standards (fair wages, safe working conditions, etc.) to use in promotion, together with Australia's ' Clean Green' image, to compete for market share against international competitors, not only on the International market but on the domestic market, should fresh imports be permitted. The industry is following the lead of a European company 'OK BANANAS', which sells 'Bananas With A Social Conscience' at a premium price.

Mushrooms
The mushroom industry is based on common white mushrooms, 95% being consumed fresh with the rest processed. They are graded as 'buttons' (small and unopened); 'cups' (cap opening to reveal some gills); or 'flats' (fully open); with out-of-grade mushrooms classed as 'factory'.

Mushrooms are picked by hand and packed directly into the box to minimise handling and bruising.

The mushroom industry has been implementing a national grading standard to assure consistent product descriptions across the industry. This is based on consumer requirements, with several grade categories so retailers can display a range of boxes of loose mushrooms of varying size, but with size consistent within each pack.

As the mushroom industry matures, exotic mushroom varieties have been introduced. This product differentiation has provided a premium priced product, that meets consumers' requirements for variety and interest. Also, exotic varieties enable the industry to develop market segments, e.g. *Shitake*, for the growing Asian food market. These are retailed by variety, size, form (whole, sliced), in pre-packs that include punnets and trays.

For mushrooms, continuing variable quality at the retail display has resulted in the industry carrying out a research study of the cool chain, from grower to wholesaler to supermarkets and independent retailers. Datalogging has identified temperatures that are too high, and which are variable.

Pricing strategies

Lychees
Lychee prices are usually highest for the first fruit in November. When volumes peak and prices drop in December, growers tend to export.

Price premiums are obtained through meeting ethnic Asian consumers' requirements for strong red skin colour, firm flesh, aromatic flavour, sweetness, symmetrical shape, high proportion of flesh to seed, and small seed; and through meeting wholesalers' and retail buyers' requirements for packs of high quality fruit of consistent size and appearance. Some growers differentiate their product, e.g. by laying a lychee branch over the fruit. The marketing groups rely on their quality assurance and recognition of their single brand.

Lychees are usually more expensive than other seasonal fruits such as stonefruit, and are perceived by consumers as exotic. However, costs are increased by the comparatively high costs of production packaging, and the need for continuous refrigeration.

Mushrooms
Because the industry can stabilise mushroom supplies, prices are relatively stable year-round. Prices are highest for buttons, averaging $4.80 to $4.00 in recent years, and lowest for flats. Small margins require substantial on-farm efficiencies.

Distribution strategies

The lychee industry sells most product through its marketing groups to wholesalers, usually specialising in exotic fruits, and retail chains.

Most mushrooms are distributed via wholesale market agents; with the rest through secondary wholesalers supplying independent retailers and food service outlets: direct to supermarket chains; and direct to processors. The bulk of its production is retailed through supermarket chains.

Promotional strategies

Lychees
The lychee industry has used some promotion, mainly recipe cards. However, because most levy funds have been allocated to research and development, there has been no generic promotion, although the marketing groups have established brand awareness with the trade as a quality assured product. The industry is planning to review this situation and consider promotional funding.

When supply volumes have allowed, retail chains have used advertising and sampling to generate strong demand and sales from non-Asian consumers.

Mushrooms
The mushroom industry, from its early growth stage, has run a consumer educational campaign to build on the awareness and taste established by canned mushrooms. It continues to run generic promotions through the AMGA, and co-operative promotions with supply chain partners and other industries such as the Australian native food industry. Advertising, recipe cards, and product labels have positioned mushrooms as:

- A nutritious and versatile food, and value for money' (rather than price). Usage suggestions including salads and barbecues;
- A convenient food for the time-poor with the 'Mushrooms make the meal … in minutes' campaign;
- A traditional food from Tuscany in Italy (taking advantage of current interest in Tuscany, fuelled by cookery and travel books), with a 'Taste of Tuscany' tag on exotic lines such as porcini and Portobello.

Exotic mushrooms are labelled with descriptions of texture and flavour and suggested uses.

Consumer promotions are aimed at increasing individual usage and purchase size, e.g. consumer in-store and live cooking demonstrations, sometimes by hotel and celebrity chefs, at stores, and markets.

- Integrated advertising and publicity campaigns, using television, including TV chefs; radio; and print media, including women's magazines; and maintaining a network of food and cookery writers;
- Chef competitions between guest chefs and media personalities;
- Restaurant promotions, featuring menu dishes, cooking classes and tastings;
- A mushroom feast at the Adelaide Festival Centre;
- Mushroom Month annually across Australia, including television advertising and cooking segments, cooking demonstrations and sampling, farm walks, and menu promotions;

Results are tracked through market research, including consumer surveying.

Food service industry promotions include chef demonstrations to the Food Media Club of Australia, chef training schools, and a Chefs' Association conference.

The AMGA website www.oz.mushrooms.com.au targets consumers and chefs with production information, seasonal recipes, product and handling information, and recipes and usage ideas.

According to a major retail chain, the mushroom industry has been exemplary in its market development, particularly in the use of promotion to overcome lack of awareness, through consumer promotions and food service industry activities including education of chefs and featuring of mushrooms in restaurant promotions.

Appendix 2. Product Description — Longan

The fruit is round-shaped, around 25–32 mm in diameter, with a smooth, thin and leathery skin that changes in colour from green-yellow through yellow-tan to brown as it matures (Some Tree Fruits for Tropical Australia, 1990), and often has markings and a dusty bloom that can be brushed off. The flesh is whitish and translucent, with a single seed, dark brown to black, that varies in size between varieties, and can take up most of the fruit volume in undersized fruit. Flesh texture ranges from juicy to very crisp, while flavour ranges from bland to sweet and aromatic, and is seldom acidic. Maturing ceases on picking. If mature fruit is picked late, water content of the flesh increases, lowering flavour and crispness.

Australia produces around 20 cultivars commercially, the most prominent of which are:

- ***Thai varieties:***
  - ❑*Biew Kiew*, a late-season variety, characterised by long clusters of large, rounded berries with good flesh recovery, small seed, and creamy coloured flesh with a crisp dry texture and excellent flavour
  - ❑*Chompoo*, a late-season variety, with medium-sized berries
  - ❑*Daw*, with medium-sized berries, thin skin, large seed, and sweet crisp flesh
  - ❑*Haew*, a late-season variety characterised by large berries with thick skin, firm texture and good flavour
- ***American varieties:***
  - ❑*Homestead No. 1* (from Florida) — small berries
  - ❑*Kohala*, an early-season Florida cultivar with large, sweet, juicy berries and, unlike some Thai varieties, tends to lose flavour if not harvested at the correct time

Table A2-1. Australian longan harvest season

	Jan	Feb	Mar	Apr	May	June
Atherton Tableland						
- Kohala						
- Homestead						
- Biew Kiew						
- Chompoo						
- Haew						
Far north Queensland coast and rest of Queensland						
- Kohala						
- Homestead						
- Biew Kiew						
- Chompoo						
NSW						
- Kohala						
- Homestead						
- Haew						

The fruit is picked as bunches (panicles), which are sometimes sold intact but are usually cut down into branchlets (sub-panicles). These are usually trimmed of flower stalks, nubbins (small undeveloped fruit), and odd fruit, to produce small well-shaped clusters.

The main product forms produced to meet Longan Association Australia gradings are:

- whole bunches/panicles (20–50 fruit with a central stem) — usually sold to Vietnamese retailers for cutting down into sub-panicles; usually packed in a bulk box surrounded by single fruit or small sub-panicles; often packed with leaf attached to the panicle for Chinese New Year
- sub-panicles (the main product form) of up to 10–12 fruit per cluster, with no central stem

- singles — individual fruit clipped to retain a stem of at least 50 mm
- loose fruit — individual fruit that has fallen off the panicle and has no stalk; if the skin at the base has torn the fruit is rejected, otherwise it is retailed as loose.

