

Market analysis and strategy: baby leaves and long beans

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Euromonitor International Ltd

Project Number: VG13046

VG13046

This report is published by Horticulture Australia Ltd to pass on information concerning horticultural research and development undertaken for the vegetables industry.

The research contained in this report was funded by Horticulture Australia Ltd with the financial support of the vegetables industry.

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ISBN 0 7341 3309 X

Published and distributed by:
Horticulture Australia Ltd
Level 7
179 Elizabeth Street
Sydney NSW 2000
Telephone: (02) 8295 2300
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Horticulture Australia

Market Analysis and Strategy

Baby Leaves and Long Beans

Horticulture Australia



Project Number: 1.5 DT MVCD (28 February, 2014)

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Purpose of Report:

The purpose of this final report is to communicate the successful delivery of project 1.5 DT MVCD.

Date of Final Report: 28/02/2014

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1. MEDIA SUMMARY

The diversity of the Australian vegetable industry has generated strong development potential overseas, particularly in Southeast Asia due to its close proximity to Australia and the United Arab Emirates (UAE) with its expatriate population and strong consumption culture of Western-cultivated greens. In specificity, markets in Malaysia and the UAE have been identified as the focus for Australian exports of long beans and baby leaves, which include subcategories of lettuce, spinach, rocket, chard and other brassicas. These produce which have seen success in Australian supermarkets have limited presence in parts of Southeast Asia and the Middle East, thus representing a potential opportunity for Australian exporters.

The feasibility study has been carried out by the independent company Euromonitor International throughout a course of 15 weeks, from 18th November 2013 to 28th February 2014. Throughout the course of the research, a comprehensive inquiry has been conducted on local consumers' preferences via extensive consumer surveys and in-store interview exercises, followed by trade interviews with major local industry stakeholders to study the optimal route-to-market distribution strategy as well as import criteria of local importers and distributors. Product placements have also been studied through store audits conducted in pertinent retail channels.

To facilitate export trade networks between Australia's local growers and offshore distributors in Malaysia and the UAE, relevant supply chain participants in these two countries have also been identified and profiled in a database. The database is expected to help exporters gain knowledge of export market specifications and forge stronger trade relationships.

2. INTRODUCTION INCLUDING REVIEW OF LITERATURE

2.1 BACKGROUND

The HAL project VG12042 (Action 7 and 12) provided evidence that existing baby leaf and beans export markets were not fully accessed or developed. Furthermore, value-added products that have been successful in Australian supermarkets have yet to find their way to Southeast Asian or Middle Eastern Countries.

It was in light of the above that HAL commissioned Euromonitor International to undertake market research in Malaysia and UAE to identify market opportunities for baby leaf and beans in these countries.

2.2 OBJECTIVES

Euromonitor undertook this project to fulfil the following research objectives:

- Complete market research of potential opportunities and threats for the export of baby leaves and long beans to Malaysia and the UAE
- The identification and profiling of relevant supply chain participants that would benefit/ assist growers in developing export trade networks both to and within Malaysia and the UAE
- Collaborative work with service providers appointed to organise National Export opportunity symposium

2.3 KEY STUDY AREAS

- Geographical: Malaysia and the United Arab Emirates
- Product Category: Baby Leaves (including brassica, lettuce, spinach, rocket and chard) and Beans (long beans)

2.4 REVIEW OF LITERATURE AND OTHER RELATED RESEARCH

To establish the underlying market size of baby leaves and long beans consumption, official government sources collated by the Ministry of Agriculture, Malaysia and National Bureau of Statistics, UAE have been adopted and incorporated in this report. Other related sources encompass comprehensive market findings derived from separate consumer surveys carried out in each of Malaysia and the UAE between the period of December 2013 and January 2014. Trade interviews with major industry stakeholders (including government officials, trade associations, importers, wholesalers and retailers) coupled by extensive store audits are also factored in crucially in the route-to-market analysis and contributed significantly in the development of final strategic recommendations.

2.5 IMPLICATIONS FOR THE INDUSTRY AND LIKELY IMPACT OF THE RESULTS

The research findings aim to establish if real export opportunities exist for the Malaysian and the UAE markets. Findings summaries drawn from the final outcome will serve to ratify the magnitude of export potential and assess the viability of benefits sustained from the export venture, should the Australian authorities and local growers decide to materialise the recommendations outlined in this report.

3. MATERIALS AND METHODS

Through a multi-pronged research approach comprising of desk research, store checks, interviews with various players operating in the supply chain and surveys of consumers of baby leaf and beans, all aspects of consumption of the two vegetables were covered from both a demand and supply perspective. Research was undertaken by Euromonitor International's analysts who were based in the country. Through this research approach undertaken by local analysts, Euromonitor International has generated a robust set of findings and recommendation of opportunities beneficial to HAL and growers in Australia.

The following research methodology was undertaken to accomplish the research objectives set out for the study.

3.2 DESK RESEARCH

Euromonitor conducted a review of all published information to build the preliminary background and insight for each country market:

- Import, export and production data
- Previously published HAL reports
- Euromonitor-published information on the packaged/ fresh food markets and the consumer foodservice market
- Health and wellness trends as well as other relevant information
- Locally published sources such as trade press, association reports, government reports, importer websites, etc.

3.3 STORE CHECKS

Euromonitor analysts visited stores in Dubai and Kuala Lumpur to compile a listing of products in the marketplace for the UAE and Malaysia respectively, with particular emphasis spent gathering information on:

- Product presence, pricing and packaging
- Unique branding from competing countries

In-store discussions were also conducted with retail staff/ managers at visited outlets to highlight consumer needs and preferences, provide information on new and emerging product trends and glimpse initial insights into the key success factors of leading brands/ source countries.

3.4 TRADE INTERVIEWS

Euromonitor conducted semi-structured trade interviews to generate thoughts, opinions and insights from existing and identified contacts within the baby leaf and long bean supply chains. It then used responses collected to build consensus answers. Trade interviews were conducted with identified contacts to gain up-to-date and accurate insights in order to create Euromonitor International's analysis addressing HAL's objectives:

- Retailers
- Foodservice operators
- Distributors
- Importers
- Other industry observers and relevant contacts

3.5 CONSUMER SURVEY

Euromonitor International conducted a consumer survey involving 789 respondents from Malaysia and the UAE, whose responses were analysed to identify the habits and perspectives of local consumers related to baby leaves and long beans. The survey was structured as follows:

- Online and closed-ended questions only
- 15 minutes in length; conducted in the local language
- 307 total completes (per crop per country; 1,270 total responses)
- Sample from general population aged 18 and up, main purchaser of household groceries. No further sub-quotas were sought.
- Screener question: Have you purchased baby leaves/ long beans (respectively) in the last six months?

3.6 ANALYSIS

Euromonitor cross-checked all sources and interpretations and performed an in-depth analysis of all fieldwork output to ensure that its deliverables address HAL's immediate objectives and set the stage for longer-term objectives.

4. RESULTS

4.1 MALAYSIA

The Malaysian baby leaf and long bean industries are expected to attain stable growth in line with the population growth rate over the next few years. The rising trend, albeit at a slower rate, will likely be attributed to various factors such as increasing awareness towards the usage of baby leaves and long beans, increasing presence in foodservice outlets as well as rising disposable income in the urbanised main cities. The industries saw gains in consumption of 21.9% and 8.3% between 2010 and 2012 for baby leaves and long beans, respectively, and they are expected to stabilise to 18.2% and 2.2% during the forecast period of 2013-2015.

Supermarkets and hypermarkets are the main go-to channels for the purchase of baby leaves. Plastic packs with a lighter shade of green in brassica, lettuce and spinach are the preferred choices among local consumers. On average, most consumers tend to purchase baby leaves more than once a week, but shorter shelf life and exorbitant costs combine to limit purchase frequency to two packs per occasion.

In contrast, wet markets are the preferred choice for the purchase of long beans. Long beans are typically marketed in a loose format, while packaged long beans tend to be less appealing to the average Malaysian consumer.

Internet blogs and online sources are the predominant media used to obtain information pertaining to fresh produce, while TV cookery shows such as 'Master Chef' help promote Western cuisine. The average local consumer is highly price-sensitive, and thus a good marketing campaign consisting of effective billboard signage and brand messaging could help secure stronger brand recognition of Australian-grown baby leaves and long beans amidst a competitive landscape that includes produce from countries such as China.

A large proportion of importers and distributors are located in the Klang Valley. Larger-scale importers are more specialised in certain produce and cater mainly to HORECA (hotels, restaurants and cafés) channels, while smaller-scale importers typically distribute to retail channels through wholesalers.

On average, large-scale retailers place their orders on a daily basis to ensure that produce arrives fresh, which leads to greater collaboration between large-scale retailers and large-scale importers with better-equipped logistical capabilities. In this respect, Australian imports are less favoured, especially for long beans, given the higher transportation costs and longer shipping time required. Importers and retailers tend to turn to Chinese imports or locally grown produce, which are comparatively cheaper.

Given the high self-sufficiency ratio of local long bean cultivation, the potential for long bean imports is fairly limited. However, ample room remains for the entry of baby leaf imports amidst a changing consumption landscape which sees local consumers increasingly embracing baby leaves as a vital ingredient in the daily diet.

5.1 THE UNITED ARAB EMIRATES

The United Arab Emirates (UAE) baby leaf and long bean industries are expected to grow positively in the next few years, driven primarily by the upcoming Expo 2020 poised to take place in Dubai. Throughout this period of time, the UAE's retail and HORECA (hotels, restaurants and cafés) industries are expected to experience significant development and help drive produce consumption. Boosted tourism levels are also anticipated to increase the existing consumer base. Going forward, baby leaf consumption is projected to attain growth of 6.5%, while long bean consumption is expected to reach growth of 2.7% in volume terms between 2013 and 2015. The government is also expected to reduce reliance on imports and promote local farming, particularly in organic vegetables.

Hypermarkets accounted for the largest value sales among grocery retailers in 2012. However, supermarket chains such as Spinney's also gained higher ground in 2012, emphasising quality and freshness as core focal areas. Given the significant number of Western expatriates, baby leaf consumption is typically incorporated into the staple diet of Western expatriate households. On the other hand, long beans tend to be consumed almost exclusively by South Asian expatriates, who incorporate the usage of long beans in their culturally traditional cuisines, such as stir-fried or curry dishes.

In terms of baby leaves, consumers generally prefer plastic packs containing leaves in darker shades of green. On average, 48.6% of respondents tend to purchase baby leaves more than once a week with an average of two packs per occasion, demonstrating the stronger consumption culture of baby leaves in the UAE. In contrast, 36.9% of respondents purchase long beans once a week averaging one pack per occasion, signalling comparatively limited consumption of long beans, which are popular among certain demographic clusters only.

Internet blogs and online sources are the predominant media used to obtain information pertaining to vegetable produce. TV cookery shows also have a significant influence on consumer education and purchasing behaviour, coupled with seasonality factors and in-store price promotions.

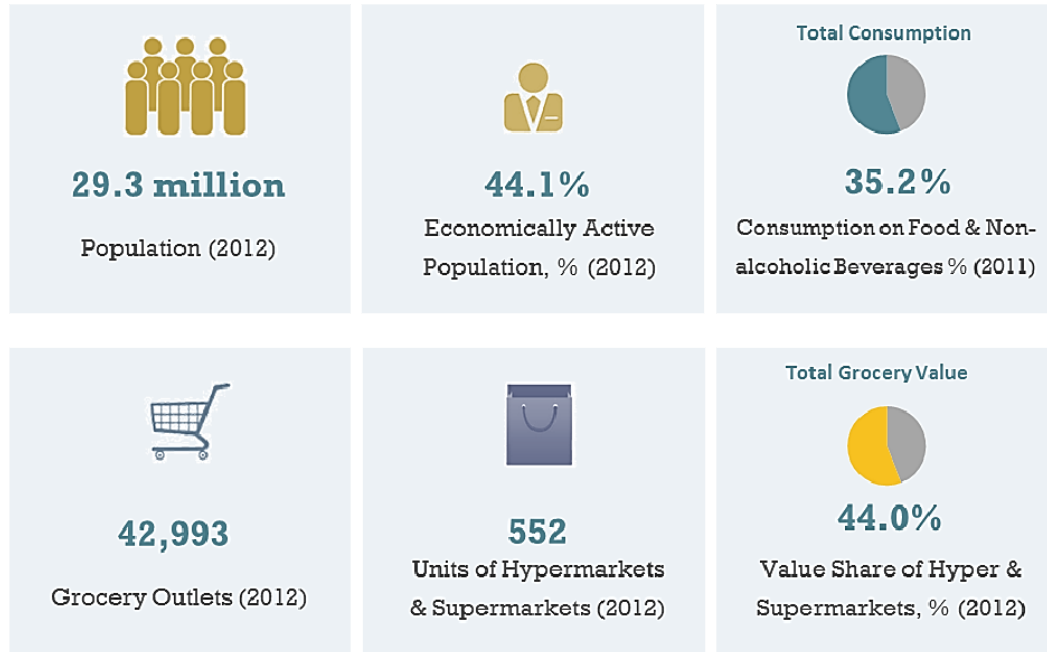
Larger-scale baby leaf importers distribute mainly to HORECA channels. On the other hand, long bean supplies are almost evenly distributed between hotels and restaurants. Yearly contracts are typically entered into between importers and foodservice operators at fixed prices, while retailers tend to demand daily or biweekly quotations. On the other hand, mid-sized importers deal almost exclusively with foodservice operators and less with retailers, due to the stringent demands imposed by retailers on supply quantities, pricing and delivery frequency.

Given the limited consumption of long beans and abundant availability of long bean imports from neighbouring Gulf Cooperation Council (GCC) countries, there is limited potential for long bean imports from Australia. On the other hand, a progressively vibrant scene of baby leaf consumption both at home and in foodservice channels, signifies promising opportunities for the broadening entry of high-quality imports marketed at affordable pricing compared to other Western imports from the Netherlands and United States.

5. DISCUSSION

5.1 BABY LEAVES AND LONG BEANS IN MALAYSIA

Macro Indicators



Introduction

Malaysia is one of the largest countries in the Asia-Pacific group, comprising of the relatively well-developed West Peninsula and the predominantly forested East Peninsula. The bulk of the population are centralised in the West Peninsula, which has a higher urbanisation rate and comparatively significant trading activities.

Economy to Strengthen, Bolstered by Private Investment and Exports

Malaysia's economy strengthened in 2013. Going forward, it should be supported by a boost in private investment and stronger exports, which are bound to offset the effects of fiscal consolidation. Consumer spending is supported by a strong job market, transfer payments and a hike in the minimum wage.

Population Rising Quickly

Malaysia's population has been on a rapid growth trajectory, reaching 29.7 million in 2013. The median age is also rising and reached 27.6 in 2013, up from 19.6 in 1980. Migration has consistently been positive, with net inflows ranging between 80,000 and 90,000 per year, including a high number of illegal immigrants, many of whom are unskilled migrants.

Urbanisation Rate Highest in Kuala Lumpur, Selangor, Penang Island and Malacca

The capital city of Kuala Lumpur charted a 100.0% urbanisation rate since the 2000s, while the peripheral well-developed states of Selangor, Penang Island and Malacca represent three of the highest urbanised and metropolitan regions in Malaysia.

Consumption of Food and Non-alcoholic Beverages Commanded a 35.2% Consumer Expenditure

In 2011, the share of non-discretionary spending – spending on food, non-alcoholic beverages and housing – to total consumer expenditure in Malaysia stood at 35.2%¹, compared to 64.8% for discretionary spending on items such as transport and leisure. Between 2006 and 2011, consumer expenditure in most categories in Malaysia recorded double-digit real growth rates, reflecting positive consumer confidence amidst the country's growing economy. Consumer expenditure on hotels and catering, alcoholic beverages and tobacco and household goods and services grew the fastest, at 91.8%, 70.7% and 69.7% in real terms, respectively. Affluent Malaysians are keen on visiting high-end restaurants, while casual dining chains, cafés and informal restaurants also became increasingly popular among young, trendy professionals and students.

Expansion of the Middle Class Is Thwarted by Unequal Income Distribution

An unequal household income distribution has hindered the expansion of the middle class in Malaysia. In 2011², Malaysia's middle class – made up of households earning between 75.0% and 125.0% of median income (MYR 3,626, USD 805.8 in 2012)³ – constituted more than 1.3 million households, accounting for 20.1% of all households that year. This represents a slight decline in the share of middle-class households, compared to 20.8% recorded in 2006. With sound spending power, Malaysia's middle class drives the demand for discretionary spending on items such as household goods and services, communications, education, and leisure and recreation.

Grocery Retail Landscape

Introduction

The rising number of Malaysians who lead hectic lifestyles with time constraints has led to a growing penchant to shop for groceries through modern grocery retailers such as supermarkets and hypermarkets. The observation is largely attributed to the wide range of groceries marketed, making them an ideal one-stop solution. Discounts are also frequently offered as a promotional strategy to attract higher purchasing activity. Apart from modern channels, independent small grocers also remain a popular option for non-fresh food groceries, given their close proximity to most local neighbourhoods.

Loss-Leader Strategy Employed by Grocery Giants

Price reductions are constantly offered by grocery retailers such as Tesco, Giant and Aeon on select products to help attract a higher number of grocery shoppers. Promotions for baby necessities, home care and fresh food are popular. Monthly or biweekly brochures or leaflets with promotional updates are handed out to consumers living within close proximity to hypermarkets and supermarkets.

¹ Malaysia Department of Statistics [online], quoted in Passport Reports, figures available up to 2011.

² Malaysia Department of Statistics [online], quoted in Passport Reports, figures available up to 2011.

³ Malaysia Department of Statistics, 2012, *Household Income and Basic Amenities Survey Report 2012*, Department of Statistics, viewed 15 January 2014, <http://www.statistics.gov.my/portal/index.php?option=com_content&view=article&id=1640&Itemid=111&lang=en>

GCH Retail Remains the Leader in Grocery Retail

GCH Retail, which specialises in grocery retailing, maintained its leading position in 2012. Brands operating under the group include Giant, Cold Storage and Guardian, which together form one of the largest chained operators in Malaysia. Giant's recognition as a local brand with competitive pricing also holds major appeal for local consumers. Giant has also engaged in rapid outlet expansion in rural and urban areas, broadening its consumer outreach and cementing its position as a major player.

Promotional and Marketing Activities Help Stimulate Higher Grocery Sales

Product prices pose one of the most important factors driving grocery sales in Malaysia. Constant price-cutting is frequently used as a promotional strategy by leading players such as Giant and Tesco. Major hypermarkets regularly advertise biweekly or monthly discounts and promotions for various products through product catalogues to pique the interest of price-sensitive consumers and attract a larger customer base.

Established Hypermarkets Foray into Internet Retailing

An increasing number of retailers in Malaysia are expected to gradually tap into the Internet retailing channel, driven by rising online purchasing activity. For instance, in April 2013 Tesco Malaysia launched its online shopping portal, which also offers complimentary home delivery services. The overwhelming response from online shoppers at its introductory launch subsequently prompted further expansion efforts in nationwide Tesco outlets to establish similar online shopping systems and extend consumer outreach in peripheral states.

Private Labels Forge a Stronger Presence at Hypermarkets and Supermarkets

Private labels have increasingly made strong headway into major grocery retailers such as Tesco and Giant hypermarkets, and they are poised to witness an expanding presence in upcoming years. Their emergence and success arose from consumers' changing perception towards the quality and range of private-label products on the market. Going forward, private labels are projected to witness speedier growth in grocery channels than non-grocery outlets, which is attributable to improving quality and consumer price sensitivity.

Foodservice Operators Going Organic

In conjunction with the rising number of health-conscious Malaysians, consumers who eat out are constantly looking for healthier food and drink offerings from foodservice operators in a bid to maintain a healthy lifestyle. For instance, Beyond Veggie, a meatless vegetarian and non-vegetarian full-service restaurant, was launched by popular café chain Secret Recipe in 2012. Organic food stores such as BMS Organics have also expanded their operations to foodservice, providing healthy eat-out organic options.

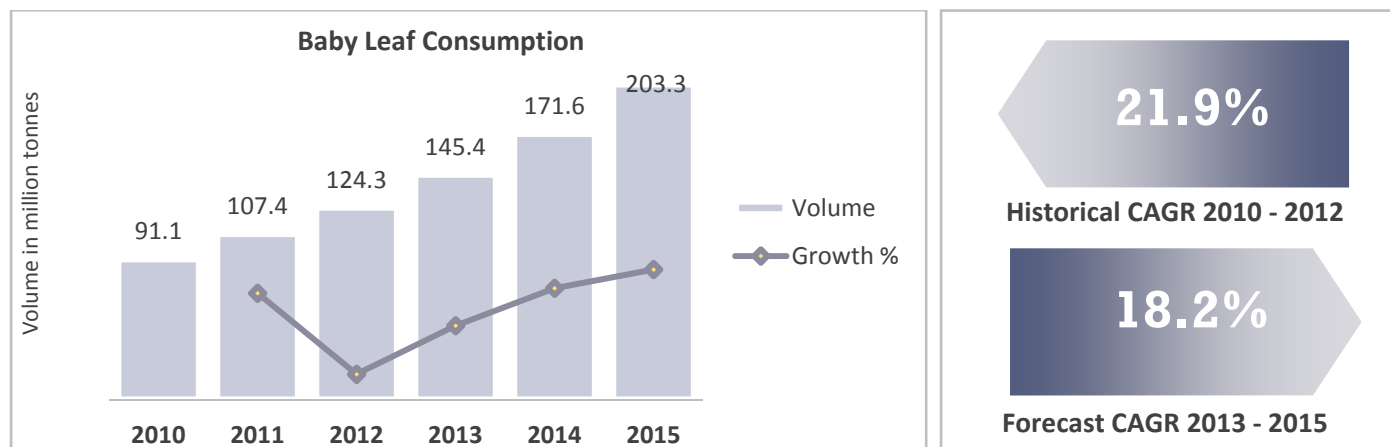
Organic Packaged Food Remained Targeted at Middle- to Higher-Income Consumers

Hypermarkets and supermarkets posted a slight increase in the distribution of organic products in 2012, with both channels assigning increased shelf space to organic products, including players such as AEON, Cold Storage, Aeon Big (previously Carrefour)⁴ and Tesco. Nevertheless, the price of most organic packaged food remained relatively high and was targeted more towards middle- to higher-income consumers who indicated a higher propensity to spend on 'affordable luxuries'.

⁴ Carrefour divested its operations to the Aeon Group in November 2012. Its branding has been changed to Aeon BIG since. However up to recent times, Carrefour has maintained its branding at its flagship store in Mid Valley, Klang Valley.

Consumption, Production and Trade of Baby Leaves in Malaysia

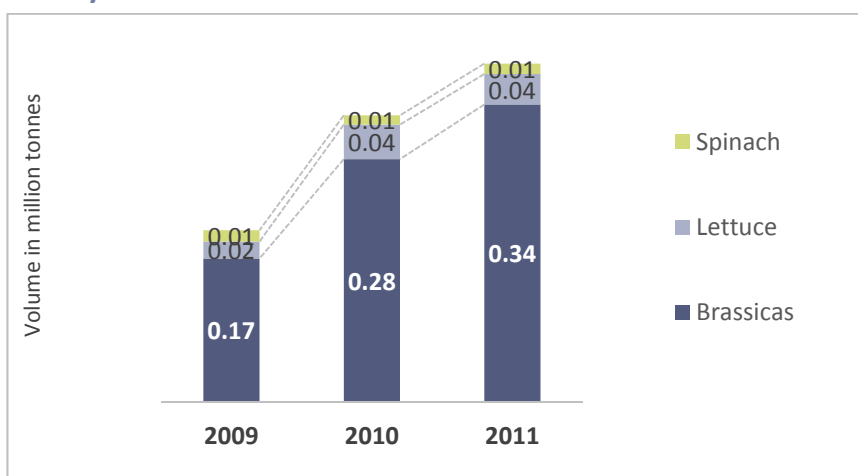
Baby Leaf Consumption, Volume in Million Tonnes⁵



Baby leaf consumption has been on an uptrend since 2010, with growth projected to advance fairly well into the forecast period of 2013-2015. The uptrend is in line with rising consumer awareness towards baby leaf availability and usage, assimilation of baby leaves in local cuisines and, more importantly, increasing presence in foodservice outlets, mainly in salad dishes with which local consumers are generally familiar.

Baby leaves are conventionally perceived as ‘healthy, organic produce of premium quality and rarity’ among local consumers. While typically priced 20%-30% higher than full-grown leaves, local consumers’ gradual identification of baby leaves as a versatile ingredient, coupled with rising disposable income in urbanised main cities, will likely help support further growth over the next few years. In this respect, foodservice also plays an instrumental role in bolstering baby leaf consumption, especially among fast-growing Western and Japanese foodservice chains.

Local Production of Baby Leaves⁶

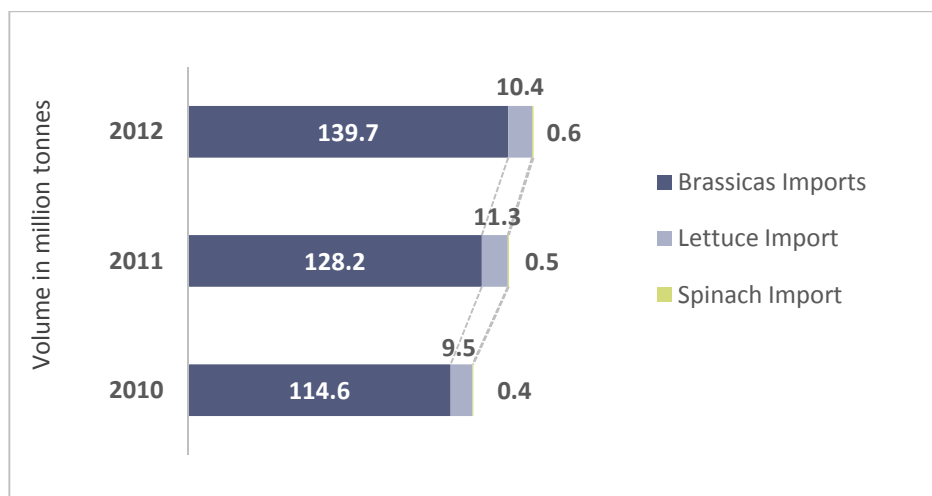


⁵ Department of Agriculture Malaysia Statistics and UN Comtrade [online]

⁶ Department of Agriculture Malaysia Statistics [online]: Aggregated volumes of full-grown and baby leaves are recorded in the diagram. Selected data on production for 2012 onwards are unavailable.

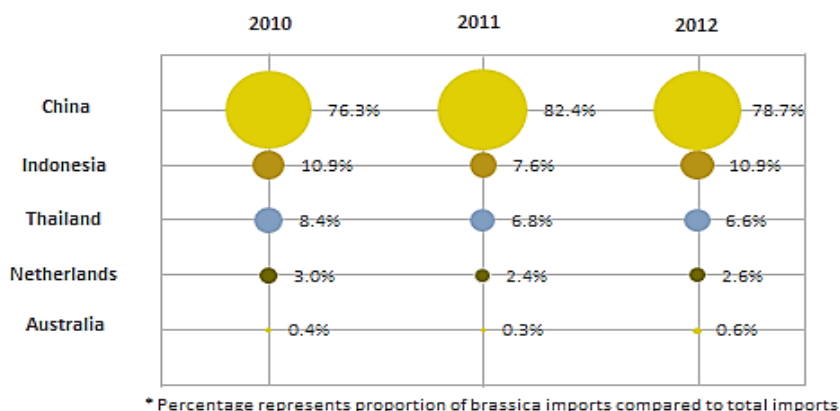
Brassica production is the highest in volume terms. It predominantly includes different varieties of cabbage popularly consumed among locals and minute levels of broccoli and cauliflower. Meanwhile, lettuce production has fallen slightly as market prices rose by a CAGR of 5.1% between 2009 and 2011, while prices of brassica and spinach remained relatively stable throughout the years.

Imports of Baby Leaves⁷



Brassica imports, the highest within baby leaves, witnessed growth from 2010 to 2012. Import patterns of lettuce and spinach tend to fluctuate with the yield from local cultivation. Spinach imports increased marginally from 2010 to 2012 as the local harvest decreased in parallel.

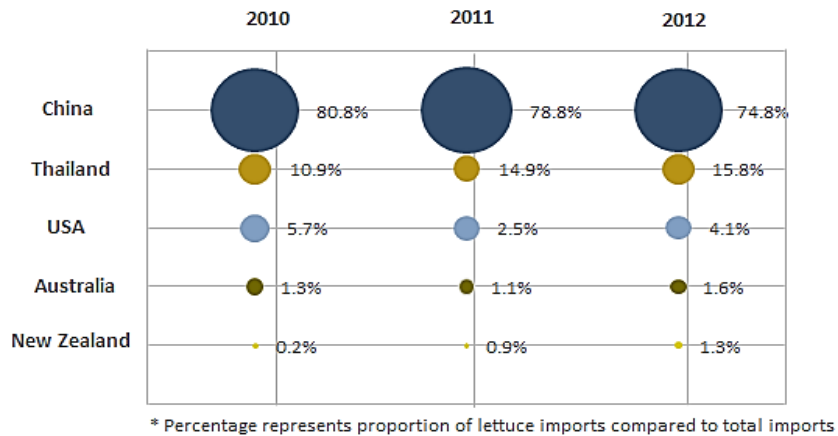
Major Brassica Importers into Malaysia (Volume in %)



Between 2010 and 2012, China remained the biggest source country for brassica into Malaysia. The neighbouring countries of Indonesia and Thailand were second and third in line, with substantially lower import quantities than China. Australia was ranked fifth in 2012, with an import proportion of 0.6% of total brassica imports.

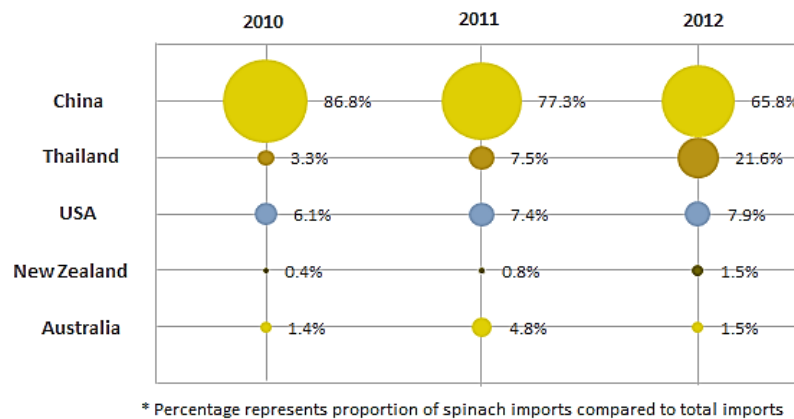
⁷ UN Comtrade statistics [online]: Aggregated volumes of full-grown and baby leaves are recorded in the diagram.

Major Lettuce Importers into Malaysia (Volume in %)



Similar to brassica imports, lettuce imports are most significant from China, followed by Thailand and the United States. Imports from the United States, which was ranked third after Thailand, tends to be seasonal and is not available year-round. Their availability is also limited to selected premier retail outlets. Australia’s share was recorded at 1.3%- 1.6% of total lettuce imports during 2010-2012.

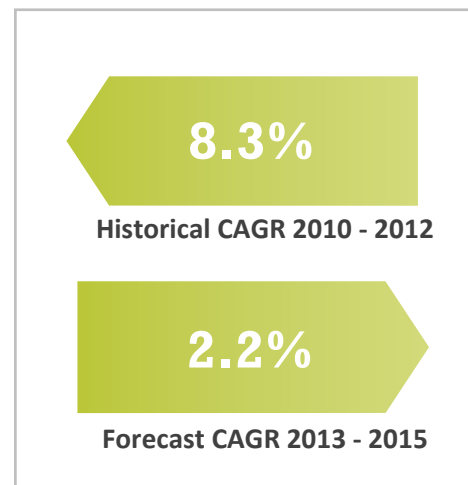
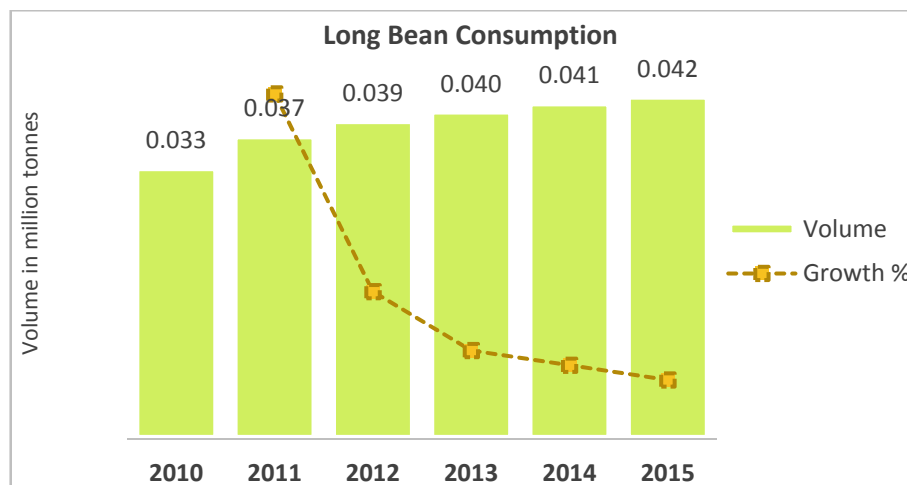
Major Spinach Importers into Malaysia (Volume in %)



Spinach imports are most common from China, as is the case with brassica and lettuce. However, imports from China have dwindled since 2011. Meanwhile, imports from the United States have been growing but are not available year-round. Their availability is also limited to certain premier retail outlets. By 2011, Thai imports had surpassed US imports, as local importers looked to cheaper import alternatives. While Australia maintained a lead over New Zealand in 2011, by 2012 New Zealand’s import volumes had risen to higher levels in 2012 to rival that of Australia’s.

Consumption, Production and Trade of Long Bean in Malaysia

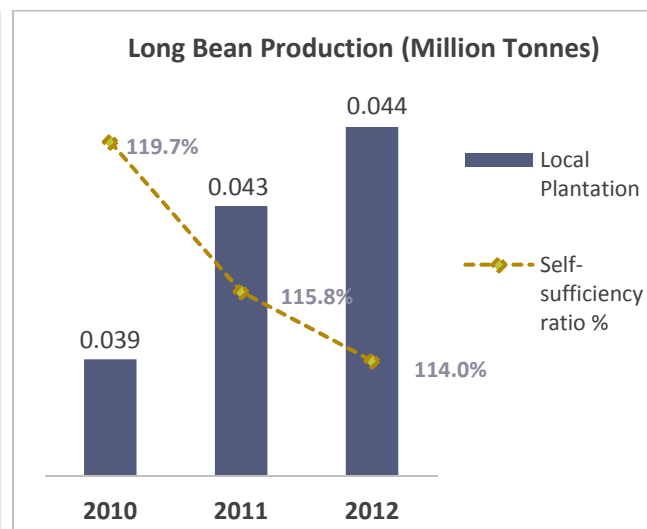
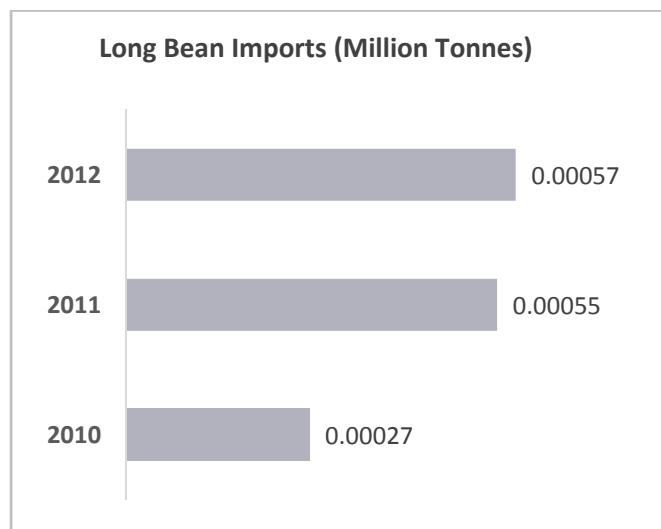
Long Bean Consumption, Volume in Million Tonnes



Long bean consumption registered fairly stable levels between 2010 and 2012, and is projected to continue on the path of organic growth, in line with the population growth rate over the next few years. Given their widespread local cultivation and availability across most retail channels, long beans are popularly used in the preparation of local cuisines, with usage not expected to fluctuate significantly in upcoming years.

However, growth has noticeably begun to plateau and stabilise at lower levels. Between 2010 and 2012, while long beans continued to grow as imports and in local cultivation, the industry shared that demand was sustained at progressively lower levels year by year.

Long Bean Imports Stagnating in Malaysia⁸



⁸ Self-sufficiency ratio = $\frac{\text{Production} \times 100}{(\text{Production} + \text{Imports} + \text{Stocks}) - \text{Exports}}$. Department of Statistics, 2011, *Supply and Utilisation Accounts Selected*

Agricultural Commodities 2007 – 2011, Department of Statistics Malaysia, viewed 15 January 2014,

<http://www.statistics.gov.my/portal/index.php?option=com_content&view=article&id=913:free-download&catid=61&Itemid=111&lang=bm>

Long bean imports persisted on an uptrend between 2010 and 2012, especially cheaper imports from Thailand and China. However, import levels are expected to stabilise, with no significant surges or drops projected in the next few years.

Local cultivation is also on the rise, albeit at a slower rate than imports. Notably, the self-sufficiency ratio fell, as imports from Thailand and China gained prominence over local produce.

Baby Leaf and Long Bean Varieties from Imports and Local Farming

The following table showcases the relevant baby leaf and long bean varieties cultivated separately in the lowlands and highlands of Malaysia, as well as the conventional imported types from countries such as Thailand, Indonesia, China and Australia:

No.	Imported Vegetable	Highland Vegetable (Primarily Cameron Highlands)	Lowland Vegetable
1	Cabbage	Chinese cabbage	Endive
2	Cauliflower	Lettuce	White endive
3	Broccoli	Cabbage	Small white endive
4	Chinese kale	French bean	Lettuce
5	Lettuce	Broccoli	Japan endive
6	Romaine lettuce	Small white endive	French bean
7	Round Chinese cabbage	Long Chinese endive	Long bean

Baby Leaves and Long Beans are Cultivated Locally in Lowlands and Highlands

Locally cultivated baby leaves are available year-round and are farmed mostly in Cameron Highlands, a hill plain eminently recognised for its fresh produce plantations and vast contours of commercialised cool-climate agriculture. Baby leaves and long beans are typically cultivated using semi-organic cultivation methods. For instance, both organic and inorganic fertilisers, as well as a combination of naturally derived and manmade pesticides, are employed in the cultivation process. Selected highland farms also grow their produce hydroponically and are labelled as such on their commercial packaging.

Popular varieties among local consumers – including lettuce, cabbage, broccoli and long beans – are cultivated in both the lowlands and highlands. Produce from the highlands registers a comparatively more pronounced presence in nationwide retail channels, attributed mainly to well-established distribution hubs in capital cities, coupled with freshly packaged and eye-catching displays in major hypermarket chains⁹.

⁹ Mass hypermarket chains such as Tesco and Aeon would exhibit displays minimally detailing whether produce is locally cultivated. Baby leaves from Cameron Highlands are typically packaged in colourful plastic packs and placed collectively on refrigerated chiller rungs.



Baby leaf display at Cold Storage featuring produce mostly from Cameron Highlands, including private label First Choice



Locally cultivated Crunchy Fresh carries salad lettuce in butter head, radicchio, lollo rossa and bionda, red and green Batavia, cos, multileaf red and green and iceberg lettuce variants

Chicory and Endive Cultivated Locally but Not Commonly Consumed

While chicory and endive are grown locally in both lowlands and highlands, they are not commonly carried in retail channels. Endive is used intermittently only in certain Western-style food preparations and is priced exorbitantly at premium independent grocers located in affluent expat-centric areas, such as Ben's Independent Grocer, Jaya Grocer and Presto in the heart of Kuala Lumpur.

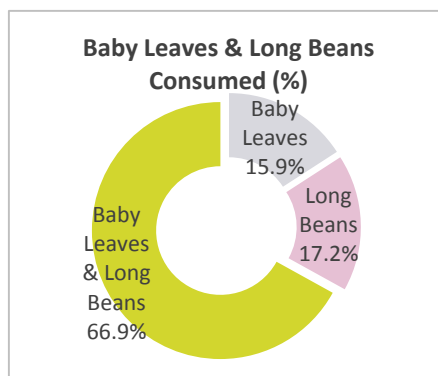
Imports from China Are Significant

Aside from local cultivation, Malaysia also imports substantially from China, thus providing consumers with cheaper alternatives. In particular, Chinese imports tend to inundate local open markets, drawing significant traffic from daily consumers with high price sensitivity. China's closer geographical proximity to Malaysia also poses an added advantage, as the shorter shipment time ensures that produce arrives fresh and intact.

Consumer Insights Analysis

This section of the report consolidates the findings from consumer surveys. A total of 789 online consumer surveys were conducted in December 2013. Respondents were selected at random from an online panel. All 372 respondents below from Malaysia had purchased or consumed baby leaves and/ or long beans in the previous six months.

A High Proportion of Baby Leaf and Long Bean Consumption in Malaysia, with Majority Consuming Both Baby Leaves and Long Beans¹⁰



Of the 372 respondents surveyed, a total of 82.8% had consumed baby leaves and salad greens in the past six months, while 84.1% had consumed long beans. Among the respondents, 15.9% had exclusively consumed baby leaves, 17.2% had solely consumed long beans, and a majority – 66.9% – had consumed both baby leaves and long beans.

Baby Leaves and Long Beans Are More Widely Consumed at Home¹¹

	Baby Leaves	Long Beans
	308 respondents	313 respondents
Purchased in stores & consumed at home	29.6%	36.4%
Consumed in foodservice outlets	5.2%	5.8%
Both of the above	65.3%	57.8%

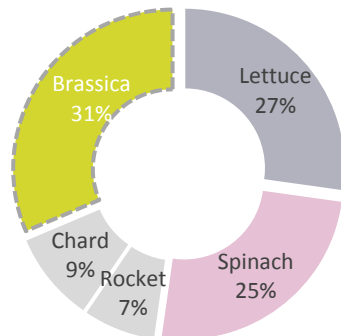
The majority (65.3%) of baby leaf consumers consume both at home and in foodservice outlets, while 29.6% consume baby leaves exclusively at home. This is in stark contrast to a mere 5.2% who consume exclusively in foodservice outlets. On the other hand, long beans are more often purchased in stores and consumed at home, as evidenced by a large proportion (36.4%) of respondents. Only 5.8% of respondents have exclusively consumed long beans in foodservice.