There are two main packaging types. The 8 kg plastic open-weave basket with tie-on lid is mainly used for sulphur dioxide-treated fruit. Cardboard cartons of 5 to 7 kg capacity are also used, the trend being towards a 5 kg industry standard. Loose fruit with stems is packed in a variety of container sizes.

Some growers use Krispibags (plastic bags with small holes to control humidity levels) to inhibit dehydration, although these increase perspiration, and reduce visibility on display. Other types of packaging bags are presently being trialed to overcome these drawbacks.

For road freight, harvested longans are pre-cooled and cool-stored at 10–15° Celsius to maintain skin colour and postpone postharvest rot. Where growers use sulphur dioxide gas to reduce dehydration and extend shelf life, fruit can be refrigerated down to 2° Celsius, permitting road freight to southern markets. This treatment produces a pale gold skin, with some bleaching of skin blemishes. Air freighted fruit is generally not sulphur dioxide-treated and is held at ambient temperature.

The Longan Association Australia has deferred branding until quality standards are established, although some growers are supplying branded packs.

Appendix 3. Countries/territories/regions with traditional domestic consumption of longans

Country	Domestic production	Scale of annual production	Comments
Burma	✓	n.a.	
China	✓	World's third largest producer — 70 000 tonnes in 1989	Exports to and imports from Hong Kong
Hong Kong	✓	Minor	Some re-exports, mainly to China. Counter-seasonal market for Australia. Mainly imports — 50 000 tons p.a.
India	✓	n.a.	
Indonesia	✓	n.a.	Imports (around 2700 tonnes in 1995)
Japan	✕	Nil	Imports from Thailand, which is carrying out market development; probably mainly for ethnic Chinese population.
Laos	✓	n.a.	
Malaysia	✓	n.a.	Developing an export industry
Philippines	✓	n.a.	
Singapore	✕	Nil	Imports — 4000 tons in 1995. Counter-seasonal market for Australia
Sri Lanka	✓	n.a.	
Taiwan	✓	Approximately 140 000 tonnes in 1995	One of world's largest three producers
Thailand	✓	Approximately 140 000 tonnes in 1994	One of world's largest three producers, and largest exporter — 48 000 tonnes (fresh fruit equivalent) in 1994
USA	✓	Small production in Hawaii and Florida	Imported 1150 tonnes of Thai canned longan in 1995, for ethnic Asian population.
Vietnam	✓	Expanding minor industry	Consumption increasing due to growing regional affluence. Developing an export industry.

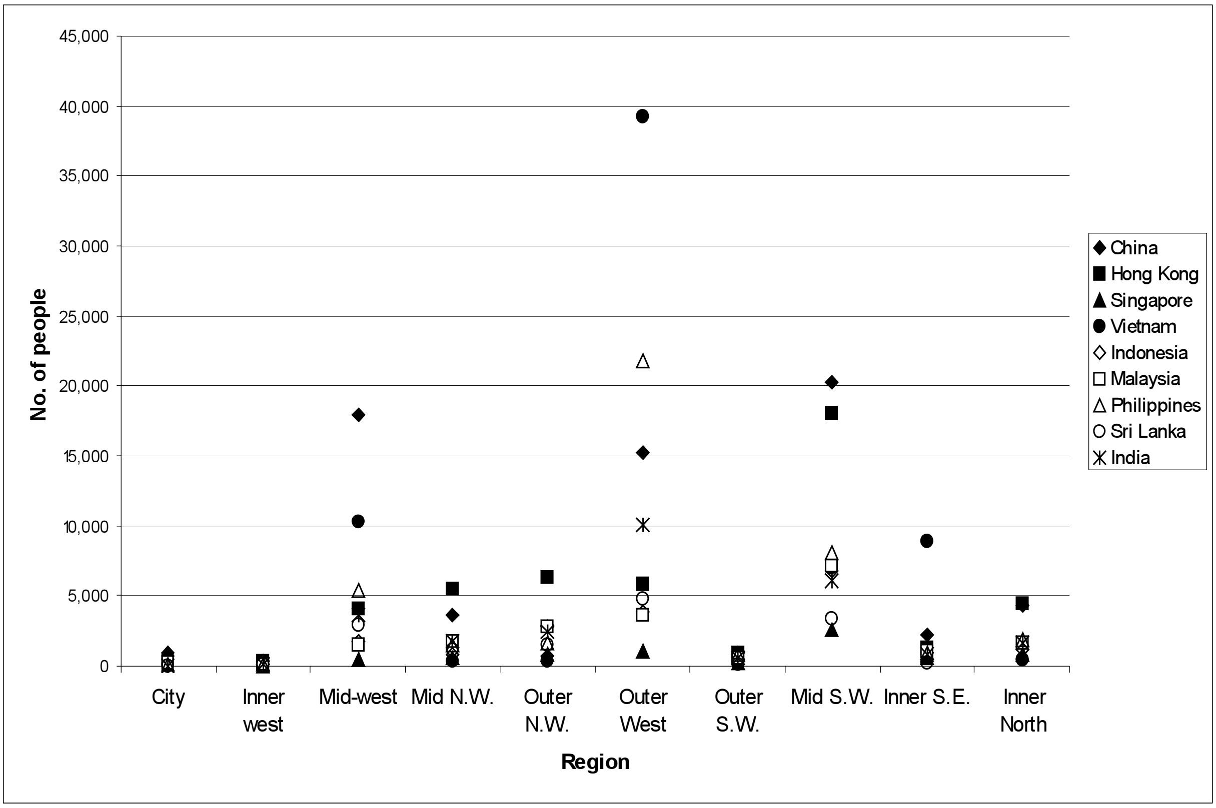
n.a. not available

Sources: Vinning, G. & Moody, T., 1997, *A Market Compendium of Tropical Fruit*; Rural Industries Research and Development Corporation
Takeshi, N., Diamond Star Corporation, Tokyo.

Appendix 4. Selected ethnic distribution by geographic region — Sydney and Melbourne

In 1996 the ABS census showed that 122 080 people living in Sydney had been born in India, Indonesia, Malaysia, Philippines and Sri Lanka, and 190 559 had been born in China (excluding Taiwan), Hong Kong, Singapore and Vietnam — all countries where longans are a traditional fruit. The second group is considered the main market for longans, the first group being not so well recognised. Therefore the graph below aims to determine whether the first group would have access to longan distribution through living in the same localities as the second group.