¹⁰ **Question:** Have you purchased/ consumed any of the following products in the past six months? (372 respondents)

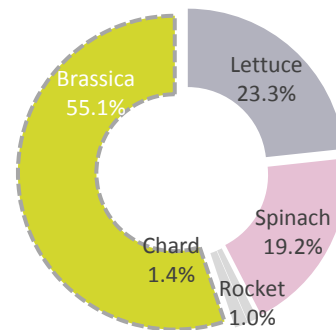
¹¹ **Question:** During the past six months, where did you purchase/ consume baby leaves and long beans? (308 and 313 respondents)

Brassica Most Prominently Purchased for Home Consumption, Followed by Lettuce and Spinach¹²

Types of Baby Leaves Generally Purchased in Stores

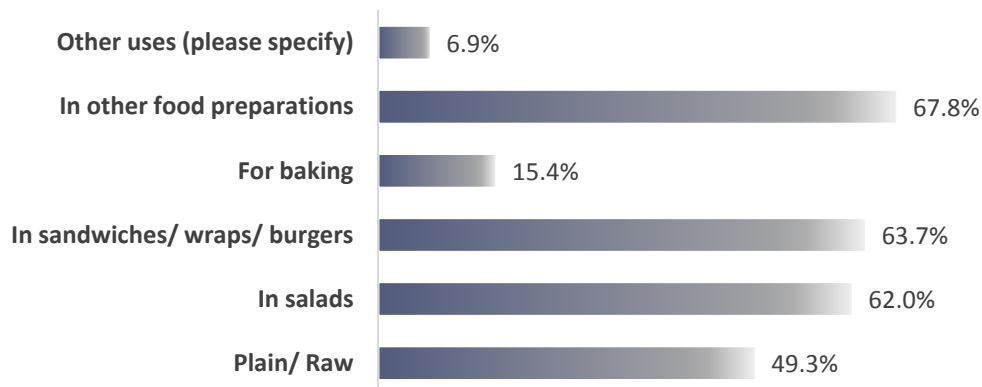


Types of Baby Leaves Most Often Purchased



Among the 308 respondents who purchased baby leaves, 31.0% would typically purchase brassica encompassing broccoli, cauliflower and cabbage from stores for home consumption. The popularity of lettuce is secondary to brassica and is a customary purchase among 27.0% of respondents. Spinach also registers prominent support among 25.0% of respondents as the third most commonly purchased baby leaves in stores. The comparative popularity of brassica, lettuce and spinach is attributed primarily to their ubiquity in various retail channels, coupled with a broad local familiarity with such produce, as well as their versatile usage in local cuisines.

Baby Leaves Most Commonly Used for Food Preparations¹³



Baby leaves such as brassica, lettuce and spinach are most commonly used in other food preparations, especially brassica, which is often used in stir-fried local cuisine. Apart from food preparations, they are also used in salads and sandwiches, wraps or burgers. The usage of brassica, primarily broccoli- and cauliflower-based, is featured most prominently in food preparations and salads, while smooth-leafed green cabbage is more often used in sandwiches, wraps or burgers, due to its crispiness and slight sweetness, which complements other savoury ingredients well.

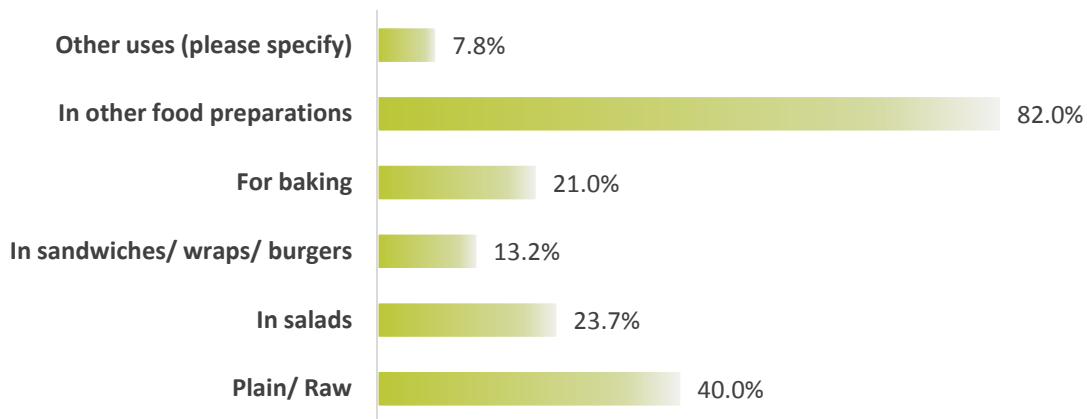
¹² **Questions:** When you purchased baby leaves from stores, which type did you purchase? And of the baby leaves purchased, which type did you purchase most often? (292 respondents)

¹³ **Question:** How did you consume the baby leaves at home? (292 respondents)

Meanwhile, the highest usage of lettuce is found in salads, followed by sandwiches/ wraps/ burgers and other food preparations. Lettuce is also rather commonly eaten raw due to its palatable crispy texture which yields a good crunch, supplemented by its subtle sweetness, high nutritional value and label as a low-calorie power food ideal for weight loss.

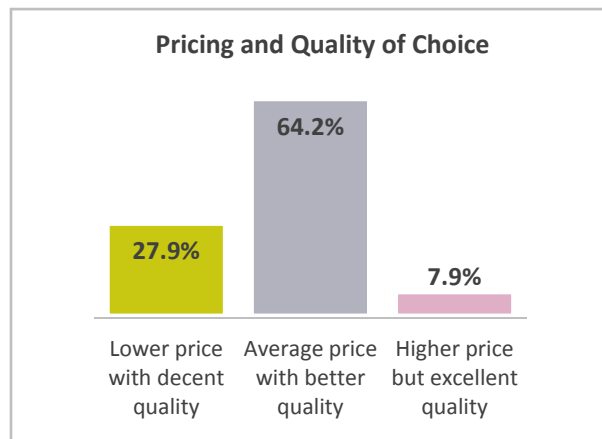
On the other hand, spinach is mainly used in the preparation of local cuisines, incorporated primarily in stir-fried dishes popular among the Malay, Chinese and Nyonya ethnic groups. Marked usage of spinach is also noted in salads and sandwiches, wraps or burgers.

Long Beans Generally Used in Other Food Preparations¹⁴



Long beans are used primarily as an essential ingredient in local food preparations such as stir-fried spicy dishes. These include ‘belacan chili stir-fried’ and ‘garlic stir-fried’ dishes which are favoured especially by the Malay and Chinese ethnic groups. Long beans are also prevalently used in curry dishes, and are thus rooted deeply in several of Malaysia’s well-known local cuisines. Aside from food preparations, long beans are readily eaten raw for their nutritional value, as well as tossed with other salad greens and vinaigrette for the extra crunch.

Consumers Opt for Average Prices with Better Quality¹⁵

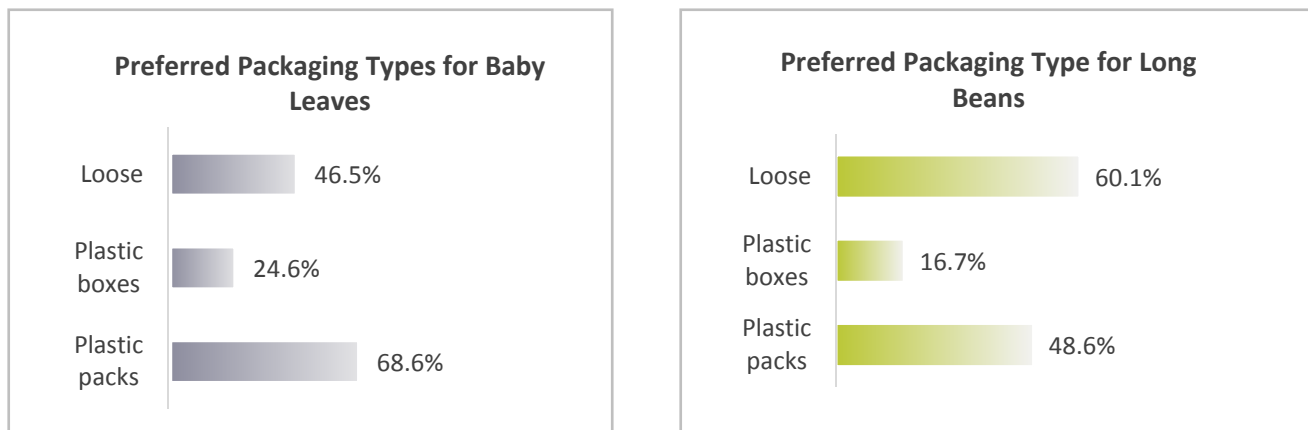


¹⁴ Question: How did you consume the long beans at home? (295 respondents)

¹⁵ Question: From which of the following categories of pricing and quality would you tend to purchase baby leaves and/ or long beans? (366 respondents)

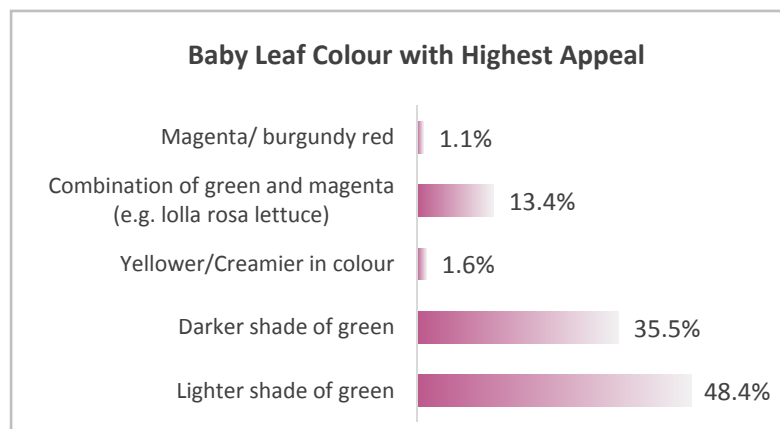
In terms of pricing and quality, a large proportion of Malaysian consumers designated average pricing with above-average quality as their main preference. Although economies of scale play a significant role in purchasing decisions, the importance of quality has been increasingly emphasised, and the health hazards of added preservatives, pesticide contamination and harmful horticultural methods have been well-publicised in the media.

Plastic Packs Preferred for Baby Leaves; Loose Format for Long Beans¹⁶



Plastic packs are generally preferred over loose formats for baby leaves, while consumers tend to prefer long beans in a loose format. Attractive packaging touting the benefits of baby leaves on its packaging label is the optimal choice of consumers, while long beans displayed in loose format are considered to indicate higher freshness than those sealed in plastic packaging.

Light Green Leaves Preferred¹⁷



An overwhelming majority of respondents chose a lighter shade of green in brassica, lettuce and spinach as their preferred colour choice for baby leaves, compared to darker shades of green and magenta. Given local consumers' lack of familiarity with baby leaves, lighter shades of green are commonly considered to indicate more freshness than darker colours.

¹⁶ **Question:** In terms of packaging, which of the following packaging types do you prefer for baby leaves and long beans? (366 respondents)

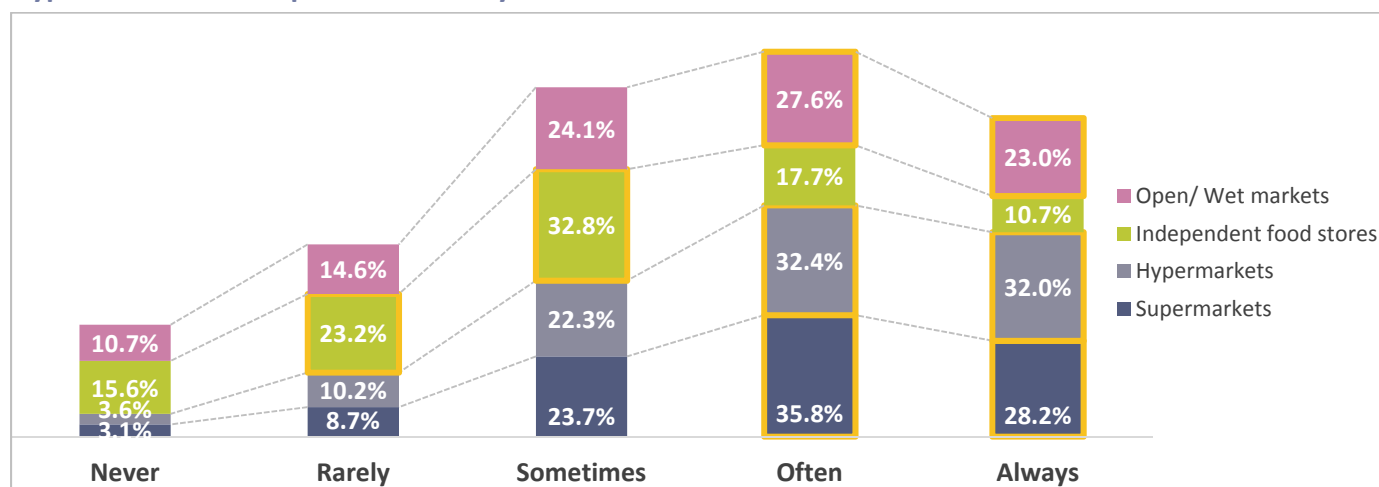
¹⁷ **Question:** In terms of baby leaf colours, which of the following colours appeals most to you as a consumer? (372 respondents)

High Consumer Awareness of Local Produce¹⁸



The majority of respondents viewed Malaysia as the preeminent supplier of baby leaves and long beans in the country, with local brands such as Highland Fresh and Genting Gardens saturating major hypermarkets and supermarkets. Malaysia was followed by China, whose fresh produce imports are strong and easily accessible in hypermarkets, supermarkets and wet markets. Australia ranked third, with 56.5% of respondents considering the country to be a principal supplier of high-quality but pricy fresh produce.

Hypermarkets are Top Choice of Baby Leaf Consumers¹⁹



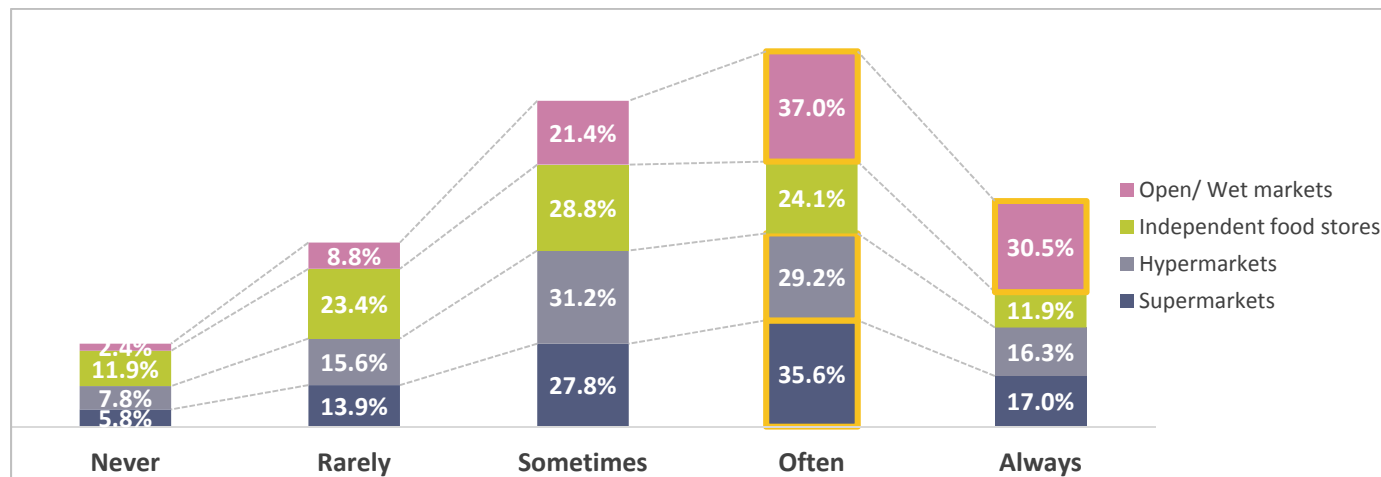
Hypermarkets represent the main go-to channel for the purchase of baby leaves, as substantiated by 32.4% of respondents who listed 'often' and 32.0% who said 'always' in response to a question about their frequency of

¹⁸ **Question:** Among the following countries, which do you think supply baby leaves and long beans to Malaysia? (372 respondents)

¹⁹ **Question:** During the past six months, where have you purchased baby leaves? (292 respondents)

purchasing baby leaves at hypermarkets. Meanwhile, 35.8% of respondents remarked that visits to supermarkets are ‘often’, while 28.2% commented ‘always’. Open markets appeal moderately well to consumers who favour them for their perceived fresher supply of produce. A total of 27.6% of respondents claimed they ‘often’ purchase from this channel while 23.0% ‘always’ do. Independent food stores represent the least-popular channel, with 23.2% of respondents commenting that they ‘rarely’ procure through this avenue, while 32.8% remarked ‘sometimes’. The observation stems primarily from the fact that independent food stores do not commonly sell vegetables.

Wet Markets or Open Markets Are the Go-To Channels for Long Beans²⁰

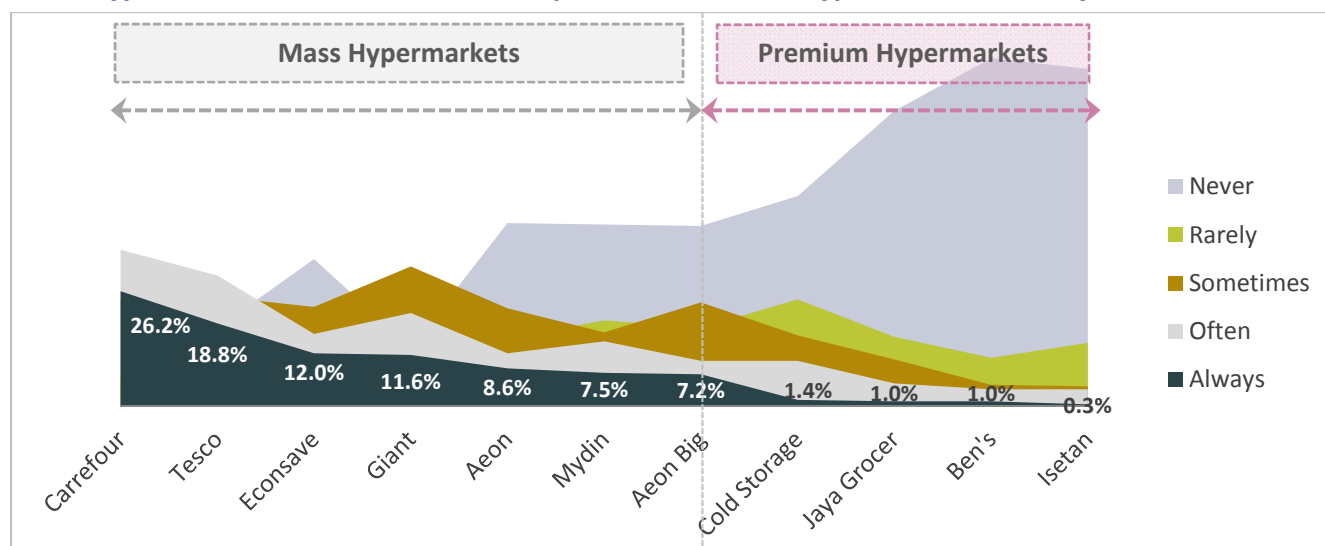


By contrast to their purchasing habits for baby leaves, consumers indicate a higher predisposition to buy long beans at wet markets. Of all respondents, 37.0% ‘often’ purchase through this channel, while 30.5% ‘always’ do. Long beans are habitually viewed as a staple vegetable in the Southeast Asian region, and their affordability makes them a popular item widely peddled in local farmers’ markets.

Supermarkets also represent a relatively noteworthy channel of importance, with 35.6% of respondents ‘often’ purchasing from this channel. Supermarkets are followed by hypermarkets, which are popular among 29.2% of respondents. Once again, independent food stores charted the lowest support, with only 24.1% of respondents ‘often’ purchasing through this avenue. Long beans are typically sold in their signature loose format in supermarkets, which is not only generally perceived as fresher and pesticide-free but also allows for convenient self-selection. Hypermarkets and independent food stores which package long beans in coated films, plastic packs and plastic boxes thus render the produce less appealing to consumers.

¹⁸ **Question:** During the past six months, where have you purchased long beans? (295 respondents)

Mass Hypermarkets Giant and Tesco Outperform Premium Hypermarkets in Baby Leaf Sales²¹



Hypermarkets in Malaysia are popularly viewed as one-stop grocery shopping centres and one of the primary choices of consumers purchasing fresh produce. Contingent upon product seasonality and availability, the pricing offered by mass-tiered hypermarkets may even undercut farmers’ markets on occasion. Among them, Giant and Tesco hypermarket chains, which compete on mass-catered positioning, have successfully aligned themselves as the crowd favourites amidst other premium, higher-end hypermarkets, such as Jaya Grocer, Isetan and Cold Storage.

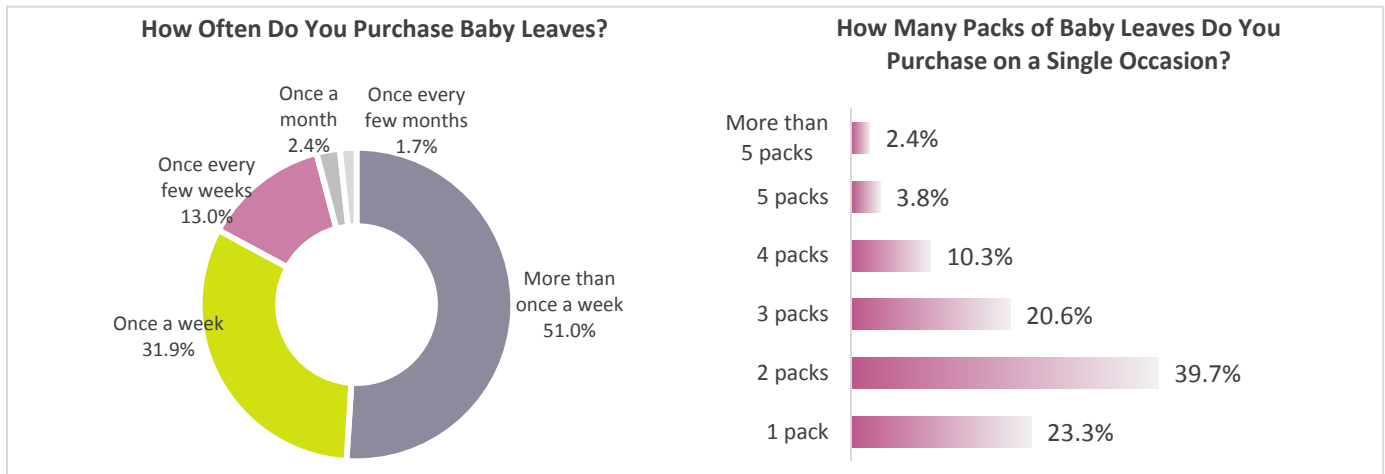
High-End Premium Hypermarket Locations Cater to Expatriates and High-Income Earners

The prevalent brand recognition of Giant and Tesco as neighbourhood hypermarkets, with store branches established within close proximity to the heartlands of residential areas have also earned them legions of customers compared to premium hypermarkets with limited outlets located in comparatively cosmopolitan central business districts. Despite the broad spectrum of baby leaves carried in premium hypermarkets, their consumer base remains profoundly skewed towards expatriates and higher-income households, deriving lower volume sales when compared to mass-catered hypermarkets.

²¹ **Question:** Among the following supermarkets/ hypermarkets, where have you purchased baby leaves during the past six months? (292 respondents)

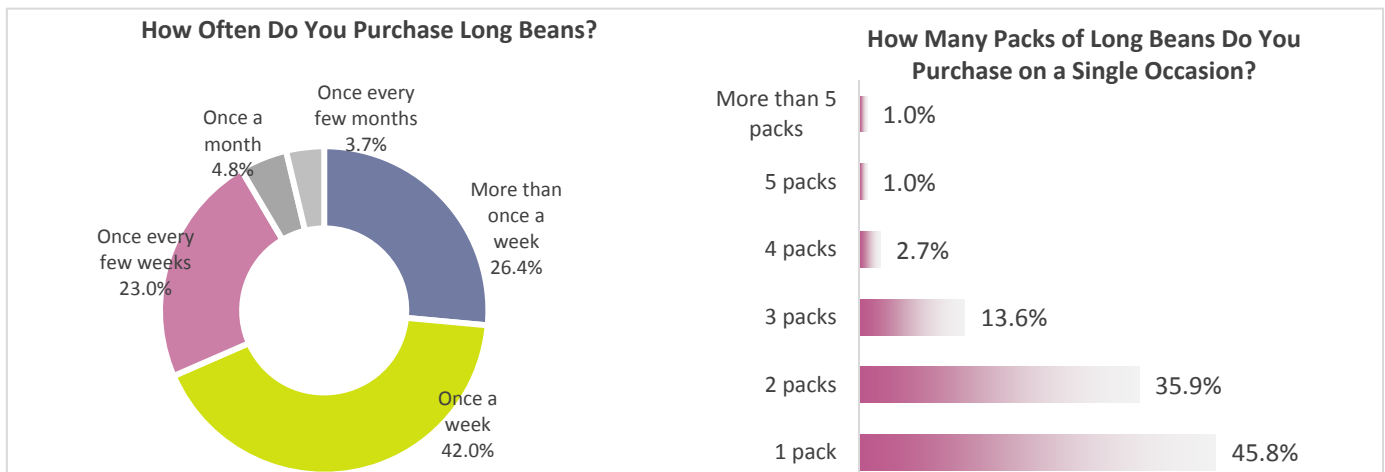
*Percentage represents respondents who ‘always’ purchase from the corresponding hypermarkets.

The Majority of Consumers Purchase Baby Leaves More than Once a Week²²



On average, the majority (51.0% of consumers) purchase baby leaves more than once a week, followed by frequency of once a week for 31.9%. On each occasion, 39.7% purchase two packages of baby leaves, while 23.3% purchase one pack and 20.6% purchase three packs. The comparatively shorter shelf life and costlier pricing of baby leaves are main considerations limiting the highest incidence of purchasing to just two packs per transaction.

The Majority of Consumers Purchase Long Beans Once a Week²³

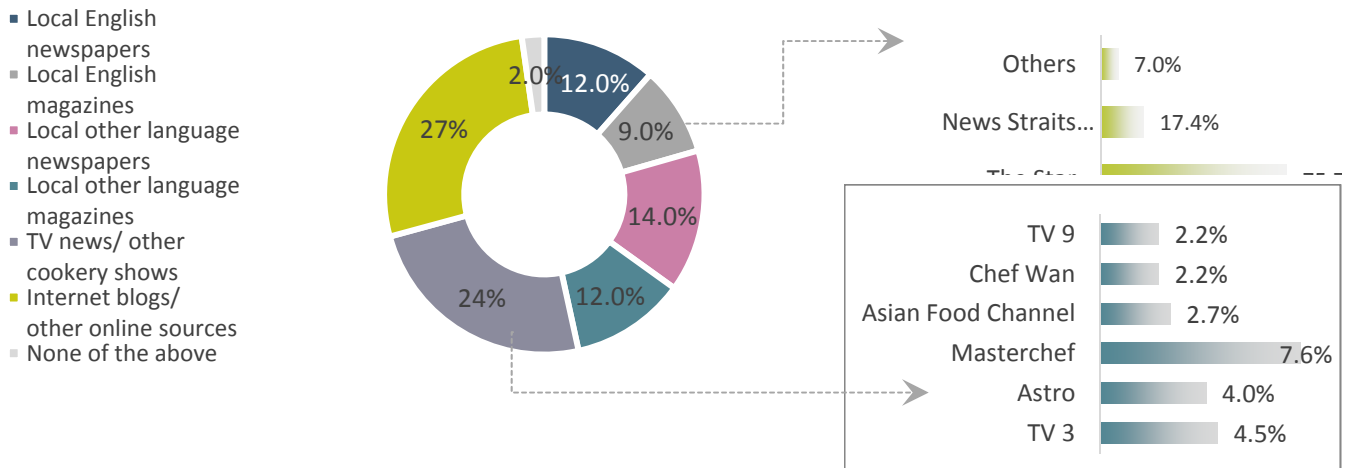


On average, a majority (42.0%) of consumers purchase long beans once a week, followed by 26.4% who buy them more than once a week. On each occasion, shoppers most often purchase one pack of long beans (45.8%), while 35.5% purchase two packs and 13.6% purchase three packs. While long beans are considered a staple vegetable, they are eaten less often on a daily basis than leafy vegetables, which are deemed essential for the daily diet.

²² **Questions:** How often do you purchase baby leaves from stores? On average how many packs of baby leaves do you buy on a single occasion? (292 respondents)

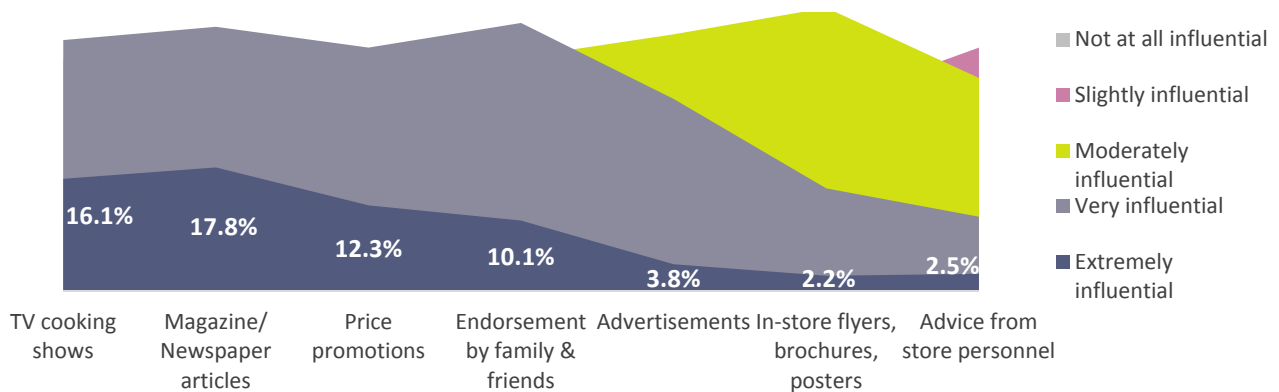
²³ **Questions:** How often do you purchase long beans from stores? On average how many packs of long beans do you buy on a single occasion? (295 respondents)

Food Blogs, Facebook Groups and Cooking Shows Amplify the Buzz for Baby Leaves and Beans²⁴



A majority of respondents (27.0%) noted Internet blogs and online sources as the predominant media they used to obtain information pertaining to health, nutrition and the cooking of baby leaves and long beans. In particular, food blogs and Facebook were cited as popular go-to channels for reference. On the other hand, a significant 24.0% cited TV cookery shows, influenced principally by the huge success of Western cuisine-centred cooking shows among Malaysian consumers, most notably ‘Master Chef’ as well as food series on the Food Network and the Asian Food Channel. Local cooking shows are also a sensation among Malay consumer demographics, which include shows such as ‘Nona’, ‘Selera’ and ‘Chef Wan’ that occasionally also demonstrate the usage of Western ingredients in Western-Asian fusion cuisines. Meanwhile, other media sources are largely sequestered between newspaper and magazine influences.

Magazine/ Newspaper Articles and TV Cooking Shows’ Most Influential Factors²⁵



Price promotions, TV cooking shows and magazine/ newspaper articles have been established as extremely influential in encouraging higher purchasing volumes. The key purchasing patterns of local consumers generally gravitate towards value-for-money. Thus, on average, consumers are highly receptive towards price discounts and bundled promotions. Advertisements and educational articles on the dietary benefits of baby leaves and

²⁴ **Questions:** Which are the various media sources you use to get information related to health, nutrition, cooking and recipes for baby leaves and long beans?

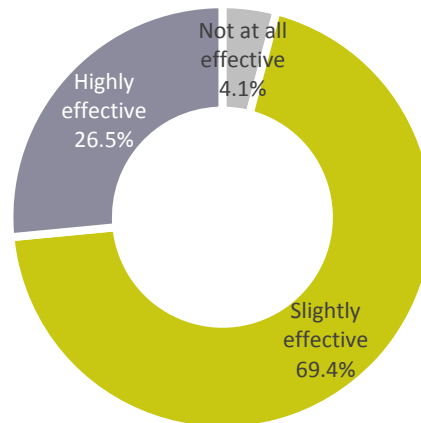
²⁵ **Question:** Among the following factors, which ones influence you when purchasing vegetables? (366 respondents)

*Percentage refers to the proportion of respondents who deem the corresponding factors as ‘extremely influential’.

long beans are also effective in piquing product awareness and consumer interest. Meanwhile, endorsements by family and friends serve as a ‘very influential’ word-of-mouth method facilitating purchase decisions. On the flip side, in-store flyers, brochures and posters have been ascertained to impart only moderate influence.

In-store Advertising Displays Only Slightly Effective in Influencing Purchasing Decisions²⁶

Effectiveness of In-store Advertising displays



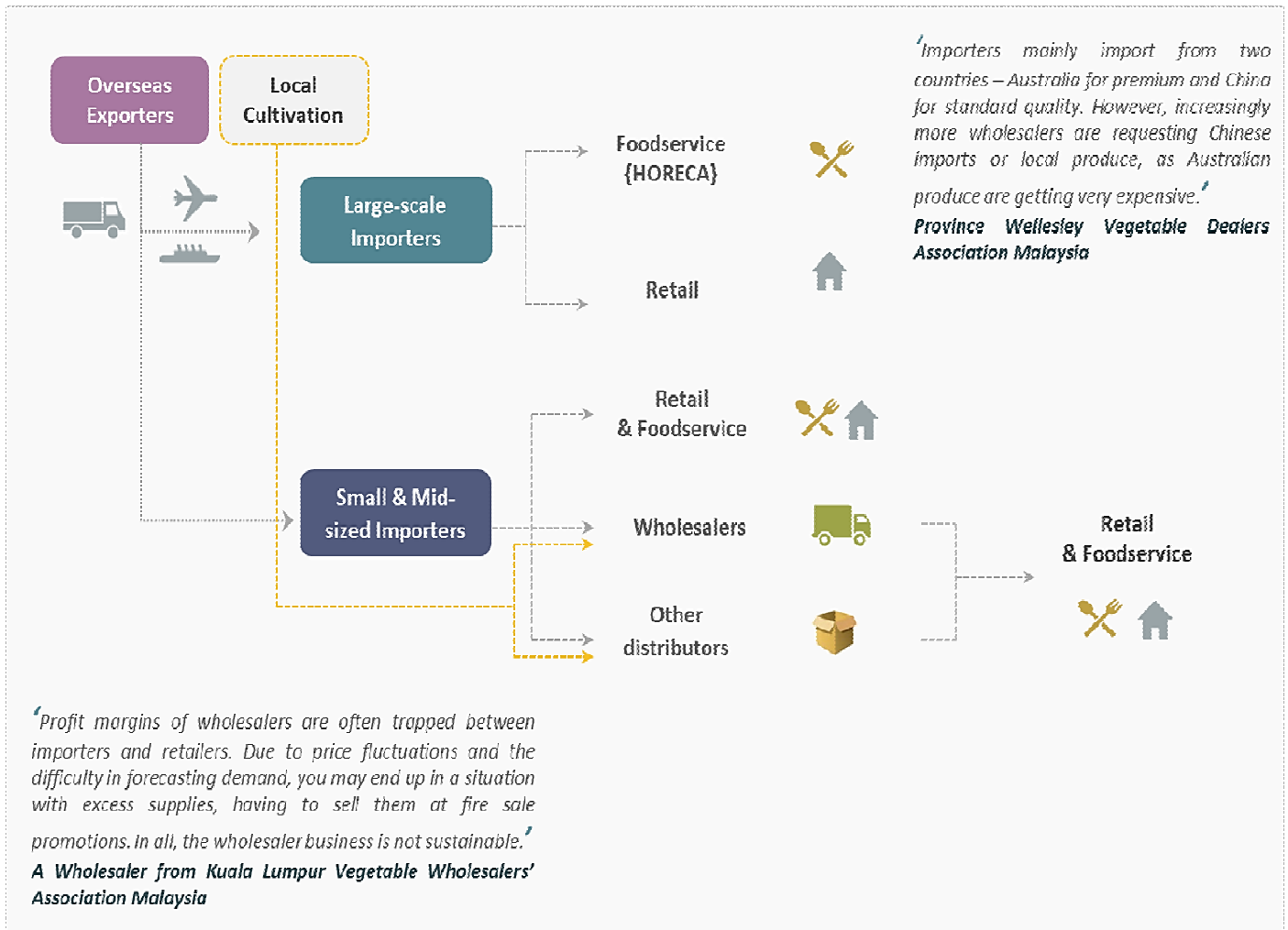
In-store advertising displays showcasing and educating the masses on health benefits, planting and/ or harvesting methods and packaging process of baby leaves have been found to foster only a slight influence on consumer purchasing. Only 26.5% of respondents consider the advertising strategy highly effective, while a majority (69.4%) deem it only slightly effective.

As hypermarkets and supermarkets are not prone to openly advertising fresh produce, Malaysian consumers are generally unfamiliar with this marketing approach. Therefore, in-store advertising, complemented with conspicuous billboard signage and effective brand messaging, can be an effective pioneering strategy to help gain a stronger foothold and brand recognition amidst a competitive landscape featuring the produce of other source countries.

²⁶ **Question:** How effective do you think having in-store advertising displays (showcasing health benefits, planting/ harvesting methods and packaging process) is in influencing your purchasing decisions? (366 respondents)

Industry Insights Analysis

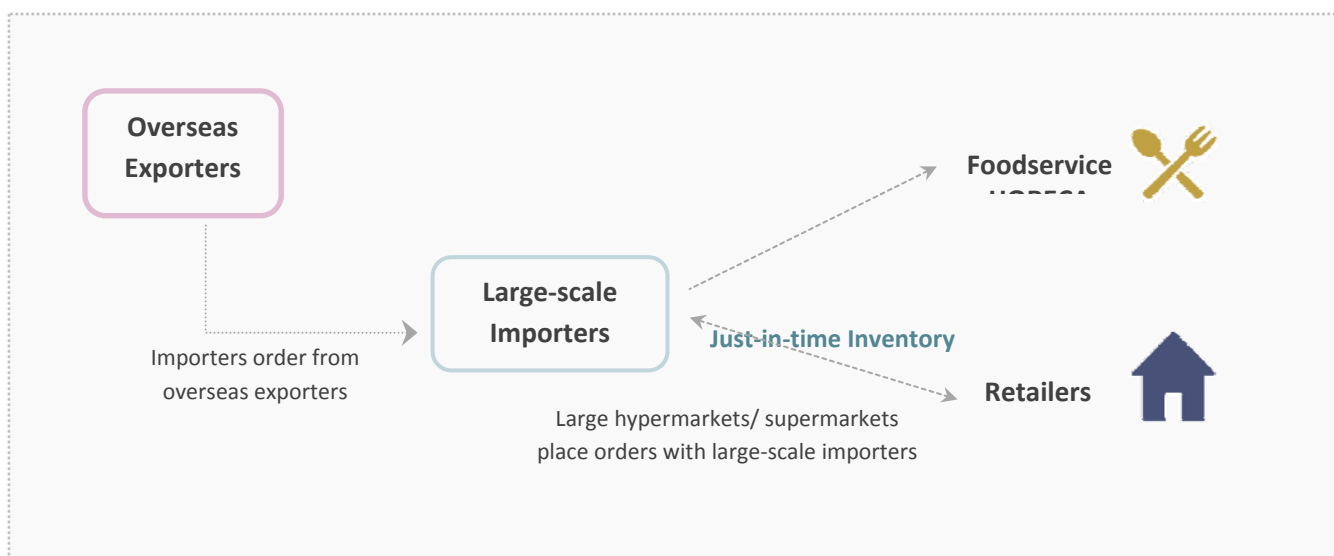
Supply Chain for Baby Leaves and Long Beans in Malaysia



Importers and Distributors Are Centralised in the Klang Valley

The majority of importers and distributors (70%) are located in the Klang Valley (Kuala Lumpur and Selangor) due to the generally higher disposable income and stronger purchasing power of vegetable produce in these heartland areas. The Klang Valley is definitively viewed as the centralised distribution hub of fresh produce, including baby leaves and long beans.

Supply Chain Analysis of Large-scale Importers



Large-scale Importers Specialise in the Products They Supply

Among importers, the majority are specialised, with some dealing only with salad greens, fruits or exotic fruits. Within the Klang Valley, the importer landscape is fairly consolidated, with only a smattering of five or six importers offering cross-category products, including large-scale importers such as Euro-Atlantic and Khai Shen. These large-scale importers place greater priority on Western imports due to their high produce quality by comparison to Chinese imports. Chinese produce typically assumes a small percentage of imports, mainly in the form of hardy vegetables such as broccoli, cauliflower and carrots.

The Foodservice Industry Represents the Main Patronage of Large-scale Importers

For large-scale importers, HORECA (hotels, restaurants and cafés) foodservice channels form their predominant patronage, contributing 70%-80% of such importers' main business. The significance is especially evident among restaurants and cafés specialised in Western cuisines, where salad entrées are often found on the menu. Higher-end hotels and resorts are also key customers, registering significant usage of baby leaves in their food and beverage units.

Large-scale Importers Cater Less to Retail Distributors

On the other hand, retail contributes only 20%-30% to large-scale importers' revenues, where transactions are mainly with large-scale retailers. The smaller proportion is attributed to three factors:

- (i) Importers' lack of focus on retail due to the high volumes demanded
- (ii) Limited consumer demand
- (iii) Retailer demands for specific packing requirements, which vary from retailer to retailer

In general, major importers dealing in cross-category products tend to lack a sophisticated packaging system to cater to retailers’ packaging needs. However, smaller importers such as Green Master specialised in supplying conventional salad greens provide packaging support for retailers.

Larger Clients Have the Upper Hand in Negotiation Terms

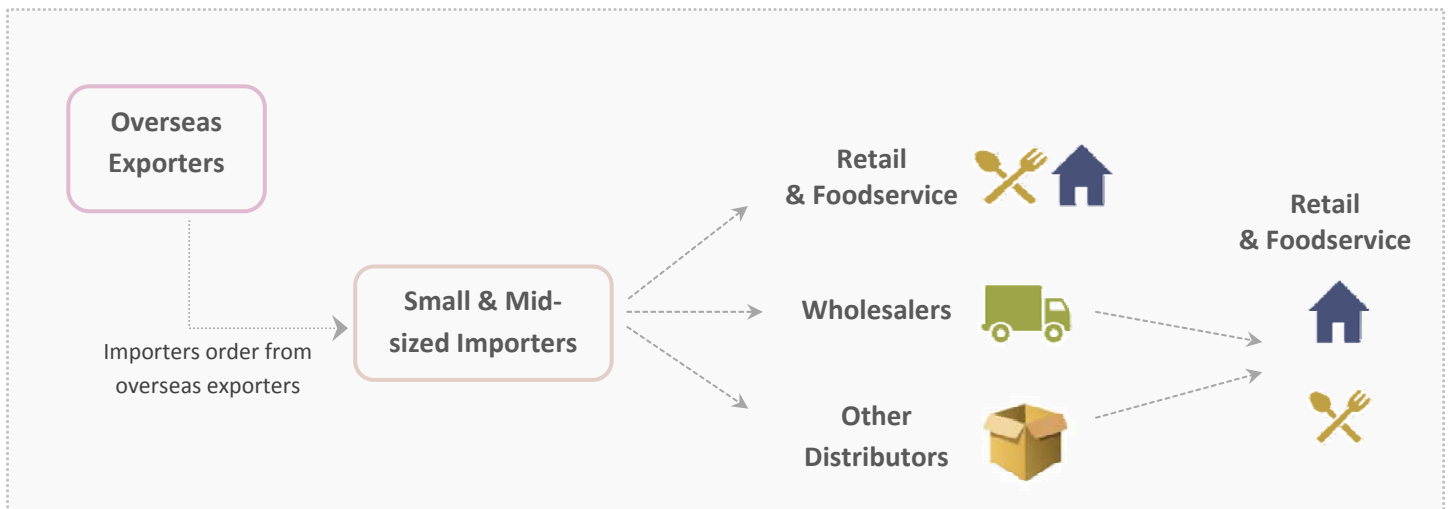
Normally, large-scale importers deal directly with retailers and foodservice players, bypassing distributors or wholesalers. Fixed pricing is not typically observed between transacting parties, whereby the exchange of goods and payments are usually reached by tacit agreement through negotiation at length and supply and demand considerations, as well as goodwill reliance on existing affiliations or distributor relationships. However, exchange rate fluctuations are often absorbed by importers.