Figure 4-1. Selected ethnic distribution by Sydney regions



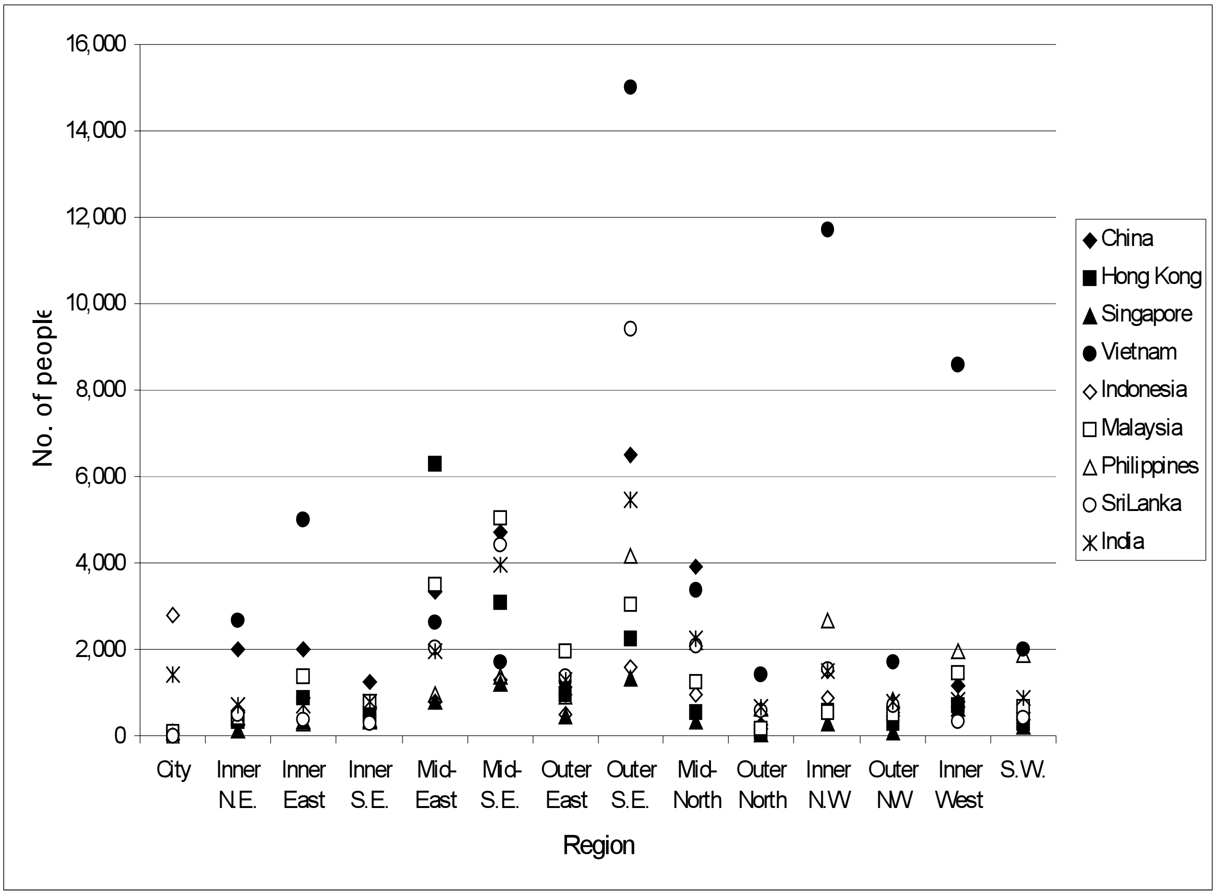
Legend for Sydney regions

City
Inner west — Drummoyne, Hunters Hill
Mid-west —Ashfield, Auburn, Burwood, Canterbury, Concord, Strathfield
Mid north-west—- Ku-ring-gai, Ryde
Outer north-west — Baulkham Hills, Hornsby
Outer west — Bankstown, Blacktown, Fairfield, Holroyd, Liverpool, Parramatta, Penrith
Outer south-west — Camden, Sutherland Shire
Mid south-west— Botany, Hurstville, Kogarah, Leichhardt, Marrickville, Randwick, Rockdale
Inner south-east — South Sydney, Waverley, Woollahra
Inner north — Lane Cove, Manly, Mosman, North Sydney, Pittwater, Warringhah, Willoughby

The graph confirms substantial populations of people born in China, Hong Kong, Singapore and Vietnam wherever there are significant numbers of people born in the Philippines, Sri Lanka, Malaysia, India and Indonesia.

For the same year, the ABS census showed that 120 207 people living in Melbourne had been born in India, Indonesia, Malaysia, Philippines and Sri Lanka, and 109 234 had been born in China (excluding Taiwan), Hong Kong, Singapore and Vietnam. Again, the graph below aims to determine whether the first group would have access to longan distribution through living in the same localities as the second group.

Figure 4-2. Selected ethnic distribution by Melbourne regions



Legend to Melbourne regions

City
Inner west — Drummoyne, Hunters Hill
Mid-west —Ashfield, Auburn, Burwood, Canterbury, Concord, Strathfield
Mid north-west—- Ku-ring-gai, Ryde
Outer north-west — Baulkham Hills, Hornsby
Outer west — Bankstown, Blacktown, Fairfield, Holroyd, Liverpool, Parramatta, Penrith
Outer south-west — Camden, Sutherland Shire
Mid south-west— Botany, Hurstville, Kogarah, Leichhardt, Marrickville, Randwick, Rockdale
Inner south-east — South Sydney, Waverley, Woollahra
Inner north — Lane Cove, Manly, Mosman, North Sydney, Pittwater, Warringhah, Willoughby

The graph confirms substantial populations born in China, Hong Kong, Singapore and Vietnam wherever there are significant numbers of people born in the Philippines, Sri Lanka, Malaysia, India and Indonesia.

Appendix 5. Store observations, April and June 2000

Store description	Longans on display	Other exotics
SYDNEY		
Paddy's Market, Flemington — Friday morning	Several stands with longans; one Vietnamese vendor selling trays of loose fruit, with a few on panicle, at $8/kg	Rambutans, lychees, other Asian fruits and vegetables
Market City, Haymarket (Chinatown) — Friday morning	Loose fruit at $7/kg; smaller and some large *Biew Kiew* on panicles at $8/kg; sub-panicles of larger fruit tied into bunches at $8/kg; all longans displayed in boxes	Wide range of Asian and other fruits
Chinese supermarket, Haymarket	Longans at $8/kg at front of store	Lychees, rambutans, durian and other Asian fruits
Strip of Asian fruit and vegetable stores and grocers, Flemington	Usually displayed prominently in their cartons at the store entrance	Lychees, rambutans, other Asian products
Boutique fruit & vegetable store, Northbridge	None	Punnets of rambutans and mangosteens; loose lychees
Fruit & vegetable store, Chatswood	Had high turnover in season, but none in June at time of store visit and interview	Large turnover of rambutans, lychees
Sydney CBD Supermarket,	Longans at $7.99/kg	Rambutans; lychees at $7.99/kg
Chain of fruit and vegetable stores, various suburbs	Bulk displays at $7.99/kg; some green-tinged, some gold; a lot of small size, heavy stick and loose fruit	Rambutans, lychees and grapes, longans next to grapes at $2/kg
MELBOURNE		
Three stands in Victoria Market, City	Large berries only on sub-panicle, at $8–$10/kg, displayed in carton	Large range of Asian-style products including rambutans and lychees
Prahran Market, Prahran	None	Several stores with lychees, one with rambutans
Supermarket, Prahran	Single tray at $8/kg	
'Let's Eat', Prahran	None	Lychees, rambutans
Department stores, City	None	
Fruit and vegetable store, Toorak	None	Rambutans, lychees
Fruit and vegetable store, Essendon	None	Lychees
Fruit and vegetable store, Carlton	None	Single 850 g punnet of rambutans, no longans
Strip of Vietnamese fruit and vegetables stores and grocers, Richmond	All	All had rambutans and lychees, e.g. lychees at $8/kg
	Supermarket had dark dry-looking longans at entrance in sun, at $5/kg	
	Fruit and vegetable store had large green longans on panicle at $9.99/kg at entrance; dark dried loose fruit, some rotting, at side of entrance, at $2.99/kg	
	Other stores had mixed greenish & brown on panicle at $6.99/kg; loose bags (around 1 kg) on pavement at $3.50/kg; loose with stacks at entrance and inside at $3.99/kg, some on panicle, small but not dried out	

Appendix 6. Media list

ETHNIC PRESS

Chinese

The Australian Chinese Times, circulation 10 000 National weekly Chinese newspaper. Target: Australian Chinese community. Publisher: AC Media, Sydney, phone 02 9211 7555; fax 02 9211 7580.