Bargaining power typically varies depending on the size of the player, with big retail and foodservice chains holding the upper hand over smaller-sized importers. For instance, larger clients are entitled to monthly discounts or rebates, especially if their purchase quotas fulfil a designated threshold, and ad-hoc price promotions occasionally range up to as much as 10%.

Just-in-time Purchase Order System Adopted by Large-scale Importers

Larger supermarkets/ hypermarkets place their orders with large-scale importers, such as Euro-Atlantic and Khai Shen, and in turn, the importers place their orders with the exporting countries. The purchase order system adopts a similar approach to the ‘just-in-time’ inventory system to help accommodate differing order quantities, avert waste and ensure produce freshness.

Supply Chain Analysis of Mid-sized and Smaller Importers



Mid-sized Importers Distribute Uniformly to Wholesalers, Retailers and Foodservice Players

Mid-sized importers register a more significant presence in the smaller states of Malaysia (outside the Klang Valley) and characteristically distribute to various intermediary parties. For instance, notable player Farm Price distributes approximately 30% to wholesalers, 30% to other distributors and the remaining 40% directly to selected retailers and foodservice outlets, including hotels and restaurants. Supply quantities are smaller in comparison to those of larger importers, suited for the needs of mid-sized clients. Contractual agreements are not typically established among transacting parties, with buyers typically purchasing from suppliers able to supply at optimal prices.

Small Importers and Distributors Typically Distribute to Retail Channels through Wholesalers

Akin to large-scale importers, smaller importers and distributors also place their core focus on foodservice distribution (80%-90%) over retail (10%-20%). While smaller importers and distributors commonly transact directly with their foodservice clientele, distribution to retailers typically takes place through wholesalers, due to the comparatively strenuous demands placed on suppliers in terms of pricing, quality, discount incentives, packaging and distribution logistics, all of which smaller importers and distributors are not well-equipped to manage.

In addition, retailers also often include hidden costs in their transaction agreements, such as necessitating smaller importers and distributors to grant concessions for promotional campaigns and provide price discounts. Retailers' refusal to transact with smaller importers and distributors during a case of inventory undersupply or oversupply has also occasionally rendered a reduced profit for these smaller players. On the other hand, wholesalers who hold a larger supply inventory possess greater bargaining power in their dealings with retailers. Larger importers and wholesalers are also able to provide competitive pricing at approximately 5%-10% below market price.

Smaller Distributors Tend to Supply Local Vegetables

Smaller distributors shared that locally cultivated vegetables, including baby leaves and long beans, are generally popular and in high demand among smaller retailers due to reasonable quality, lower pricing and the absence of freight charges and import taxes. Chinese imports are also in great demand due to their abundant supply in large volumes and cheaper pricing, which gives rise to a demand proportion of 50% local and 50% Chinese imports among smaller distributors and wholesalers.

Retailers Dynamics

Retailers Are Carrying More Locally Cultivated Produce

While Australian imports are valued for their excellent quality and Chinese imports for their lower pricing and longer shelf life, a promising development involving local growers in Cameron Highlands who ply semi-organic produce through an established distribution system to the Klang Valley region has piqued the interest of prime retailers such as Jaya Grocers, Cold Storage and Aeon. Local produce has become a mainstay offering in mass hypermarkets and it is available in many other premium hypermarket outlets such as Cold Storage and Jaya Grocer, as well as independent grocers including Mercato and Ben's.

Surging Acceptance of Chinese Imports among Hypermarkets and Supermarkets

In recent years, Chinese imports – in particular cabbage, broccoli and lettuce – have become more pronounced among small importers and distributors. Their popularity has also trickled into mainstream distribution channels, with hypermarkets and supermarkets increasingly demanding Chinese imports. On the other hand, small importers and distributors are reining in orders for Australian produce, citing fluctuating exchange rates and favourable prices from China. The protracted shipping time required for Australian produce also renders a higher potential for damage to goods by the time they arrive.

Online Supermarkets Carry Baby Leaves and Long Beans to Boot

Baby leaves are also sold through online supermarkets, including Presto, Redtick and most recently Tesco Online, which provide the most popular and widely consumed varieties of spinach and lettuce imported from Thailand and China, as well as those from Cameron Highlands. Given that the average Malaysian remains relatively unfamiliar with online grocery shopping, such online retailers operate predominantly in the Klang

Valley region and tend to procure from multiple distributors in limited quantities of 1-2 tonnes per day. Baby leaves and long beans are sold pre-packaged in plastic packs or plastic boxes to facilitate direct delivery to consumers.

Australian Long Bean Imports Less Preferred Due to the High Cost of Transportation

Retailers indicate less receptivity towards long bean imports from Australia, citing exorbitant air freight costs and a longer shipping time required, which can render the produce less fresh upon arrival. The lack of interest also stems from an existing well-established supply chain for the procurement of local produce and Chinese imports.

Large-Scale Retailers Prefer to Place Orders on a Daily Basis from Large-scale Importers

On average, large-scale retailers place their orders on a daily basis to ensure freshness. For this purpose, major retailers typically prefer to work with large-scale importers who have substantial inventory on hand to assist with stock replenishment as and when required on delivery schedules flexible to retailers' needs. For instance, if a particular produce item sells out, retailers can be assured that if orders are placed that day replenished supplies will arrive the next day.

Foodservice Dynamics

Organic Leaves Preferred

Foodservice operators prefer to procure from at least two suppliers to ensure produce continuity and supply reliability when replenishment is required. Salad greens typically arrive washed and properly packaged, which helps to reduce preparation time. In general, most foodservice operators cite combined reliance on both imported and locally cultivated baby leaves, with a special preference for organically cultivated varieties.

Price, Availability and Shelf Life are Main Considerations

Western foodservice operators who do not conventionally use baby leaves in their food preparation cite factors such as high pricing compared to full-grown vegetables, sporadic availability, lower nutritional content and shorter shelf life as the primary reasons. As a substitute, full-grown leaves and medium-sized leaves are used in place of baby leaves to help reduce costs.

Price Stability Ensures Procurement Sources

Keeping food prices constant is a main consideration when procuring ingredients, with most foodservice operators citing their preference for a long-term relationship with their main suppliers to ensure constancy of supply and quotations. Renewal of quotations between suppliers (often importers) and foodservice operators usually takes place on a monthly basis. In the event of a drastic change in negotiated terms, foodservice operators prefer to search for new suppliers who are able to supply at lower costs.



Use of lettuce featured with bruschetta on a Western foodservice establishment menu in the Klang Valley

Salads are a popular lunchtime order among patrons; a mix of lettuce and arugula is typically used

Product Mix based on In-store Observations



Imported Chinese broccoli and cauliflower sell at a 50 % discount during the Chinese New Year period



Plastic packed baby leaves (lettuce and spinach) on display



Locally cultivated long beans sold in mass supermarkets



Brassica, Lettuce and Spinach Commonly Featured in Hypermarkets and Independent Food Stores

Subcategories of brassica, lettuce and spinach are seen in comparative abundance relative to other baby leaf types in hypermarkets and independent food stores. For instance, brassica subcategories of broccoli, cauliflower and the less conventionally available brussel sprouts and red cabbages, coupled with multiple lettuce varieties such as butter head, romaine and red and green corals, are rather commonly found in hypermarkets and independent food stores.

Brassica variants of cabbage, broccoli and cauliflower are generally considered to be staple vegetables in Malaysia, with a recurring annual spike noted in the period leading up to Chinese New Year (between the end of January and mid-February). Throughout this period, pricing of imported Chinese brassica, such as broccoli and cabbage, can be discounted up to a margin of 50% to generate higher sales.



Cabbage and other brassica on display in mass hypermarket



Salad greens on display in Cold Storage



Loose display of locally cultivated long beans in Tesco

The majority of baby leaves sold in Malaysia are home-grown in Cameron Highlands, while imports typically originate from Australia, China, Hong Kong and Indonesia. Above all, imports are distinctly observed in the category of brassica, with marked presence from Australia, China, Hong Kong and Indonesia. Australia's broccoli and Brussels sprout imports are discernibly carried in higher-end hypermarkets and supermarkets located in affluent regions, such as Mercato independent food store, Aeon organic shop and Ben's Independent Grocer.

Baby Leaves Are More Prevalently Available in Plastic Packs and Boxes in Premier Channels

Hypermarkets offer salad greens or mesclun salad mixes in plastic packs or plastic boxes such that they require little preparation for convenient consumption. Lettuce varieties conventionally include butter head, romaine, red and green coral and curly crisp, packaged either in plastic packs or boxes. On the other hand, typical spinach varieties carried in stores are baby spinach and red spinach sold in plastic packs in independent food stores and higher-end supermarkets.

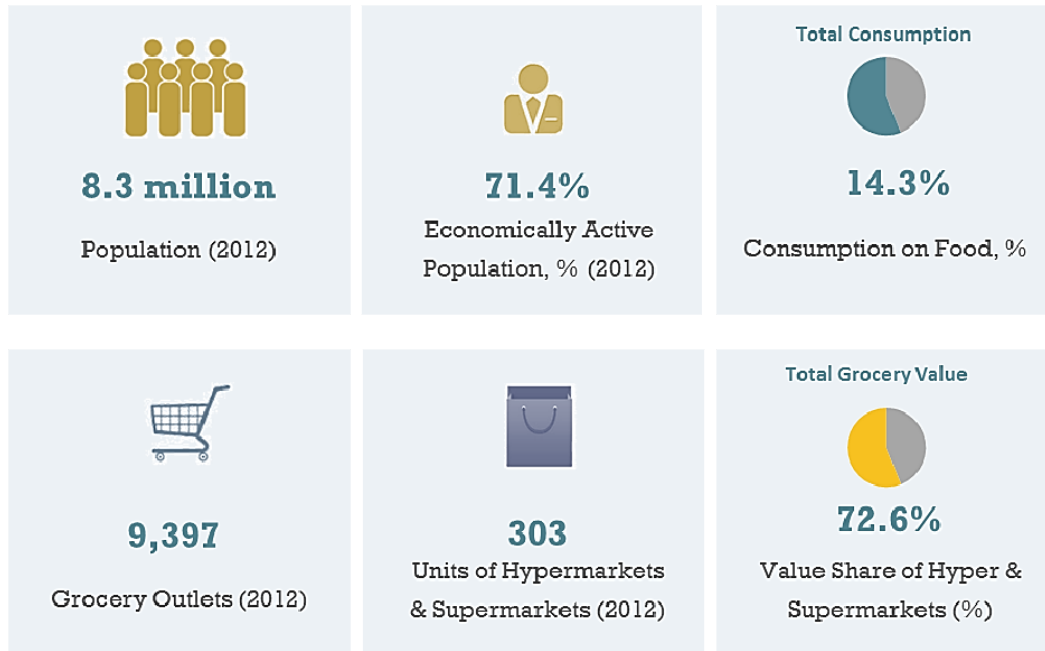
Long beans found across all channels are mostly locally cultivated or imported from Thailand and China, and typically are sold loose. The organic varieties tend to be available in premium hypermarket/ supermarket outlets and are packaged in plastic packs and stacked in the refrigerated section alongside other organic vegetables.

Premier Independent Grocers Shifting from Plastic Packs to Bulk Self-selection Display

In recent years, the advent of high-end independent grocers such as Ben's Independent Grocer and Mercato located in high-density expat areas has led to new methods for displaying baby leaves in stores. Baby leaves are bought in bulk and displayed in a loose format, allowing consumers to purchase according to their needs. Aside from end consumers, the convenience has also piqued the interest of restaurant operators, who tend to purchase on a piecemeal basis for their restaurants' needs.

5.2 BABY LEAVES AND LONG BEANS IN THE UAE

Macro Indicators



Introduction

The United Arab Emirates (UAE) is a confederation of nominally independent states which form a crescent running along the southern Persian Gulf. Oman is to the east and Saudi Arabia is to the west and south. Given its proximity to the Straits of Hormuz, the UAE occupies a position of immense strategic importance. Its capital is Abu Dhabi.

Economy Is Based on Oil Exports, but the Government Is Working to Diversify

The UAE is especially dependent on exports. In 2011, exports accounted for 79.1% of GDP, up from 76.0% in 2008. Exports (in USD) grew by 21.3% in 2012. Dubai is home to the UAE's busiest airport and sea port and it has long been a transfer point for goods moving in and out of nearby Iran.

Tourism Is a Booming Industry

The UAE is one of the leading tourist destinations in the Middle East. Tourism accounts for an estimated 16.6% of GDP and the government forecasts that the direct contribution of travel and tourism reached US\$19.9 billion in 2012.

High Standard of Living

The standard of living in the United Arab Emirates is one of the highest in the world. The country also has one of the more diversified economies among the major oil-producing Persian Gulf states.

The UAE's Population and Economy Are Dominated by Immigrant Workers

The country's total population in January 2012 was 8.3 million. Its median age is rising slowly and presently estimated to be 31.8 million. The annual average growth rate spiked to a massive 25.3% during 2006-2009, nearly doubling the population from 4.1 million to 8.1 million. This was due to a huge influx of workers brought in mainly to work on major construction projects preceding the economic meltdown in 2008. Foreign citizens – who make up more than 80% of the total population and 90% of the workforce – came mainly from India, Pakistan, Sri Lanka, Egypt, the Philippines, Bangladesh, Yemen, Iran and Sudan in 2010.

The UAE Is Affected by Global Market Conditions Due to Import Dependency for Fresh Food

The UAE relies almost entirely on imports for all of its local consumption of vegetables and other basic commodities. This almost exclusive dependency on other countries for fresh produce creates a ripple effect in which macro drivers such as political or financial instability in the importing country directly affect the UAE's ability to import, the way it prices its products, and the variance in levels of domestic consumption. These parameters of supply and demand are also shaped by other macro factors such as poor weather conditions in importing countries.

The Emerging Prominence of Organic Farming

A steady increase in imports is pushing local farmers to exploit niche markets such as organic vegetables as they cannot compete with the abundant supply from the international market. On average, supermarket space dedicated to organic produce has doubled year-on-year over the past five years. Once again, this is due to increased supply from local farmers who are focusing on profitable crops rather than competing with the high production rates and low labour costs in countries abroad.

Grocery Retail Landscape

Food Price Inflation a Major Impediment for Grocery Retailers

Food price inflation continued to be an important topic affecting grocery retailers in the UAE in several ways in 2012. While overall inflation in the country had slowed down significantly in comparison with the start of the review period, the rise in commodity prices of various staple foods during 2011 and 2012 resulted in the UAE government taking a number of actions to protect consumers' disposable income and keep groceries affordable. In early 2012, the Consumer Protection Department (CPD) reached an agreement with 320 retailers to fix the prices of 1,650 basic food items until the end of the year, following similar measures taken during 2011.

Carrefour in the Lead among Hypermarkets

Majid Al Futtaim Hypermarkets was the clear leader in 2012 with a value share of 20% in grocery retailers overall and 26% in modern grocery retailers. The company managed to further increase its share in grocery retailers by 1 percentage point over 2011, due to the opening of two hypermarket outlets during 2012 but also because of its increasing focus on supermarkets. While Carrefour led hypermarkets throughout the review period, the company rebranded the Carrefour Express supermarket chain, originally launched in 2008, as Carrefour Market in 2011 in order to emphasise its range of fresh fruit, vegetables and meat and to be able to better compete with leading supermarkets such as Spinney's and Choithram. This move proved successful as Carrefour Market progressed further in supermarkets in 2012, its share gaining 3 percentage points over the previous year.

Lulu Hypermarket an Up-and-coming Player

That being said, Carrefour's expansion in supermarkets is also indicative of the growing competition in hypermarkets, with other players expanding aggressively as well. Emke Group and Abu Dhabi Co-operative Society both opened two additional hypermarket outlets each in 2012. Emke Group led in terms of outlet volume in hypermarkets in 2012 and also gained 1 percentage point in value share within this channel over the previous year, benefiting from the growing popularity of its Lulu brand and also from its expanded range of private labels.

Consumer Co-operative Union (CCU) Backed by Governmental Support

Although Majid Al Futtaim Hypermarkets led grocery retailers at a national brand owner level, the various co-operatives that were formed by the government to encourage the development of domestic modern retailing led at the global brand owner level, with the Consumer Co-operative Union (CCU) holding a value share of 21% of grocery retailers in 2012. This included companies such as the Dubai-based Union Cooperative Society or Abu Dhabi Cooperative Society.

Price Caps Affecting Sales of Consumer Co-operative Union (CCU)

While these two players saw a slight increase in share in 2012 due to their ongoing expansion, the CCU's share stagnated during 2012. This was chiefly the result of the government-imposed price caps constraining value sales growth, with cooperatives playing an important role in terms of providing affordable grocery products in the country. Emirates Cooperative Society, for example, reported that the price caps cost the company a total of AED 8 million (USD 2.8 million) during Ramadan alone, while it estimated the total cost over the course of 2012 to be approximately AED 25 million (USD 8.6 million). Collectively, grocery retailers were estimated to have taken a hit of at least AED 60 million (USD 20.7 million) to their profits during Ramadan by agreeing to the government's price caps.

Purchase Sentiment Increasing in Supermarkets

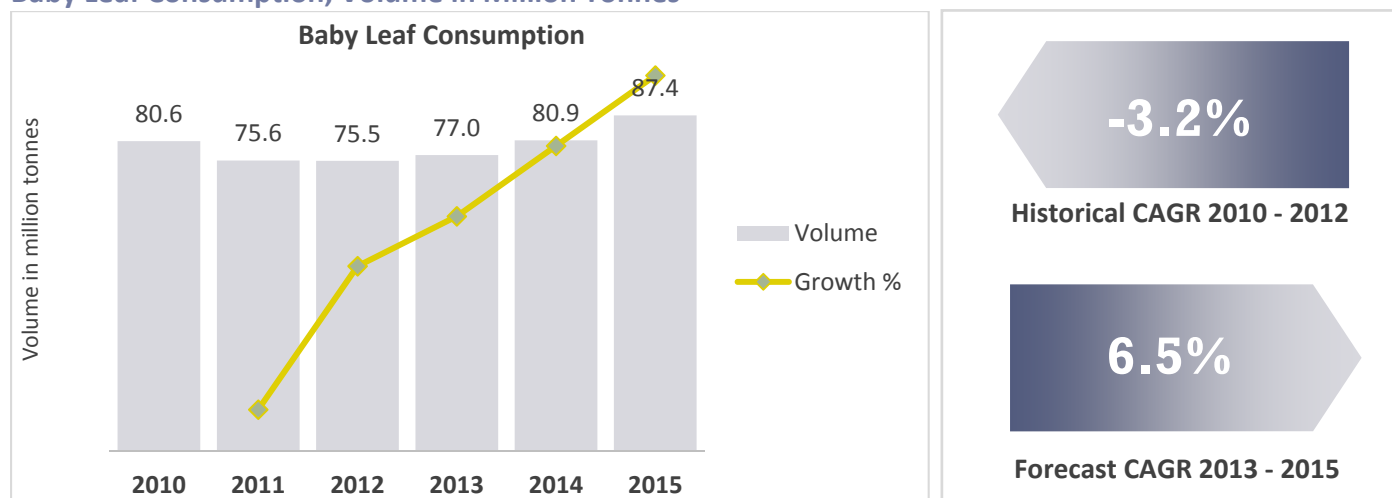
Consumers meanwhile became more confident about their spending in 2012, which mostly benefited supermarkets that once again increased at a faster rate than hypermarkets. Leading supermarket chains such as Spinney's and T Choithram & Sons, for example, which have a stronger focus on quality and freshness than on offering value-for-money, enlarged their shares in 2012. However, supermarkets also expanded at a faster pace in terms of outlet volume and selling space compared with hypermarkets in 2012, as finding suitable locations for new outlets proved increasingly difficult for the latter.

Hypermarkets Still Dominant as Convenient One-stop Channel

Nevertheless, hypermarkets represent the most significant channel in terms of sales value, accounting for 52% of grocery retailers' overall value sales in 2012. Hypermarkets benefit from offering the widest range of products at the low prices and with frequent price promotions. Many outlets are adjoined to modern shopping centres, thus offering consumers the convenience of one-stop shopping in these outlets, which is especially appealing given the country's hot climate. Due to the popularity of hypermarkets, consumers' shopping patterns in the United Arab Emirates shifted from frequent to weekly trips to larger outlets.

Consumption, Production and Trade of Baby Leaves in the UAE

Baby Leaf Consumption, Volume in Million Tonnes²⁷



Baby Leaf Consumption Slated for Greater Rise in Forecast Years

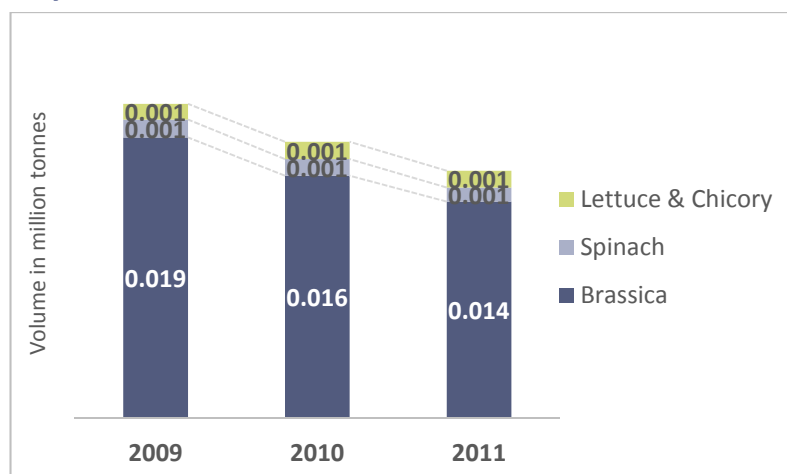
Baby leaf consumption registered a negative CAGR of -3.2% during the historical period, due to shrinking local production and tightening economic conditions post-global economic crisis, which resulted in a subdued performance. However, consumption trends seemingly hit an inflection point in 2012 as consumer sentiments gradually resumed their former levels, and the renewed investment in hydroponic technology and organic farming is slated to more effectively address the conundrum of non-arable lands in the UAE.

Until 2012, baby leaves proved to be a popular ingredient in demand by hotels, restaurants and catering outlets. The progressive development of consumer foodservice, especially fast food and cafés which experienced rapid growth in 2012, is expected to drive stronger consumption in a country that is reasonably well-acquainted with baby leaf consumption compared to Malaysia. In addition, the growing number of grocery outlets and strengthening performance of hypermarket/ supermarket chains focused on freshness and quality are also expected to fuel higher home consumption of baby leaves in upcoming years.

Going forward, the growth of baby leaves is expected to reach higher levels, driven primarily by the advent of Expo 2020, which is slated to take place in Dubai. During this period, the expansion of retail infrastructure and HORECA channels is anticipated to catalyse consumption of food commodities, while the arrival of new expatriates and tourists attributed to economic boosts in the industrial, hospitality and tourism sectors is expected to expand the current consumer base.

²⁷ UAE National Bureau of Statistics

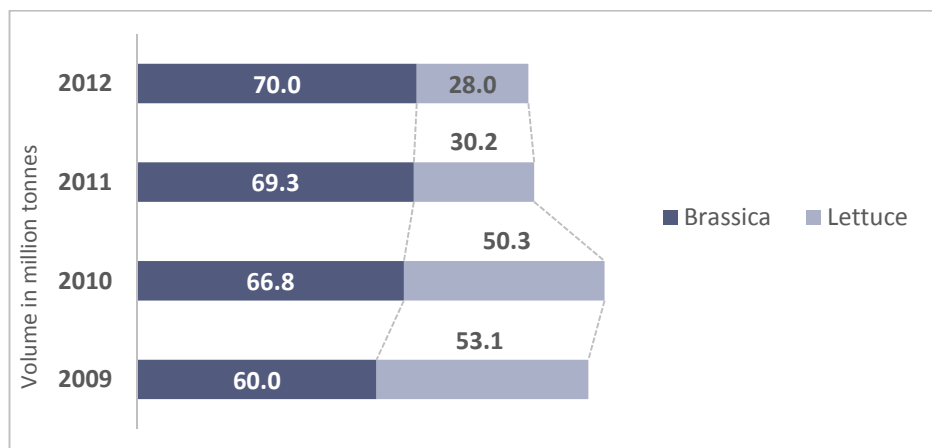
Local Cultivation of Baby Leaves²⁸



The local cultivation of baby leaves – in particular brassica varieties, which form the bulk of baby leaf cultivation – has been in steady decline. The observation is closely correlated to the progressive increase in brassica imports, which helped sustain the demands of HORECA and retail channels.

Local cultivation of lettuce and chicory increased marginally by a CAGR of 3.1% while spinach declined by a significant CAGR of -11.5% due to lesser demand by foodservice and retail channels stemming from a generally contracting consumption culture.

Imports of Baby Leaves²⁹

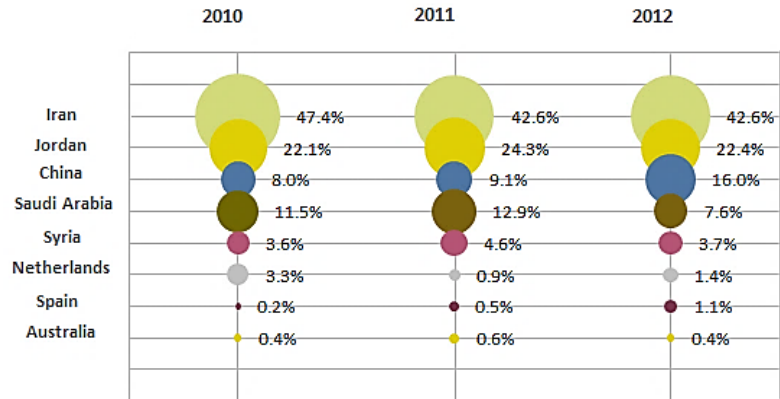


Brassica imports rose by a CAGR of 7.5% during the review period, while lettuce imports decreased by -24.6%. As the government sought to reduce reliance on lettuce imports and promote a more vibrant local farming scene, especially through organic and hydroponic methods, lettuce imports may continue to decline in future years.

²⁸ UAE National Bureau of Statistics

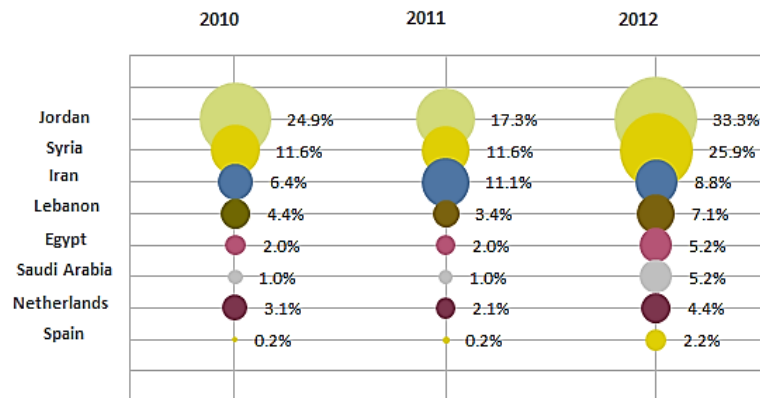
²⁹ UN Comtrade statistics: Aggregated volumes of full-grown and baby leaves are recorded in the diagram.

Major Brassica Importers into the UAE (Volume in %)



Neighbouring Iran was the biggest importer of brassica into UAE between 2010 and 2012, and it maintained a steady import proportion of 42.6% between 2011 and 2012. Chinese imports, which saw a significant uptrend in import proportions between 2010 and 2012, are also on the rise. Among Western imports, the Netherlands registered a marked presence as the sixth-highest brassica exporter, although its import proportions dwindled between 2010 and 2012.

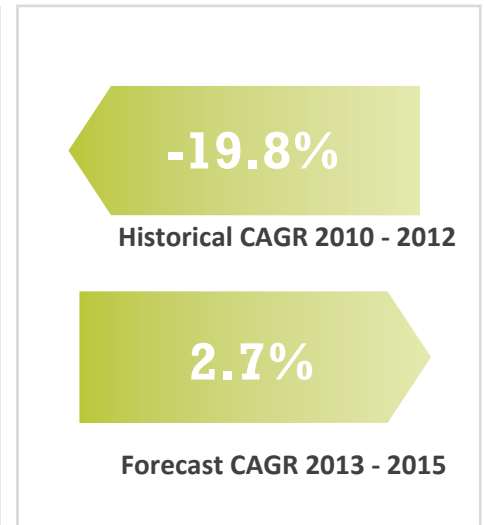
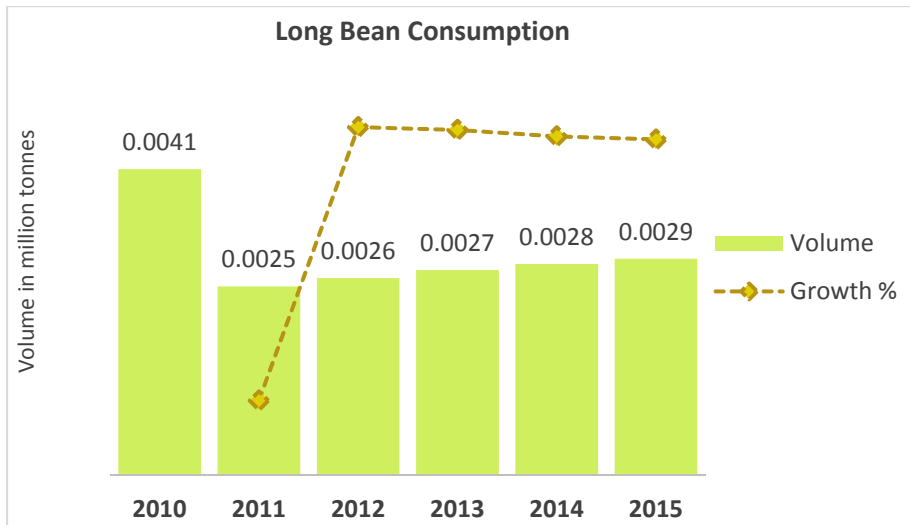
Major Lettuce Importers into the UAE (Volume in %)



Neighbouring countries Jordan and Syria are major exporters of lettuce into the UAE, followed by Iran and Lebanon. Jordan’s import proportions amounted to a considerable 33.3% in 2012, while Syria garnered 25.9%. Among Western imports, the Netherlands and Spain registered significant presence with 4.4% and 2.2% import proportions in 2012, respectively, witnessing healthy growth during 2010-2012. Western imports are carried predominantly in premium hypermarkets/ supermarkets located in affluent residential areas.

Consumption, Production and Trade of Long Bean in the UAE

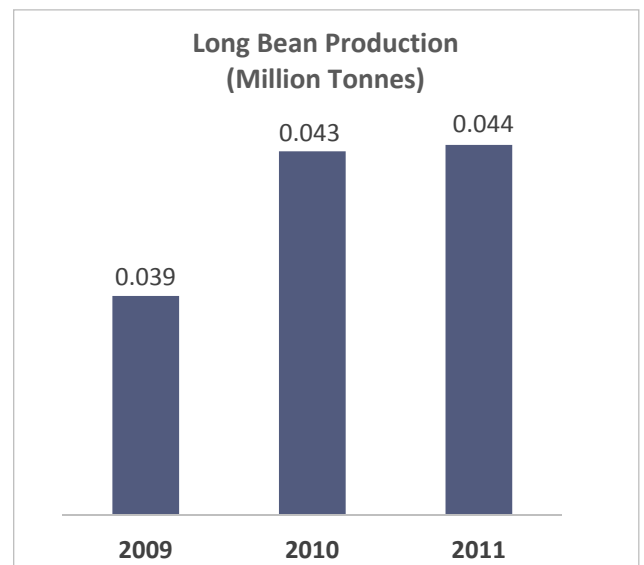
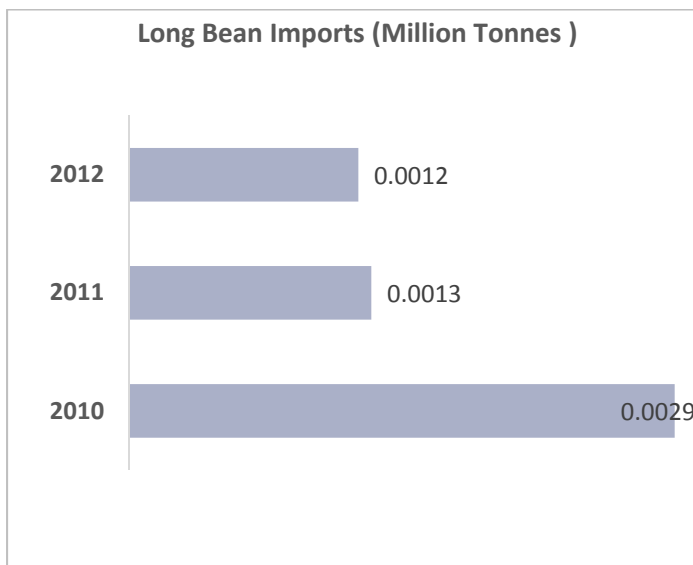
Long Bean Consumption, Volumes in Million Tonnes



Long Bean Consumption to Rise Marginally

The economic recession between 2008 and 2011 imposed a dampening effect on long bean consumption. Long beans are used less frequently in daily dishes by the general population, with stronger patronage among immigrant cultural groups from India, Southeast Asia and the Levante Region. Usage by other Western expatriates is minimal in certain dishes such as salads and side dishes, while the local population uses them in a handful of cooking staples. Long beans are also not significantly used in foodservice and are served minimally in salads and side garnishes. Going forward, the forecasted increase will mainly be attributed to increasing health awareness, coupled with rising home consumption and foodservice offerings.

Long Bean Imports Declining in the UAE in Parallel with Rise in Production³⁰



³⁰ UN Comtrade statistics and UAE National Bureau of Statistics

Long bean imports have taken a dive in the last three years, as local production witnessed an increase. Given its limited consumption, higher local production and generally self-sufficient neighbouring imports helped sustain the market with few Western imports.

Baby Leaf and Long Bean Varieties Derived from Imports and Local Farming

The following table showcases the relevant baby leaf and long bean varieties cultivated through different methods of normal farming, organic farming and hydroponic farming in the UAE:

No.	Normal Farming	Organic Farming	Hydroponic Farming
1	Cabbage	Lettuce	Lettuce – lollo rosa
2	Chicory	Chicory/ Endive	Lettuce – lollo bionda
3	Other brassica	Broccoli	Lettuce – oak leaf red
4	Cauliflower	Brussels sprouts	Lettuce – batavia
5	Broccoli	Cabbage	Lettuce – Boston butter head
6	Spinach	Cauliflower	Lettuce – oak leaf green
7	Lettuce	Kale	Lettuce - frisée
8		Rocket	Lettuce – rocket
9		Spinach	Rucola – rocket
10		Chard	
11		Green beans	

Local Produce Rising with Organic Varieties Making a Mark in Recent Years³¹

Major fresh produce suppliers have indicated that at least 10% of total sales of the majority of vegetable supplies in the UAE originate from local produce. Most of these local producers typically peddle their goods through large hypermarkets and open markets, where the produce are usually sold in bunches at AED1 (USD0.27) for all varieties (mainly green/ leafy vegetables such as lettuce, spinach, rocket, cauliflower, cabbage and string beans) among other mainstream vegetables including tomatoes and fresh green herbs.

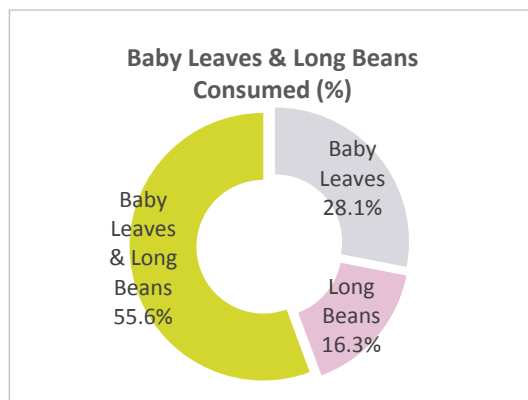
The number of organic farms is on the rise, amounting to more than 40 farms by 2013. Many of these farms operate in climate-controlled greenhouses while others exist as open-air farms, and they grow a range of 62 products, in particular date palms, tomatoes and green beans. The seasonality for locally produced organic commodities in open-air farms includes green beans, cabbage, broccoli, cauliflower and lettuce in winter and cabbage predominant in spring, but a lack of strong production in summer and autumn. Meanwhile, such seasonality has minimal effect within climate-controlled greenhouses. Local farmers are also increasingly turning to hydroponic techniques to produce higher-quality yields in order to remain competitive as well as elevate interest and awareness in national agricultural output.

³¹ Khaleej Times, 2013, *UAE now has 40 organic farms, growing 62 crops*, Khaleej Times Online, viewed 16 January 2014, <http://www.khaleejtimes.com/kt-article-display-1.asp?xfile=/data/government/2013/October/government_October45.xml§ion=government>

Consumer Insights Analysis

This section of the report consolidates the findings from consumer surveys. A total of 789 online consumer surveys were conducted in December 2013. Respondents were selected at random from an online panel. All 417 respondents below from the UAE had purchased or consumed baby leaves and/ or long beans in the previous six months.

A Majority of the Population Consume Both Baby Leaves and Long Beans³²



Of the 417 respondents surveyed, a total of 83.7% had consumed baby leaves and salad greens in the previous six months, while 71.9% had consumed long beans. Among the total 417 respondents, 28.1% of respondents consumed exclusively baby leaves, 16.3% consumed exclusively long beans, while 55.6% consumed both baby leaves and long beans.

Baby Leaves and Long Beans Are More Prevalently Consumed at Home³³

		Baby Leaves	Long Beans
		349 respondents	300 respondents
	Purchased in stores & consumed at home	50.1%	57.7%
	Consumed in foodservice outlets	9.2%	9.7%
	Both of the above	40.7%	32.7%

The majority of baby leaf consumers (50.1%) consume baby leaves exclusively at home while 40.7% consume them both at home and in foodservice outlets. The high percentage of home-based consumers signifies the essential nature of baby leaves as a staple diet item especially in expatriate households. Similarly, 57.7% of long

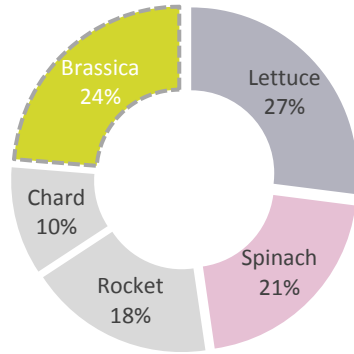
³² **Question:** Have you purchased/ consumed any of the following products in the past six months? (417 respondents)

³³ **Question:** During the past six months, where did you purchase/ consume baby leaves and long beans? (349 baby leaf and 300 long bean respondents)

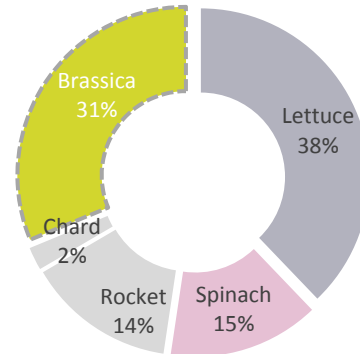
bean consumers consume them exclusively at home, most prominently among Asian expatriates who use them in cultural cuisines.

Brassica Most Prominently Purchased for Home Consumption, Followed by Lettuce and Spinach³⁴

Types of Baby Leaves Generally Purchased in Stores



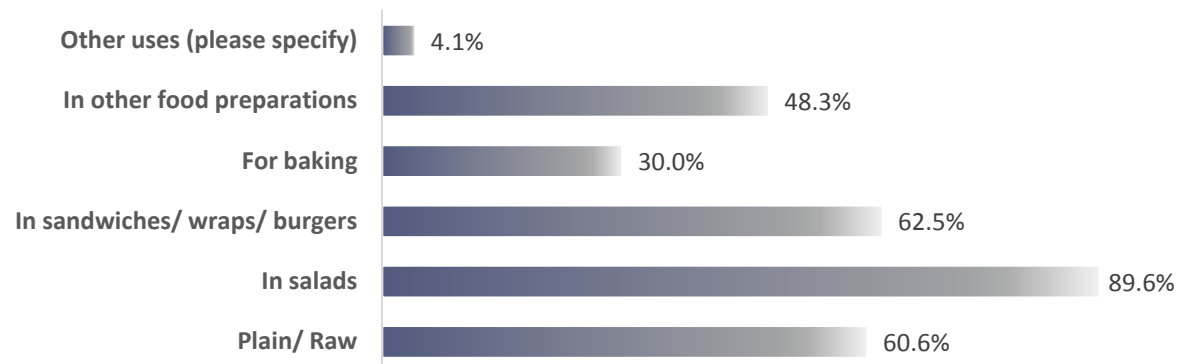
Types of Baby Leaves Most Often Purchased



Among the respondents who had purchased baby leaves, a total of 27.0% typically purchased lettuces from stores for at-home consumption. The expatriate community places particular emphasis on high quality and freshness, and opted to purchase from hypermarkets/ supermarkets located in high-end suburban areas where produce freshness is guaranteed. Meanwhile, 24.0% of respondents typically purchased brassica, especially well-known staples such as broccoli, cauliflower and cabbage.

Spinach came in third, commonly supplied by other Western countries such as the United States and Italy and sold in premier hypermarkets/ supermarkets. Given the vibrant mix of expatriate consumers in the UAE, a higher familiarity with rocket and chard also translated into higher take-home frequency, for primary usage in home-prepared salad dishes.

Baby Leaves Most Prevalently Used in Salads and Sandwiches/ Wraps/ Burgers³⁵



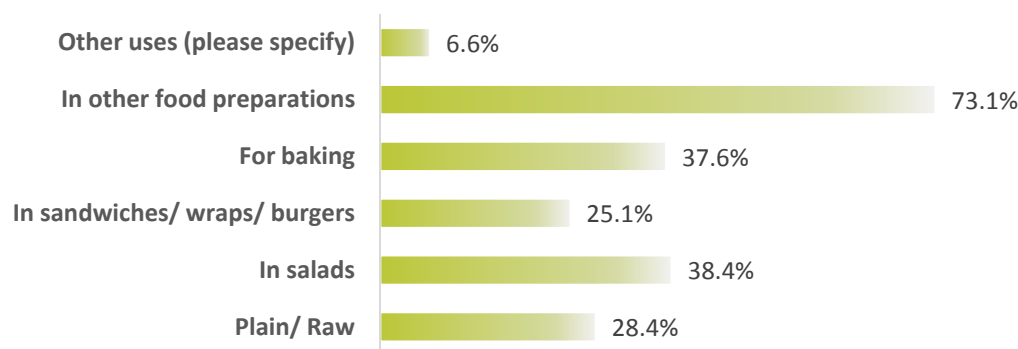
³⁴ **Questions:** When you purchased baby leaves from stores, which type of baby leaves did you purchase? And of the baby leaves purchased, which type of baby leaves did you purchase most often? (317 respondents)

³⁵ **Question:** How did you consume baby leaves at home? (317 respondents)

Baby leaves are most commonly incorporated into salad dishes, where lettuce, arugula and chard have been pinpointed as popular choices for salad mixes. Meanwhile, chard and cabbage are also prevalently used in sandwiches, wraps and burgers. In terms of other food preparations, spinach and brassica feature prominently in Western-centred recipes for their acquired taste and nutrition.