The Australian Chinese Age, circulation 10 000. Weekly Melbourne suburbs & metropolitan areas, community & local news. Publisher: The Australian Chinese Age Group, phone 03 9663 8181; fax 03 9663 3696.

Australian Chinese Daily, circulation 25 000. National, Monday–Saturday. Phone 02 9261 3033; fax 02 9261 3525.

The Chinese Australian, circulation 11 300. Includes community news, leisure. Phone 03 9663 1833; fax 03 9663 1033.

Chinese Herald, circulation 23 000. News, entertainment, restaurant guides, etc., free translation service. Publisher: The Chinese Herald, phone 02 9281 2966; fax 02 9281 8328.

Chinese Post, circulation 13 800. Weekly, includes news, entertainment, etc. Publisher: Chinese Post, phone 02 9267 6288; fax 02 9267 6818.

Melbourne Chinese Post, circulation 13 000. Fortnightly, Melbourne metropolitan area, Chinese community. Publisher: Melbourne Chinese Post, phone 03 9663 8455; fax 03 9663 8209.

Philippines

The Philippine Community Herald, circulation 6 000. Monthly, community news and events. Phone 02 9725 7722; fax 02 9725 7722.

The Philippine Community News, circulation 3000. Publisher: Sampaguita Publications, phone 02 9637 6474; fax 02 9682 4062.

Indian

Hindi Samchaar Patrika, circulation 20 000. Monthly, all capital cities, with news, entertainment etc. Publisher: Asia Pacific Times, phone 02 4736 1904; fax 02 4736 8074.

Indian Post, monthly, distributed Sydney, Melbourne, Canberra, in English. Circulation 10 000. News, reviews. Publisher: Consolidated C. Holdings, phone 02 9742 6106; fax 02 9642 1117.

Indonesian

Warta Berita Aquila, circulation 15 000 General news, communities issues. Fortnightly, national distribution. Phone 02 9560 8510; fax 02 9564 0454.

Japanese

J.A. News (*The Japan Australia News*), circulation 15 000. Bilingual, includes general interest topics and information. Free distribution monthly. Publisher: J.A. Net, phone 08 9355 0111; fax 08 9355 0333; e-mail janews@wantree.com.au

Southern Cross Times, circulation 24 000; national distribution monthly. News, day-to-day information, shopping, lifestyle. Publisher: The Southern Cross Times, phone 07 3221 2551; fax 07 3221 1472.

Vietnamese

Chieu Duong (*The Sunrise Daily*), circulation 98 000. Daily news, art and culture. Publisher: The Sunrise Daily Newspaper Pty Ltd, phone 02 9725 6444; fax 02 9725 6446.

Viet Luan (*The Vietnamese Herald*), circulation 20 000. Tuesday & Friday. Publisher: Vietnamese Pty Ltd, phone 02 9796 3922; fax 02 9707 1572.

Vietnam News Today, circulation 15,000. National weekly. Phone: 02 9600 6846; fax 02 900 8085.

MAINSTREAM PRESS

Upmarket

Australian Financial Review, phone 02 9282 2822. Contact Food Writer.

Australian Gourmet Traveller, monthly magazine — food, wine and travel. Readership: 25 to 49 year olds, 47% AB (the top 20% in terms of education, income and job status). Circulation: 87 422+ (ABC). Publisher: ACP Publishing, phone 02 9282 8000. Contact Food Editor.

marie claire lifestyle, bi-monthly — interiors, food, wine, gardening, travel. Readership: women 25–49, AB&C quintiles (higher education, income, job status). Publisher: Murdoch Magazines, phone 02 9692 2000.

New Woman, monthly magazine — lifestyle, fashion, health, beauty, career, money, food, relationships, travel, self-development. Readership: "30-something women". Circulation: 106 944 (Australian Bureau of Circulation). Publisher: Murdoch Magazines. Contact Food Editor, 02 9692 2000.

The Australian, phone 02 9288 3000. Contact Food Writer, Cherry Ripe.

Vogue Entertaining & Travel Guide, monthly magazine culinary and entertaining lifestyle guide. Circulation: 61 370 (ABC). Publisher: Conde Nast Publications, phone 02 9964 3888. Contact Food Director.

Mass market

Australian Good Taste, monthly magazine — lifestyle and food; distributed nationally through Woolworths and by subscription. Circulation: 150 897 (ABC). Publisher: Text Media Group, phone 02 9952 4611. Contact Food Editor.

Australian House & Garden, phone 02 9282 8000, contact Food Writer, Geoff Jansz.

Australian Table, monthly magazine, national distribution, food, wine, lifestyle, associated with Coles and sold through Coles and select newsagents. Publisher: ACP Publishing, phone 02 9282 8529000. Contact Food Editor.

Australian Women's Weekly, monthly magazine — women's general interest, food, fashion, craft, family. Circulation: 963 626 (ABC). Publisher: ACP Publishing, 02 9282 8107. Contact Food Editor.

Daily Telegraph, phone 02 9288 3000, contact Food Writer.

Family Circle, family, food. Publisher: ACP Publishing, phone 02 8220 2000. Contact Food Editor.

Family Living — interviews, home, leisure, healthy living, fashion & beauty, travel, entertainment, children, 60+. Free distribution, Greater Sydney area. Publisher: Family Magazines, phone 02 9353 0700.

Herald Sun, phone 03 9292 2000, contact Food Writer.

New Idea, weekly magazine — women's general interest. Circulation: 570 418 (ABC). Publisher: Pacific Publications. Contact Margaret Fulton, Cooking Editor, 03 9320 7405.

Sunday Telegraph, phone 02 9288 3000, contact Food Writer.

Sun-Herald, phone 02 9282 2822, contact Food Writer.

Sydney Morning Herald, phone 02 9282 2822, contact Food Writer.

The Good Weekend, The Age, Sydney Morning Herald — current affairs and lifestyle topics. Publisher: John Fairfax Group, 02 9282 1380 (editorial).

Woman's Day, weekly magazine — women's interest, celebrities, food, fashion, gardening, cooking. Circulation: 892 155 (ABC). Publisher: ACP Publishing, 02 9282 8000. Contact Food Editor.

Diana Todd-Banks, dtoddb@ozemail.com.au (food writer for various publications including *The Cairns Post).*

Sources:

Rann, J., 1998, Margaret Gee's Australian Media Guide – November 1998 – March 1999, 59th ed, Information Australia, Melbourne

Media People, August 2000 edition.

Appendix 7. Criteria for Matrix of market attractiveness and competitive position for current and potential market segments

MARKET ATTRACTIVENESS INDEX

Evaluative criteria	Ethnic — Chinese/ Vietnamese	Other ethnic	Mass market	Upmarket Caucasian	Food service
Market size	Medium	Medium	High	Medium	Medium
Market growth rate	High	Medium	Low	Medium	Medium
Demand	High	High	Low	Low	Low
Industry profit margin	High	High	Low	High	Low
Seasonality	Medium	Low	Low	Low	Medium
Price sensitivity	Medium	Medium	High	Low	High
SCORE	15	13	10	10	11

Scoring:

High = 3
Medium = 2
Low = 1

BUSINESS STRENGTH INDEX

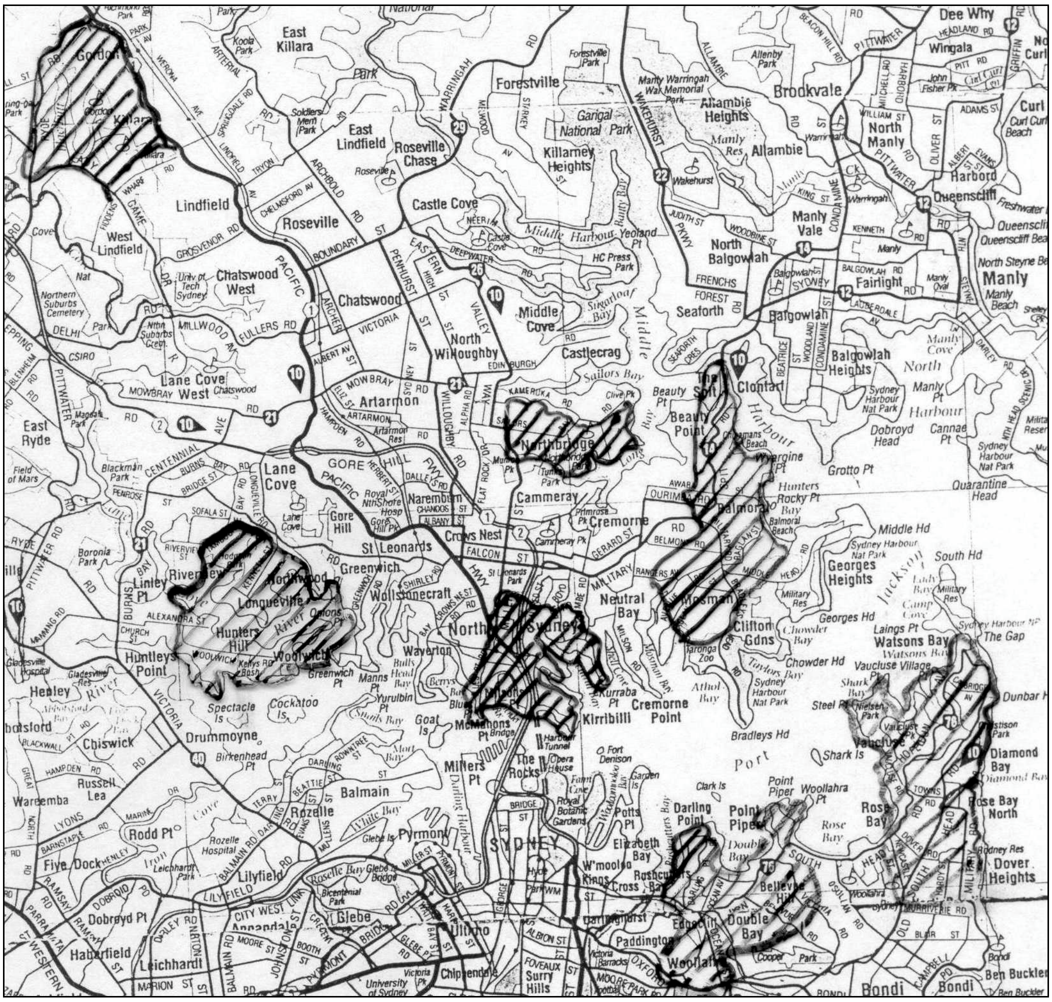
Evaluative criteria	Ethnic — Chinese/ Vietnamese	Other ethnic	Mass market	Upmarket Caucasian	Food service
Relative market share	Strong	Strong	Weak	Weak	Weak
Price competitiveness	Strong	Strong	Weak	Weak	Weak
Product quality	Average	Average	Average	Average	Average
Customer and market knowledge	Average	Weak	Weak	Weak	Weak
Sales effectiveness	Weak	Weak	Weak	Weak	Weak
SCORE	11	10	5	7	7

Scoring:

Strong = 3
Average = 2
Weak = 1

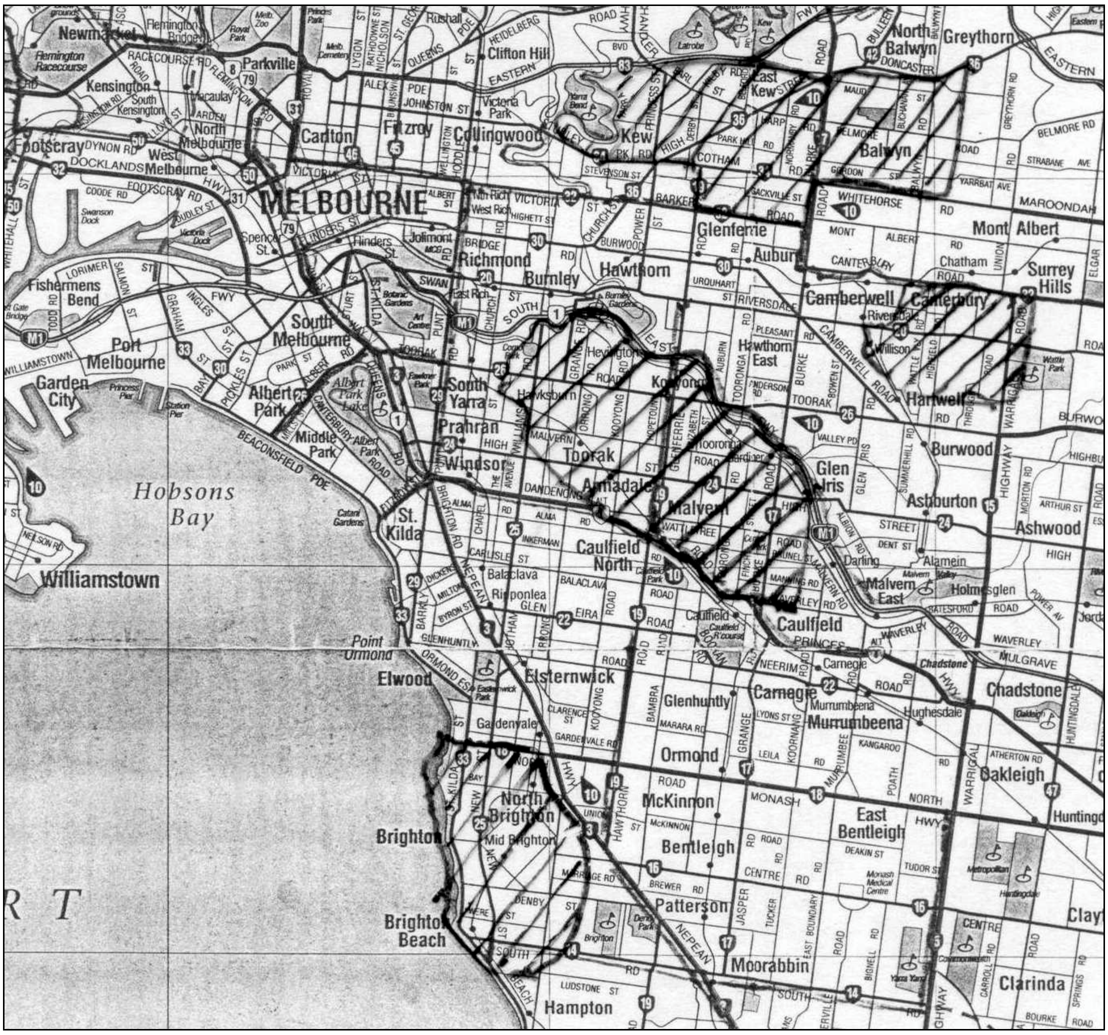
Appendix 8. Highest-earning suburbs of Sydney and Melbourne, 1997–98

Figure 8-1. Highest earning suburbs of Sydney, 1997–98



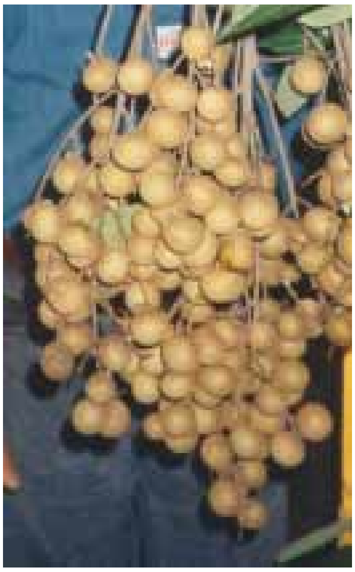
Source: Australian Taxation Office, 'Highest and lowest mean income earning postcodes, New South Wales', *Taxation Statistics 1997-98, a summary of taxation, superannuation and child support statistics*