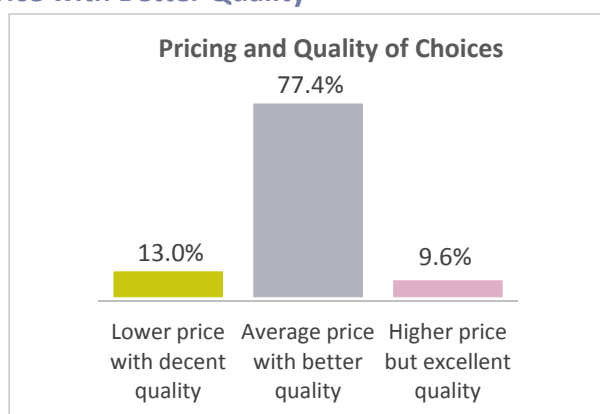
Baby leaves – in particular rocket, chard and lettuce – are also eaten raw. Rocket is favoured primarily for its versatile pungent, peppery taste that can easily add to a fresh mix with other ingredients. On the other hand, the sweet buttery taste and high nutritional value of chard have made it a perennial favourite in the Mediterranean culture, and it is also easily adapted to Western cuisines such as pasta, quiche and salads, helping to add depth and complexity to dishes.

Long Beans Generally Used in Other Food Preparations³⁶



Long beans are most commonly used in food preparations reserved for stir-fried local dishes, but more fundamentally they are featured in Asian cuisines as a staple and are used extensively by Asian expatriates in curry dishes as well as sautéed and stir-fried recipes. Their resounding popularity within the Asian community has rendered them a must-have item in hypermarkets/ supermarkets frequented by Asian expatriates, serving the strong community demographic in nearby vicinities. Meanwhile, on the contrary, Western expatriates tend to use long beans differently, whether sautéing, baking or dressing with vinaigrette to be served in salads or as a side garnish.

Consumers Opt for Average Price with Better Quality³⁷

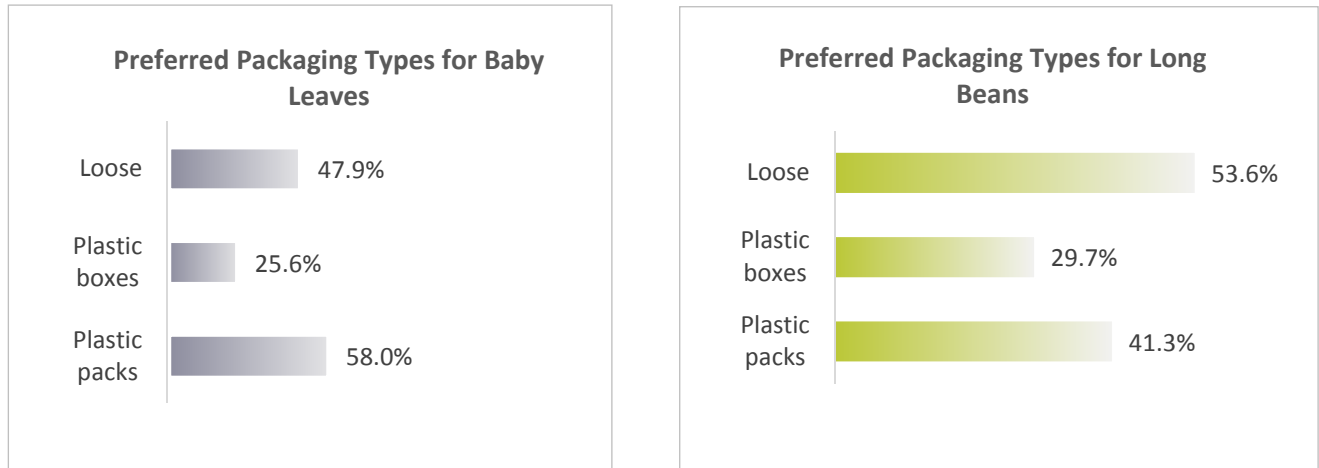


³⁶ Question: How did you consume the long beans at home? (271 respondents)

³⁷ Question: Which of the following category of pricing and quality would you tend to purchase for baby leaves and/or long beans? (407 respondents)

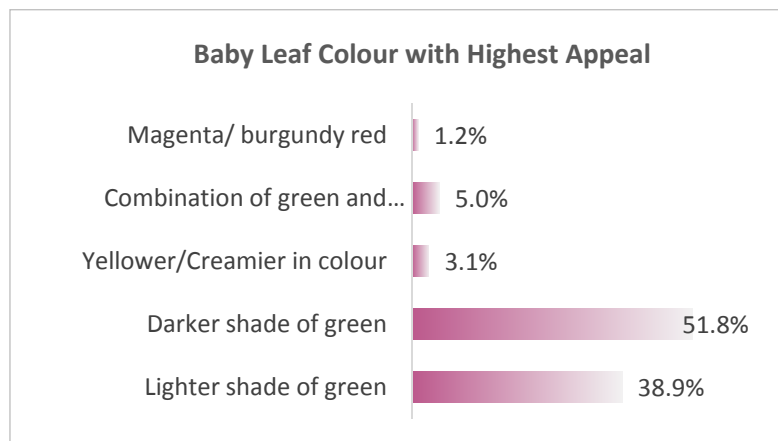
In terms of pricing and quality, a majority of local consumers designated mid-tier pricing with above-average quality as their main preference. In general, the UAE’s vibrant expatriate scene signals high affordability for premium-quality groceries. This is evidently so when considering the main consumer cluster for baby leaves who tend to frequent higher-end hypermarkets/ supermarkets strategically located in affluent neighbourhoods.

Plastic Packs Preferred for Baby Leaves, Loose Format for Long Beans³⁸



Plastic packs are generally preferred over loose and plastic box formats for baby leaves, while consumers tend to prefer long beans in a loose format. Attractive packaging touting the benefits of baby leaves on its packaging label is the optimal choice of consumers, while long beans displayed in loose format are considered to indicate higher freshness compared to sealed long beans in plastic packaging.

Darker Shade of Green Preferred³⁹

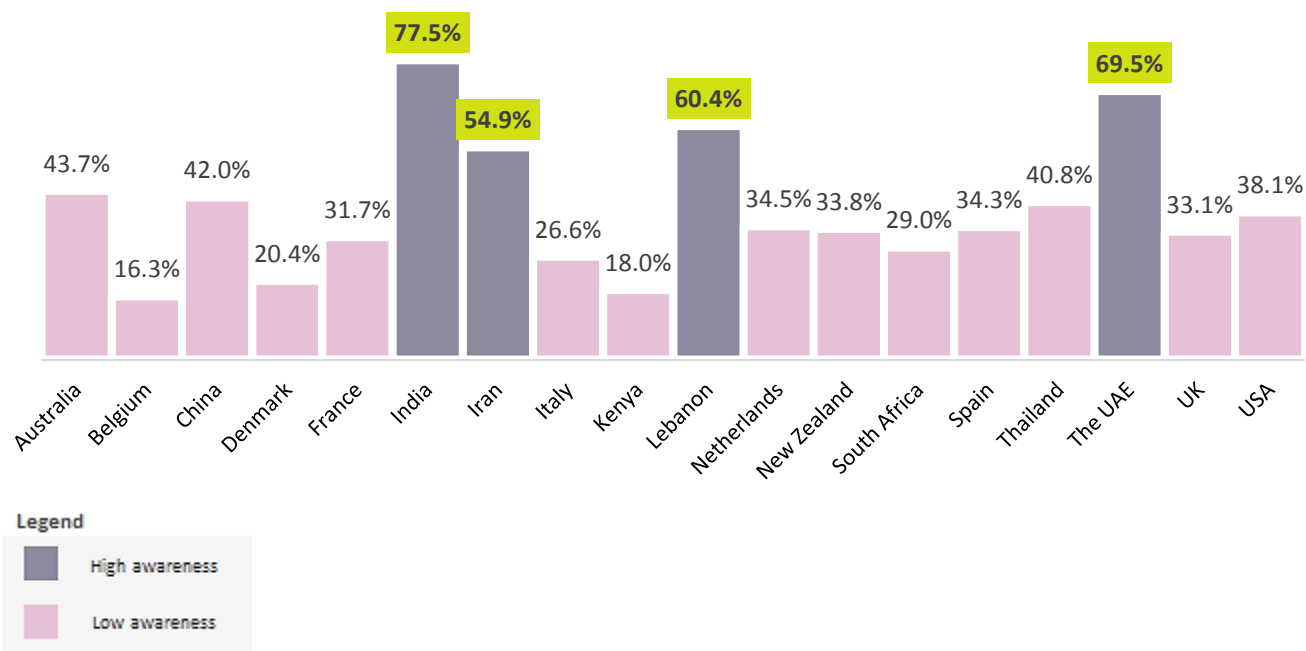


Of all respondents, 51.8% indicated their preference for a darker shade of green, associating it mainly with higher nutritional value in terms of antioxidants and vitamins. The observation demonstrates Western expatriate consumers’ well-versed understanding of and familiarity with the usage of different baby leaf types, as well as the taste and nutritional benefits each type yields.

³⁸ **Question:** In terms of packaging, which of the following packaging types do you prefer for baby leaves and long beans? (407 respondents)

³⁹ **Question:** In terms of baby leaf colours, which of the following colours appeals most to you as a consumer? (417 respondents)

India and the UAE Considered Prominent Suppliers of Vegetable Produce⁴⁰

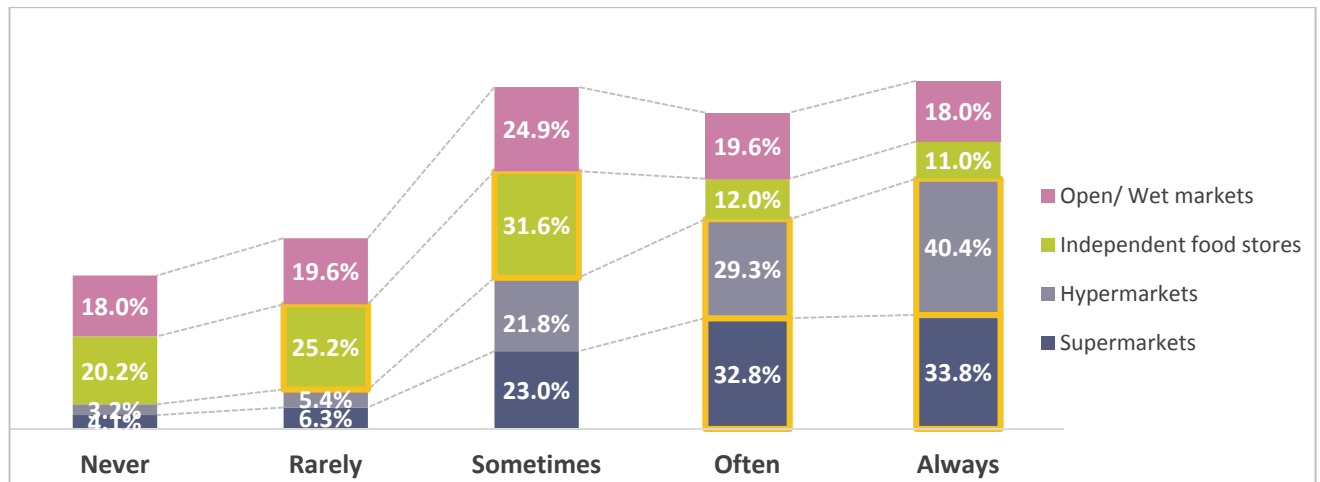


The major proportion of respondents viewed India and the UAE as the preeminent suppliers of baby leaves and long beans in the country, where local brands such as Fresh Express and Bakarar can be found in hypermarkets and supermarkets. In particular, long bean imports from India serve a strong community of Asian expatriates especially in supermarkets carrying lower-priced commodities.

Meanwhile, neighbouring Lebanon, whose long bean imports are dominant in mass hypermarkets such as Carrefour and Lulu, placed third. In addition, many of the open market outlets and stalls deal with local produce directly delivered from farms in Ajman and neighbouring Emirates, while many others import directly from neighbouring countries such as Oman, Iran and Jordan, and to a lesser extent from Lebanon or India due to lower shipping costs. Iranian imports register a strong familiarity among UAE consumers, showing solid dominance in brassica at comparably good quality for a lower price in mass hypermarkets. Being a regional import, Iranian produce is also promoted in Union Co-op Hypermarket.

⁴⁰ **Question:** Among the following, which countries do you think supply baby leaves and long beans to the UAE? (417 respondents)

Hypermarkets and Supermarkets Are the Main Choices of Baby Leaf Consumers⁴¹

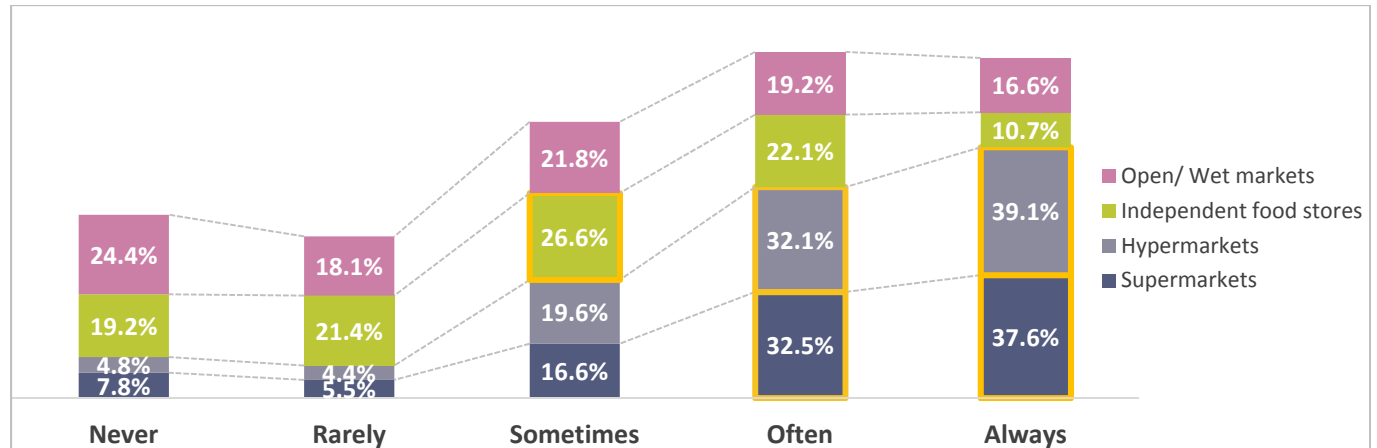


Hypermarkets and supermarkets are the primary channels visited by consumers when purchasing baby leaves. A high proportion of respondents (40.4%) ‘always’ purchase through hypermarkets, while 33.8% ‘always’ purchase through supermarkets. The proportion of consumers who ‘often’ purchase from these two channels also registers at fairly high levels; 32.8% ‘often’ purchase from supermarkets, while 29.3% ‘often’ purchase from hypermarkets. Premium hypermarkets and supermarkets tend to stock up on high-quality Western imports, which appeal well to Western expatriates who demonstrate strong loyalty to imports from their home countries. Meanwhile, mass hypermarkets offer an extensive range and quality of baby leaves which are both imported and locally cultivated varieties.

On the other hand, independent food stores and open/ wet markets register fewer visits, with 31.6% of consumers purchasing from independent food stores only on occasion, while 24.9% purchase from open/ wet markets. Independent food stores such as organic shops tend to carry limited varieties of baby leaves, priced comparatively higher than the average commodity price attributed to their organic cultivation, which renders them relatively costly to produce or import. While these shops are predominantly targeted at affluent Western expatriates and Emiratis, the target consumer group manifests higher interest in premium hypermarkets/ supermarkets instead due to their fresher supplies and comparatively affordable prices which accommodate their frequent usage of such produce.

⁴¹ **Question:** During the past six months, where have you purchased baby leaves? (317 respondents)

Hypermarkets and Supermarkets are the Go-To Channels for Long Beans⁴²

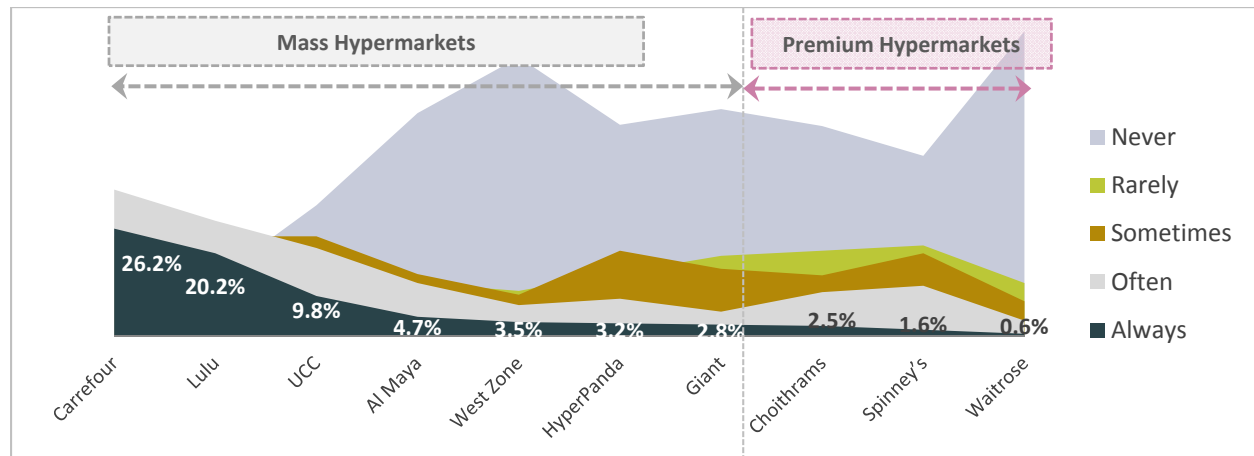


Similar to baby leaves, consumers also indicate a higher predisposition to purchase long beans from hypermarkets and supermarkets; 39.1% of respondents ‘always’ purchase from hypermarkets, while 37.6% ‘always’ purchase through supermarkets. As long beans are an essential staple among Asian expatriates, who tend to seek more affordable and mainstream options in the market, they are more often accessible through hypermarkets/ supermarkets located in suburbs characterised by low to medium purchasing power.

On the other hand, 26.6% of consumers only purchase long beans in independent food stores while 21.8% buy from open/ wet markets on occasion. Organic food stores which are typically located in high-end malls and shopping districts cater to a demographic of affluent Western expats and Emiratis, who exhibit minute levels of long bean consumption. Thus long beans are generally unavailable through these outlets. Meanwhile, the comparatively lower quality of produce, coupled with a lack of diversity in importing countries as well as lack of proper pricing signage and information in open/ wet markets, contribute as major factors driving consumers away from this channel.

⁴² **Question:** During the past six months, where have you purchased long beans? (271 respondents)

Mass Hypermarkets Carrefour and Lulu Outperform Premium Hypermarkets in Baby Leaf Sales⁴³



The strong availability and economically priced private labels in Carrefour yield higher mass appeal and cater to all nationalities and Emiratis with varying levels of purchasing power. Product pickup tends to be high due to greater in-store traffic as consumers shop for their weekly necessities as well as reasonable pricing affordable by those with all income levels.

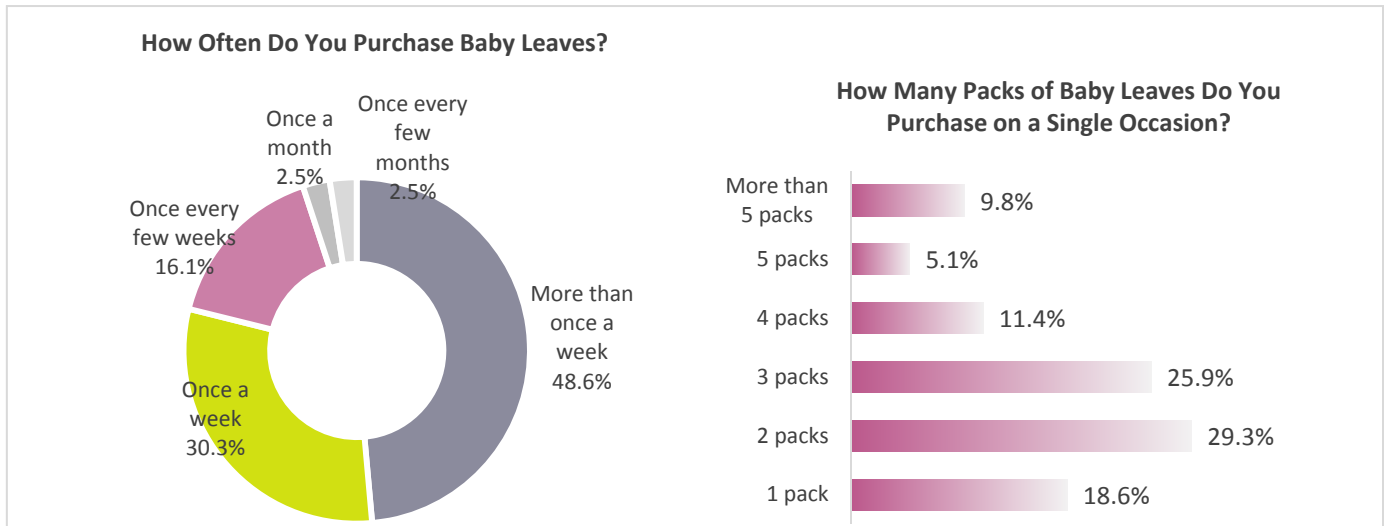
Premium Hypermarkets Caters to Expatriates and High-income Earners

On the other end of the spectrum, premium outlets such as Choithrams, Spinney's and Waitrose tend to carry baby leaf imports exclusively from Western countries that can be priced as much as 50% higher than local and regional produce. These premium outlets are more accommodating to the shopping needs of Western expatriates and higher-income Emiratis, who remain a niche consumer segment in the market.