Figure 8-2. Highest earning suburbs of Melbourne, 1997–98

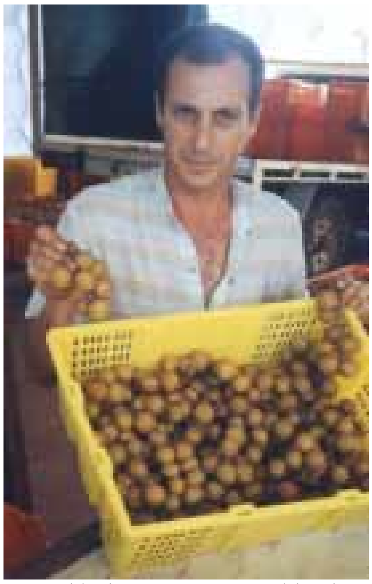


Source: Australian Taxation Office, 'Highest and lowest mean income earning postcodes, Victoria', *Taxation Statistics 1997-98, a summary of taxation, superannuation and child support statistics*

Appendix 9. Photographs



Longan bunch, before grading



S. Tahir, longan grower , with 9 kg plastic tray

Paddy's Markets, Flemington, Sydney

Longans on display in used date box

Longan mass display – Sydney fruit & vegetable store

Retailer holding sub-panicles with heavy stem

Appendix 10. Consumer survey findings

Table 10-1. Recognition of longans
(response = 87)

'What do you think these are?'	No. of respondents	% of respondents
No idea	33	38%
Lychee	25	29%
Longan	12	14%
Nut	7	8%
A fruit	5	6%
Date	2	2%
Pine nut	1	1%
Rambutan	1	1%
A vegetable	1	1%
TOTAL	87	100%

Table 10-2. Recognition of longans by location of fruit and vegetable store where interviewed

'What do you think these are?'	Longan		Lychee		Other		No idea		TOTAL	
	No.	%	No.	%	No.	%	No.	%	No.	%
Ashfield	2	15	3	21	1	7	8	57	14	100
Pennant Hills	1	7	2	13	3	20	9	60	15	100
St Ives	0	0	7	50	3	21	4	29	14	100
Ultimo	3	21	6	43	5	36	0	0	14	100
Mosman	3	21	2	15	3	21	6	43	14	100
Willoughby	2	13	4	25	4	25	6	37	16	100
TOTAL	11	13	24	27	19	22	33	38	87	100

Table 10-3. Whether seen longans previously

'Have you seen longans before?'	No. of respondents	% of respondents
Yes	23	25
No	65	71
Canned	1	1
Don't know/not sure	4	3
TOTAL	93	100

Table 10-4. Whether tried longans previously

'Have you tried longans before?'	No. of respondents	% of respondents
Yes	13	16
No	67	83
Canned	1	1
TOTAL	81	100

Table 10.5. Where longans seen/tried before

'Where have you seen longans?'	No. of respondents	'Where have you tried longans before?'	No. of respondents
Fruit stores	6	Fruit stores	1
Asia	2		
Supermarkets	2		
Thailand	2	Thailand	1
Buys them	1	Buys them	1
Cabramatta, Sydney	1		
Chinese store	1		
Hong Kong	1		
Husband is Indonesian	1		
Husband is Chinese	1		
Market	1		
Singapore	1	Singapore	1
TV, 'Landline'	1		
United Kingdom	1		
Workplace	1		
Wagga Wagga	1		
South America	1		

Table 10-6. Tried before, by location of store where interviewed

Location of store where interviewed	'Have you tried longans before?'						TOTAL	
	Yes		No		Not sure			
	No.	%	No.	%	No.	%	No.	%
Ashfield	2	14	12	86	0	0	14	100
Pennant Hills	1	8	11	92	0	0	12	100
St Ives	0	0	16	100	0	0	16	100
Ultimo	2	25	6	75	0	0	8	100
Mosman	3	16	12	67	3	17	18	100
Willoughby	1	17	4	66	1	17	6	100
TOTAL	9	12	61	83	4	5	74	100

Table 10-7. Tried before, by age

Age category	'Have you tried longans before?'				TOTAL	
	Yes		No			
	No.	%	No.	%	No.	%
Under 18	0	0	0	0	0	0
18–24	0	0	5	100	5	100
25–44	8	16	42	84	50	100
45–65	4	17	19	83	23	100
65 plus	0	0	1	100	1	100
TOTAL	12	15	67	85	79	100

Table 10-8. Tried before, by sex

Sex	'Have you tried longans before?'				TOTAL	
	Yes		No			
	No.	%	No.	%	No.	%
Female	8	14	50	86	58	100
Male	5	23	17	77	22	100
TOTAL	13	16	67	84	80	100

Table 10-9. Reaction to taste-test

'What did you think of it?'	No. of respondents	% of respondents
Liked strongly	29	33
Liked somewhat	44	50
Neither liked nor disliked	10	11
Didn't like	2	2
Disliked strongly	3	4
TOTAL	88	100

Note: One person had tried a longan in Thailand, not liked it then, and declined a taste on this occasion.

After the tasting:

One respondent bought 1 kg (male, 25–45, commutes between Sydney and Canberra).

One bought 0.5 kg (female, 25–45 from Dulwich Hill).

One respondent's daughter, who had tasted longans at school, returned to buy some.

Table 10-10. Comments following taste-test

Exterior

Ugly, unattractive (4); unattractive colour, and needs peeling (2);' unattractive but refreshing'; unattractive and needs labels; 'delicious, but outside unattractive — can they be washed?'; 'Japanese look, needs to be peeled'; 'could use to decorate'; 'not as presentable as other fruits'

Flavour

Very tasty; tangy; strong; very tropical (2); unusual, strange, but not distasteful; sweet (4); very sweet; less sweet than canned; not too sweet; refreshing; exquisite; beautiful; delicious; distinctive; nice (2); 'good flavour and texture'; good; interesting; unusual, 'not very strong flavour', 'not distasteful'; 'could grow on one after a few tastings' (2);

'Tastes OK, but not the most interesting fruit'; 'different' (2); 'not much flavour'; 'too sweet' (2); 'taste a surprise, as it looks unattractive'; 'savoury taste' (2); 'acquired taste (2); 'not a refreshing aftertaste'; 'not thirst quenching'; 'nice aftertaste' (3); peppery; refreshing; 'aftertaste grew on respondent after two'; dry aftertaste; funny aftertaste'; cross between grape and melon'; 'cross between coconut and plum'; 'like an apple'; 'like coconut'; 'citrus flavour'; 'nutty' (3)

Texture

Nice (2) firm, very fleshy, juicy; watery; low in calories

General

Unusual (2); different (3); weird (2); strange (2); bizarre; 'kids love them'; 'seed no good for kids'

Comparisons to lychee

'Flesh looks like lychee' (37); 'outside like a lychee' (2); 'tastes like a lychee' (5); 'less sweet than lychee' (6); 'sweeter than lychee'(2); 'not as nice as lychees' (8); 'don't like, but don't like lychees' (2); 'flesh more transparent than lychee'; 'less astringent than lychee' (2); 'more interesting, with more definite flavour'; 'less sickly, less perfumed, less juicy' (big lychee eater); 'cross between lychee and grape' (2); 'cross between lychee and rockmelon'; 'cross between lychee and coconut'; 'likes slightly better than lychees' (occasional lychee eater); 'flavour, texture and skin similar to lychee but sharper'; 'prefer lychees and would buy instead of longans'; 'prefer lychees'; 'prefer lychee as less juicy'; 'poor relation to lychee'; 'less flavour than lychee'; 'less flavour than lychee or rambutan, less juicy, uninviting appearance'

Table 10-11. Likelihood of purchasing longans

'Could you see yourself buying longans?'	No. of respondents	% of respondents
Definitely	12	24
Probably	14	27
Maybe	10	19
Don't know/can't say	3	6
Maybe not	7	14
Definitely not	5	10
TOTAL	51	100

Table 10-12. Likelihood of buying longans, by reaction to tasting
(cross-tabulation)

'Could you see yourself buying longans?'	Reaction to tasting					
	Liked strongly	**Liked somewhat**	**Don't know/ can't say**	**Disliked somewhat**	**Disliked strongly**	TOTAL
Definitely would	9	3	0	0	0	12
Probably	5	9	0	0	0	14
Maybe	2	7	1	0	0	10
Don't know/can't say	1	1	1	0	0	3
Maybe not	0	4	2	0	0	6
Definitely not	2	0	1	1	1	5
TOTAL	19	24	5	1	1	50

Table 10-13. Likelihood of buying longans, by age category

'Could you see yourself buying longans?'	Age category (estimated)										TOTAL
	Under 18		**18–24**		**25–44**		**45–65**		**Over 65**		
	No.	**% of age category**	**No.**	**% of age category**	**No.**	**% of age category**	**No.**	**% of age category**	**No.**	**% of age category**	
Definitely	1	0			6	23	6	38	0	0	13
Probably	0	0	3	50	8	31	3	19	0	0	14
Maybe	0	0		0	4	15	4	25	2	100	10
Don't know/can't say	0	0	1	17	1	4	1	6	0	0	3
Maybe not	0	0			6	23		0	0	0	6
Definitely not	0	0	2	33	1	4	2	12	0	0	5
TOTAL	1	0	6	100	26	100	16	100	2	100	51

Table 10-14. Information requirements
(response = 80)

‘What information would you need if you were to buy longans?’	No. of respondents	% of respondents
How-to-use ideas	45	50
Nutrition, health benefits	28	29
Where grown	12	12
Recipes	8	9
How to store	5	6
Similarities to lychee	4	4
How to use serve; use in cooking (5)	4	4
Description of contents, flavour	3	2
Can they be washed?; how to peel (2)	2	2
Foods to eat longans with	3	3
How to use for school lunches	1	1

Other suggestions:
‘the season’; ‘ the kind of tree it grows on’; varieties; ‘why on the stick’ (2); how to select good ripe fruit (2); when to eat; general information;
Note: Some respondents provided more than one suggestion.

Table 10-15. Likely eating situations
(response = 77)

‘How could you see yourself eating longans?’	No. of respondents	% of respondents
Fresh, fresh snack	40	52
Dessert	11	14
Fruit salad	6	8
Fruit and cheese platter	6	8
Dessert — fresh with icecream	5	6
Fruit platter	5	6

Other suggestions
‘Use in fruit salad with ginger wine syrup, as with melons’; ‘Not on a fruit salad — too much effort’; ‘has used on bunch to decorate’; ‘not exciting on own, but could use to decorate’; fruit baskets (caterer); breadcrumbed and fried; peeled; ‘in salads, and would complement a lot of vegetable flavours’; ‘use like a lychee for special occasions’; entrée; dessert with cream; after dessert; dessert after Chinese meal; in a restaurant; ‘Could they be cooked with, say, pork?’; ‘Doesn’t go with most cheese, but maybe with gorgonzola — like quinces with creamy cheese’; ‘Probably wouldn’t cook. Maybe salt and serve in savoury dish, e.g. fish sauce for Thai fish salad, to cut saltiness’; ‘Maybe served with nuts’
Note: Some respondents provided more than one suggestion.

Table 10-16. Likelihood of purchasing, by likely usage
(cross-tabulation)

‘How could you see yourself eating longans?’	Likelihood of purchasing						
	Definitely	**Probably**	**Maybe**	**Don’t know/ can’t say**	**Maybe not**	**Definitely not**	TOTAL
Fresh	10	6	5	1	1		23
Fruit salad	2	2				1	5
Dessert		1	1		2		4
Fruit & cheese platter	1		3				4
Dessert with icecream		1		1		1	3
Fruit platter		2					2
TOTAL	13	12	9	2	3	2	41

Table 10-17. Comments on longans in square punnet and/or flatter punnet

Positive	Negative
Prefer (37)	Don’t like (12)
OK, good (7)	Dearer (5)
Better presentation, more appealing (7)	Waste of packaging (2), polluting
More uniform presentation	Not fragile or soft fruit so don’t need packaging (2)
How people like to buy fruit, would sell	Too bulky
Looks more ready to grab from shelf	Limits volume
Would appeal to Caucasians	Fruit looks bald
More modern	Waste of time
More presentable, but dearer (2)	Looks like potatoes
Likes Europunnet	Less presentable
Might indicate need to refrigerate	‘Suspicious of punnets’; ‘fruit in punnets softens underneath’; ‘would suspect not enough volume’; ‘would suspect quality’
Easier to handle without roughage	
Easier to pack for children’s lunch	
Easier to store	Depends on volume wanted
	Should present similar to lychee, with label

Table 10-18. Comments on longans on sub-panicles

Positives	Negatives
Prefer (25)	Don’t like (10)
OK (13)	Unattractive (10), unappealing, looks woody, looks soiled, soiled, rotten like dirty potatoes, uninspiring
Prefer loose — looks rustic, natural (5)	Hard to bag without tearing (4)
Prefer to hand pick (4)	Less attractive than lychee (2)
Prefer bulk (2)	Not attractive to Caucasians
Would pick from the bunch	
Depends on volume required	1 kg is too much
As with other fruit, doesn’t need protection	Unappetising — need to promote
Would buy	Uninteresting, need recipe card with photo
Maybe OK on platter	Needs more decision-making
Can choose volume	
Allows selecting	Loose wouldn’t sell because of colouring
Look authentic	Bunch doesn’t enhance appearance
Good, sturdy, branch on plate interesting	Could be too dear
Looks fresh off tree	
Looks too stalky but at least looks fresh	
Would buy	

Table 10-19. Attitudes to fruit being on the stem

'Would the sticks worry you?'	
Positives	**Negatives**
Looks rustic (7)	Definitely (2); maybe (3)
Looks Australian (7)	Doesn't enhance; unattractive; unappealing
Prefer, looks good, 'definitely not a problem'; 'probably not a problem' (11)	Too bulky; less goes in the bag
OK (3)	Better to remove
Looks natural (7)	Wouldn't want to pay for sticks (2)
'Cosmetically yes, but signifies that from a tree'	Harder to bag without tearing the bag (3)
'Fine, once familiar with it'	'Would like to know why they are on the stick'
'Can use as a garnish'	
'Twigs look intriguing'	
'Authentic, like vine-ripened tomatoes'	
'Good, would serve with the stem'	
'Would use either branch or loose, like lychees'	
'Good, know that fruit picked fresh so has had less processing'	
'Probably would be paying for stem, but it looks light'	

Table 10-20. Expected peak season price for panicles and punnets

Panicles (price/kg)	No. of respondents	Per punnet (approx. 300 g)	No. of respondents
$2.00	1	$2.00	1
$3.00	1	$3.00	3
$4.00		$4.00	2
$5.00	3	$5.00	1
$6.00	4	$6.00	
$7.00	4	$8.00	
$8.00	1		
$9.00	2		
No idea	4	No idea	5

Comments

'Price will be a barrier while unknown'; 'won't pay for lychees when price reaches $5'; 'expensive'; 'similar to lychee'; 'price needs to be affordable to allow trial until you acquire the taste'

Table 10-21. Information sources suggested for longans

'Where would you expect to get more information on how to use a fruit such as this?'	No. of respondents	% of respondents
Recipe cards	45	50
Store staff	9	10
Signage	11	11
Magazines (including *House and Garden*)	5	5
Label, label on punnet	6	6
Newspapers	3	4
Internet — Greengrocer.com	1	1
Internet	1	1
Chinese friends	1	1
Other customers	1	1
Through usage	1	1

Table 10-22. Expected retailer for longans
(response = 62)

'Where would you expect to be able to buy fruit such as these?'	No. of respondents	% of respondents
Usual fruit and vegetable store	37	60
Ethnic fruit and vegetable store	9	14
Supermarket	4	6
Fruit markets	1	2
Harris Farm markets	1	2
Health food and vegetable shop	1	2
No idea	2	4

Table 10-23. Likelihood of buying longans without tasting
(response = 57)

"Would you buy a fruit like this without having tasted it first?"	No. of respondents	% of respondents
Would have bought	7	12
Maybe	5	9
Don't know/can't say	2	4
Maybe not	7	12
Definitely not	36	63
TOTAL	57	100

Comments
'Yes, if I knew what to do with them'; 'No, too dull looking'; 'Maybe, but only a small amount'; 'Would need to taste for first experience'; 'No, I would be intimidated'; 'Not unless described as 'like a lychee"'; 'Maybe if good label or some cut open'

Table 10-24. Suggestions for introducing people to new fruits such as longans?"
(response = 61)

Promotion

Store sampling (44); Saturday sampling with discount

Demonstrate, with how-to-use ideas; promote variety of how-to-use ideas (2), e.g. 'simply peel like a lychee'; pavlovas, decoration, elegant salad for entertaining; present with a few leaves when sampling (2); display cut open; give kids a taste

Do a dish such as a dessert in a store demonstration, and show on a fruit platter

Pair with stonefruit, autumn fruit, apples

Via restaurants, e.g. fruit platters, maybe salads, to overcome consumers' lack of knowledge

Educate, promote as ultra-special; promote as a surprise — e.g. 'magic delight'

Get across the 'Australian-grown' message

Point-of-sale material

Large display at point of sale (2), with pictures and information on how to use; show the origin of the fruit, maybe say from China

Poster; poster showing how to peel and eat, not just the name as shoppers wouldn't know it

Labelling, how-to-use stickers — description of fruit; show contents

Recipe cards that advertise attributes; show peeled, being used as a dessert; describe contents; photographs of cut-up fruit, presentation (2); describe what taste to expect; describe similarity to lychee (4), including taste and flesh; quick and easy ideas for the person who doesn't cook; for the health-conscious consumer, promote the benefits to health; maximum of five usage ideas' (advertising executive); without recipe cards, too risky to buy; put leaflet in fruit box for store staff; hand out recipe cards in shopping centre

Improve appearance to overcome unattractiveness, e.g. good presentation such as cane basket

Publicity

TV chefs, TV programs (3), launch on daytime TV; show on TV showing people enjoying them

Food writers; articles in food sections of newspapers, and food magazines (2); articles in Wednesday lifestyle section of Sydney's *Daily Telegraph*; tell *Women's Weekly* readers about the lovely delicate range of flavours, very refreshing after Asian food, a refined sophisticated taste

The Internet

Word of mouth; offer to guests at barbecues

Table 10-25. Usual fruit retailer

'Where do you usually buy fruit?'	No. of consumers	% of consumers
This store	43	58
Other fruit & vegetable store	24	32
Supermarket	7	10
TOTAL	74	100

Table 10-26. Survey sample, by whether main household shopper

'Are you the main food shopper for your household?'	Yes		No		Share		TOTAL	
	No.	%	No.	%	No.	%	No.	%
Friday	33	84%	4	16%	2	0%	39	100
Saturday	18	58%	10	21%	6	21%	34	100
TOTAL	51	71%	14	19%	8	10%	73	100

Table 10-27. Survey sample, by whether main shopper for household, by day when interviewed shopping

'Are you the main food shopper for your household?'	Day of interview				TOTAL	
	Friday		Saturday			
	No.	% of Friday's respondents	No.	% of Saturday's respondents	No.	% of total
Main shopper						
Female	29	74	15	34	44	63
Male	4	10	3	9	7	9
Not main shopper						
Female	2	5	4	12	6	8
Male	2	5	6	18	8	10
Shares shopping						
Female	0	0	4	12	4	5
Male	2	5	2	6	4	5
TOTAL	39	100	34	100	73	100

Table 10-28. Profile of children's ages in household

Age category of children	No. per household
1 to 3 years	12 with one child
4 to 6 years	7 with one child; 2 with two children
7 to 12 years	8 with one child; 1 with two children.
13 to 18 years	7 with one child; 4 with two children
More than 18 years	16 with one child; 1 with two children

Note: Of these respondents, 29 households had children; 12 households had one child under 18, 12 had two and 5 had three.

Table 10-29. Survey sample, by sex

Sex	No. of respondents	% of respondents
Female	66	72
Male	25	28
TOTAL	91	100

Table 10-30. Survey sample, by age (estimate)

Estimated age category	No. of respondents	% of respondents
Under 18	1	1
18—24	8	9
25—44	53	59
45—65	26	29
Over 65	2	2
TOTAL	90	100

Appendix 11. Consumer survey questionnaire

LONGAN CONSUMER SURVEY – SYDNEY Date: /00. Store: ……………………..

RECOGNITION: **"What do you think these are?"** Longans ☐ Lychees ☐ A fruit ☐
Macadamia ☐ Other nut ☐ No idea ☐ Other ………………………….……………………

EXPERIENCE: **"Have you seen longans before?"** Yes ☐ No ☐ Not sure ☐ Where?

Have you tried them: Yes ☐ No ☐ Not sure ☐ Where?

TASTE TEST **"What did you think of it?"**

Liked strongly	*Liked somewhat*	*Neutral*	*Disliked slightly*	*Disliked strongly*
☐	☐	☐	☐	☐

Comments:

Comparisons to lychee:

INTENTION: **"Could you see yourself buying them?"**

Definitely	*Probably*	*Maybe*	*Neutral*	*Maybe not*	*Definitely not*
☐	☐	☐	☐	☐	☐

Comments:

USAGE: "How could you see yourself eating these?"

Fresh	☐	Fruit platter	☐
Fruit and cheese platter	☐	Dessert	☐
Dessert with icecream	☐	Other	

PACKAGING & UNIT SALE: "How do you feel about these presentations?"
PUNNET BRANCH

"Would the sticks worry you?"

"What price would you expect these to be?" … $…… per kg …… $…..…. Per punnet

INFORMATION SEARCH:
"Where would you expect to get more information on how to use fruit such as these?"

"What information would you need?"

"Where would you expect to be able to buy fruit such as these?"

"Would you buy them without having tasted them?"

"What do you think would be the best way to introduce people to new fruits such as longans?"

SHOPPING BEHAVIOUR: "Which suburb are you from?"
"Where do you usually buy fruit*?"* *Supermarket* ☐ *Fruit & vegetable store* ☐ *Market* ☐ *Other* ☐
Are you the main food shopper for your household? Yes ☐ No ☐
Do you have children? Yes ☐ No ☐Details

Gender M ☐ F ☐ Age category (estimate): under 18 ☐ 18-25 ☐ 25-45 ☐ 45-65 ☐
Ethnic origin (estimate): … Australian ☐
Caucasian ..☐ Other ……………………………..