⁴³ Question: Among the following supermarkets/ hypermarkets, where have you purchased baby leaves during the past six months? (317 respondents)

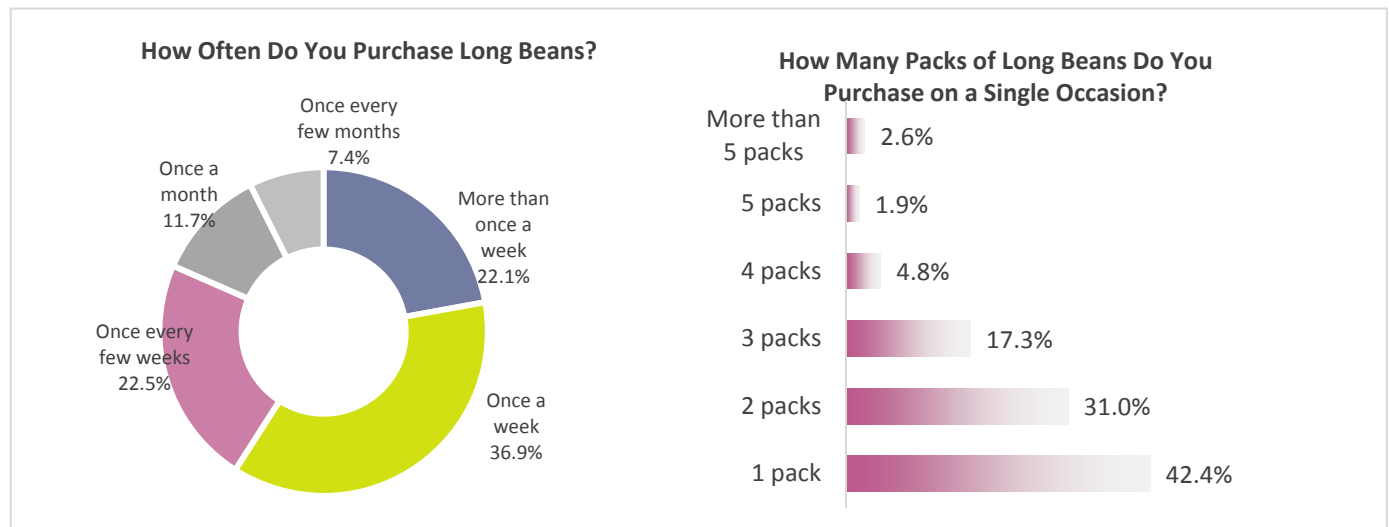
*UCC stands for Union Co-operative Supermarket

The Majority of Consumers Purchase Baby Leaves More than Once a Week⁴⁴



On average, a majority of consumers (48.6%) purchase baby leaves more than once a week, followed by 30.3% who buy once a week. On each occasion, 29.3% purchase two packages of baby leaves, while 25.9% purchase three packs and 18.6% purchase one pack. Compared to the current landscape in Malaysia, the purchase incidence per transaction is higher, thus reflecting an overall stronger consumption culture of baby leaves in the UAE among Western expatriates.

The Majority of Consumers Purchase Long Beans Once a Week⁴⁵



On average, a majority of consumers (36.9%) purchase long beans once a week, followed by 22.5% who buy them once every few weeks and 22.1% who purchase more than once a week. On each occasion, a majority

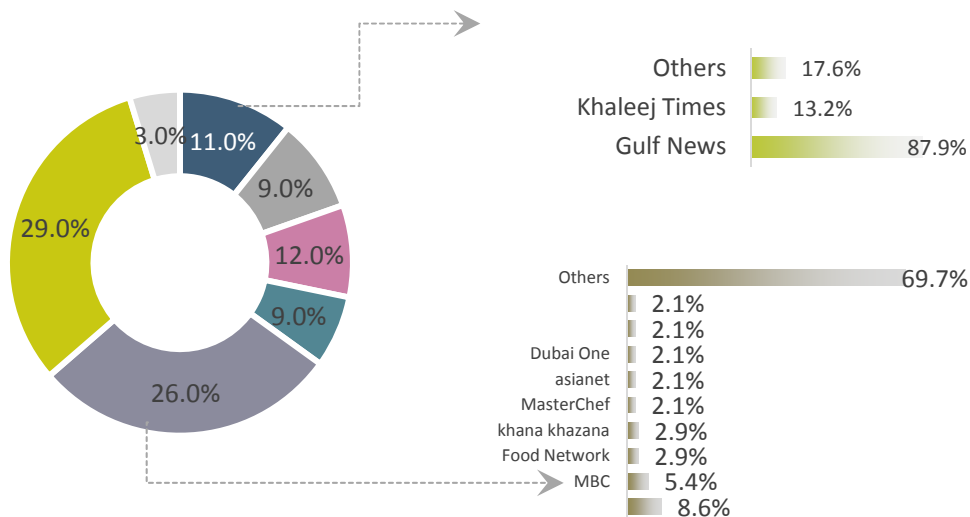
⁴⁴ **Questions:** How often do you purchase baby leaves from stores? On average how many packs of baby leaves do you buy on a single occasion? (317 respondents)

⁴⁵ **Questions:** How often do you purchase long beans from stores? On average how many packs of long beans do you buy on a single occasion? (271 respondents)

(42.4%) purchase one pack of long beans, while 31.0% purchase two packs and 17.3% purchase three packs (in loose format). The consumption patterns of long beans are fairly polarised, as they are not commonly considered staple vegetables in Western and local diets, but are essential in Asian cuisines. Due to the lower purchasing power of blue-collar migrant workers, purchase frequency is predominantly limited to one or two packs.

Food Blogs, Facebook Groups and Cooking Shows Add Buzz to the Appeal of Baby Leaves and Beans⁴⁶

- Local English newspapers
- Local English magazines
- Local other language newspapers
- Local other language magazines
- TV news/ other cookery shows
- Internet blogs/ other online sources
- None of the above



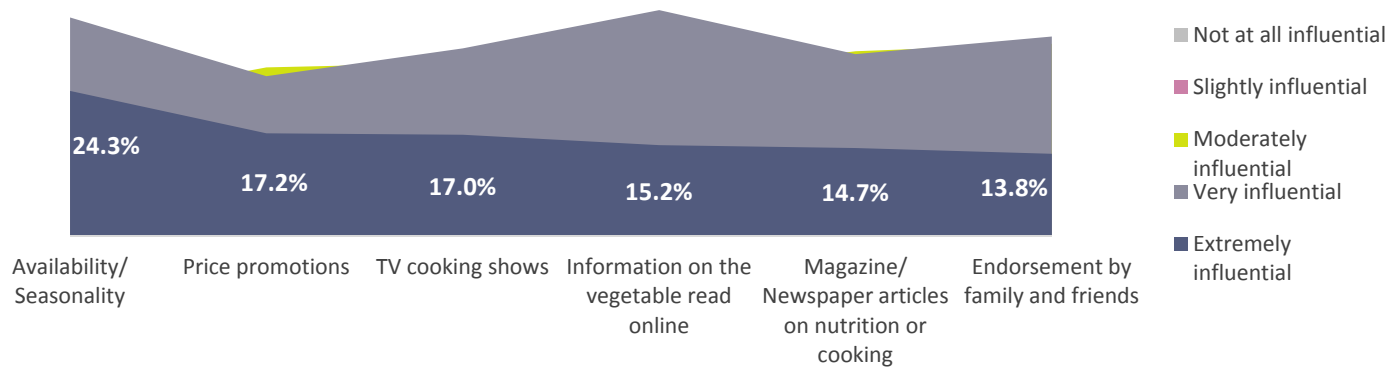
According to the Ministry of Health⁴⁷, basic commodities such as fruits, vegetables and poultry are prohibited from sales promotions such as price discounts and bundled promotions. This ruling was implemented to prevent fire sales of older and expired stock, taking into consideration the shorter shelf life of these commodities, which may potentially lead to health implications for end users.

Media such as newspapers and magazines are increasingly spreading awareness about the health benefits of baby leaves and long beans, subsequently boosting consumer trials of such produce and their willingness to incorporate them more often into their daily diet. In addition, articles and columns on dish preparations and new healthier and lighter recipes for local and international cuisine also help elevate consumers' understanding of the produce. Internet blogs also dominate as a tool for spreading awareness as many of them include holistic avenues for product review and comparison, and also serve as a common platform to obtain feedback from other end users. In addition, the globalisation of cable television networks in the UAE region with multiple Arabic dialect translations of major cooking shows and TV personalities has aided in further spreading consumer awareness and consumption of baby leaves and long beans.

⁴⁶ **Question:** Which are the various media sources you use to get information related to health, nutrition, cooking and recipes for baby leaves and long beans? (407 respondents)

⁴⁷ Trade interview with the Ministry of Health of the UAE

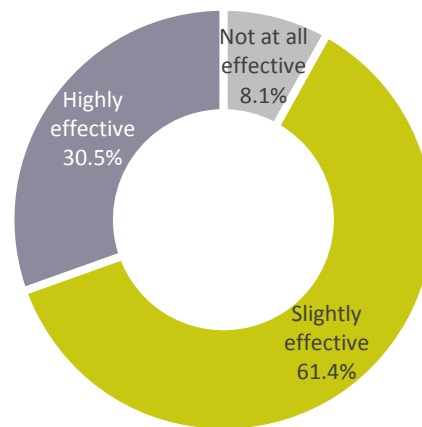
Magazine/ Newspaper Articles and TV Cooking Shows Most Influential Factors⁴⁸



Availability/ seasonality are the most influential factors when it comes to purchasing vegetables. This is followed by price promotions, TV cooking shows and information about vegetables obtained online. Given the more robust consumption culture in the UAE, target consumers are generally well-educated on the health benefits of baby leaves and long beans and are more inclined to consume a selection of fresh produce when provided with sufficient information on their cultivation and associated benefits. In this respect, magazine/ newspaper articles on nutrition or recipes are also considerably effective in influencing consumption patterns.

In-store Advertising Displays Only Slightly Effective in Influencing Purchasing Decisions⁴⁹

Effectiveness of In-store Advertising Displays



In-store advertising displays that showcase and educate the masses on the health benefits, planting and/ or harvesting methods as well as packaging process of baby leaves have been found to impart only a slight influence on consumer purchasing. Only about one-third of respondents (30.5%) consider this advertising strategy highly effective, while a majority (61.4%) deem it only slightly effective.

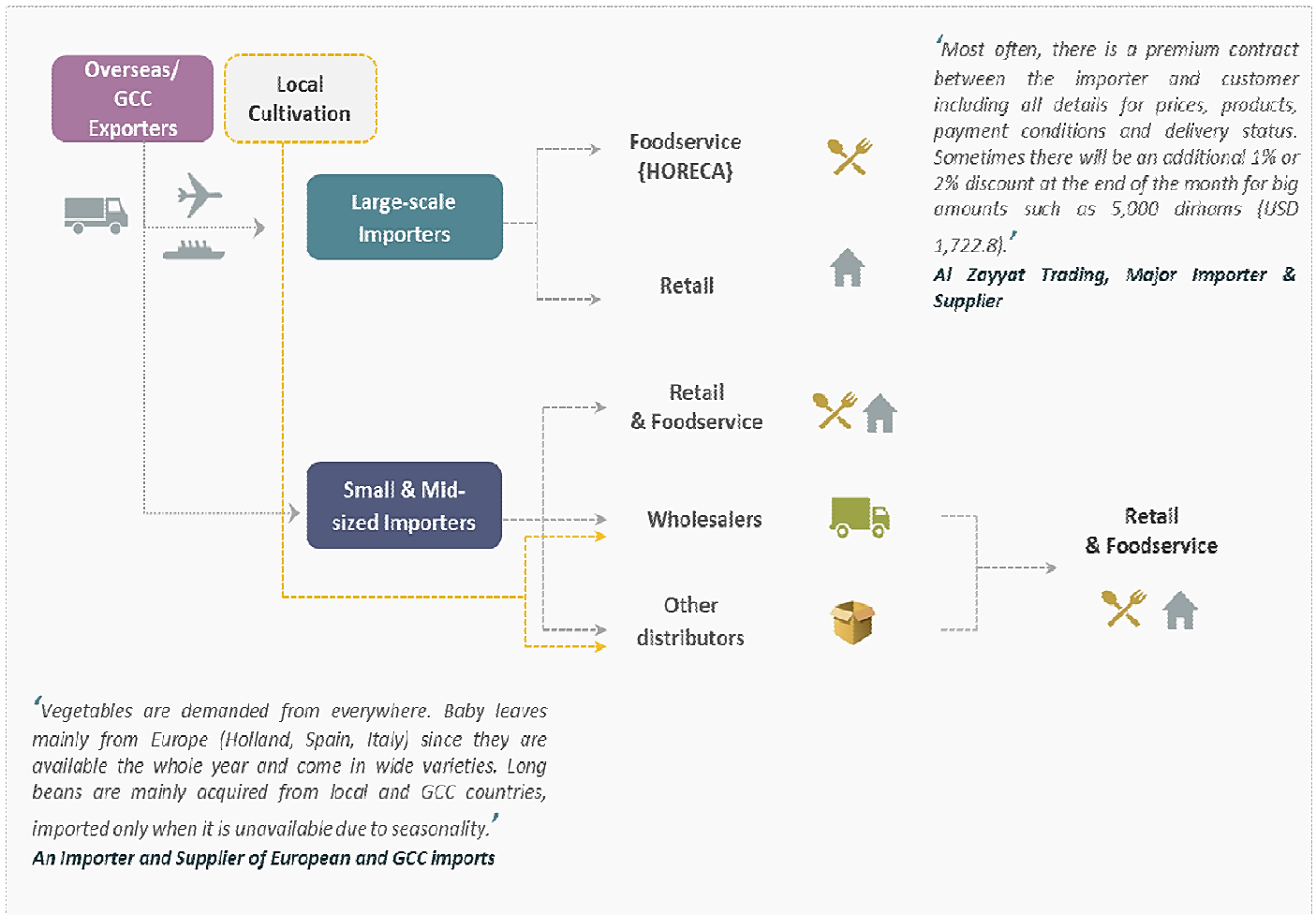
⁴⁸ **Question:** Among the following, which factors influence you when purchasing vegetables? (407 respondents)

⁴⁹ **Question:** How effective do you think having in-store advertising displays (showcasing health benefits, planting/ harvesting methods and packaging process) is in influencing your purchasing decisions? (407 respondents)

Apart from separate non-refrigerated stands promoting UAE organic produce, supported by POS signs highlighting its UAE origins in mass hypermarkets, hypermarkets and supermarkets are not prone to openly advertising fresh produce. Thus similar to Malaysia – open advertising, when complemented with conspicuous billboard signage and effective brand messaging – can be an effective pioneering strategy to help gain a stronger foothold and brand recognition amidst a competitive landscape featuring produce from other countries.

Industry Insights Analysis

Supply Chain for Baby Leaves and Long Beans in the UAE



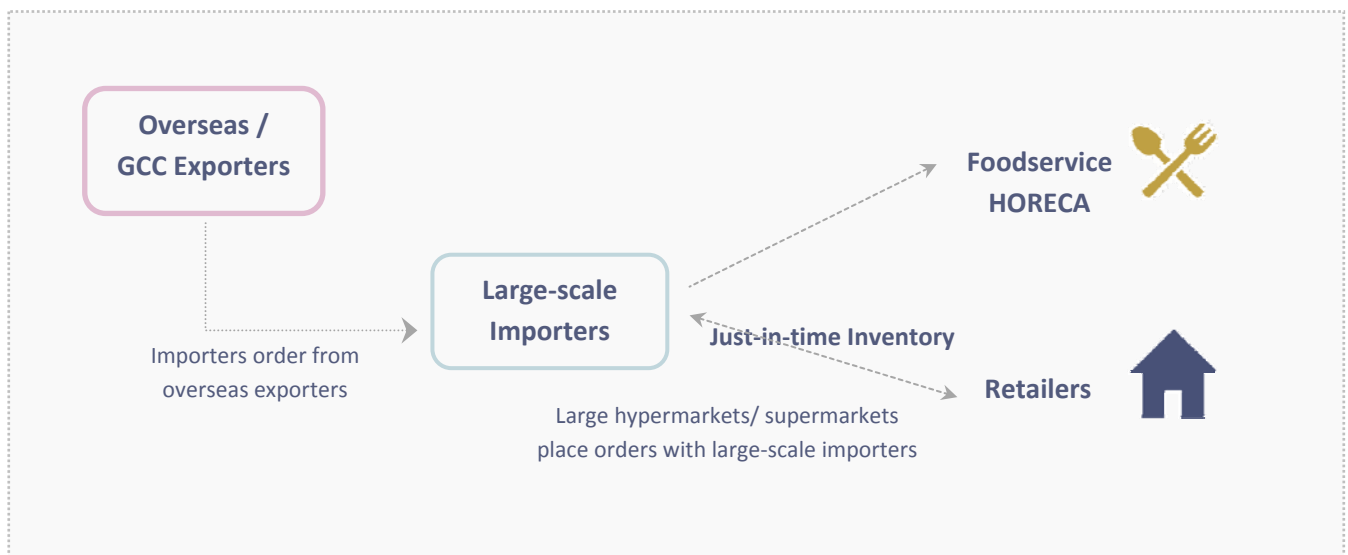
Importers Consolidated at the Top, But Distributors and Wholesalers Fragmented and Dynamic

Due to strong governmental support in terms of storage, distribution, market awareness and promotion, many local farmers and producers deal directly with the Abu Dhabi Farmers' Service Centre (ADFSC) in order to help them market their produce. All fresh fruit and vegetable imports enter the UAE through sea, air or land hubs located around the three main emirates – Dubai, Sharjah and Abu Dhabi – with 70% of these imports going to Dubai.

Importers, wholesalers and distributors comprise the key players in the supply chain. Major importers have typically been in the industry for more than 20 years and have established a wide distribution network and key retailing alliances. These companies tend to import from various countries but re-export in small quantities to nearby countries in the GCC region.

In addition, distributors also play an important role in the supply chain since many small-scale importers cannot afford a local warehousing facility. Meanwhile, the remainder of the market is open to stiff competition between small and medium-scale wholesalers and distributors supplying smaller-scale retailers, independent grocers and foodservice players.

Supply Chain Analysis of Large-scale Importers



Large-scale Importers Distribute Mainly to HORECA Channels

Both baby leaf and long bean imports are increasing among larger importers, as the rapid development of major cities such as Dubai and Abu Dhabi has progressively led to an increasing number of restaurants, hotels and hypermarkets. Baby leaf imports are generally in the proportion of 60% compared to 40% long beans. Large-scale importers tend to supply baby leaves predominantly to HORECA channels, with hotels garnering a 50% proportion relative to 30%-40% for restaurants. Meanwhile, the remaining supplies are channelled to food processing. On the other hand, long bean supplies are almost evenly distributed between hotels and restaurants only.

Iranian and Arabic restaurants typically use normal green leaves such as romaine lettuce and rocket in their cuisines, while cabbage is generally used by all types of restaurants, including fast food chains and Arabic restaurants. In contrast, European restaurants demonstrate a penchant for the use of iceberg lettuce. Hotels typically place large-quantity orders for all types of baby leaves since they tend to feature different types of restaurants and international cuisines within their facilities.

Certain Large-scale Importers Also Supply Retailers

A number of large-scale importers such as Kibsons International and Iran Dubai also supply big hypermarkets such as Carrefour and Lulu Hypermarket. However, large-scale retailers tend to place more stringent demands on their suppliers, requiring revised quotations every 15 days and refusing to absorb more quantities than necessary, which oftentimes lead to reduced profit margins for importers.

Negotiated Terms Are Dictated by Contracts

Premium contracts are typically entered into between the importer and customer, encompassing all details for pricing, products, payment conditions and delivery status. Additional discounts of 1%-2% may be granted at the end of the month for large-order quantities.

Baby Leaves Are Imported from Western Countries, Long Beans Mainly Sourced Locally or from GCC

Baby leaves are mainly imported from European countries such as Holland, Spain and Italy, due to their year-round availability and wide variety. In addition, baby leaves imported from the West also saw encouraging demand among Western expatriates residing in the main cities of Dubai and Abu Dhabi. Meanwhile, long beans are typically acquired from local sources as well as GCC countries. Importers generally place predominance on bringing in locally cultivated and GCC imports, while imports from other countries are brought in only when long beans are unavailable locally due to seasonal factors.

Fixed Pricing with HORECA Channels, Daily or Biweekly Pricing with Retailers

Larger importers typically enter into yearly contracts with restaurants and hotels to supply baby leaves and long beans at yearly or biennially fixed prices. The contracts provide stable pricing regardless of produce seasonality and protect foodservice operators against fluctuating cost prices. To ensure constancy of quality and pricing, most higher-end foodservice operators prefer to collaborate with only one large-scale importer.

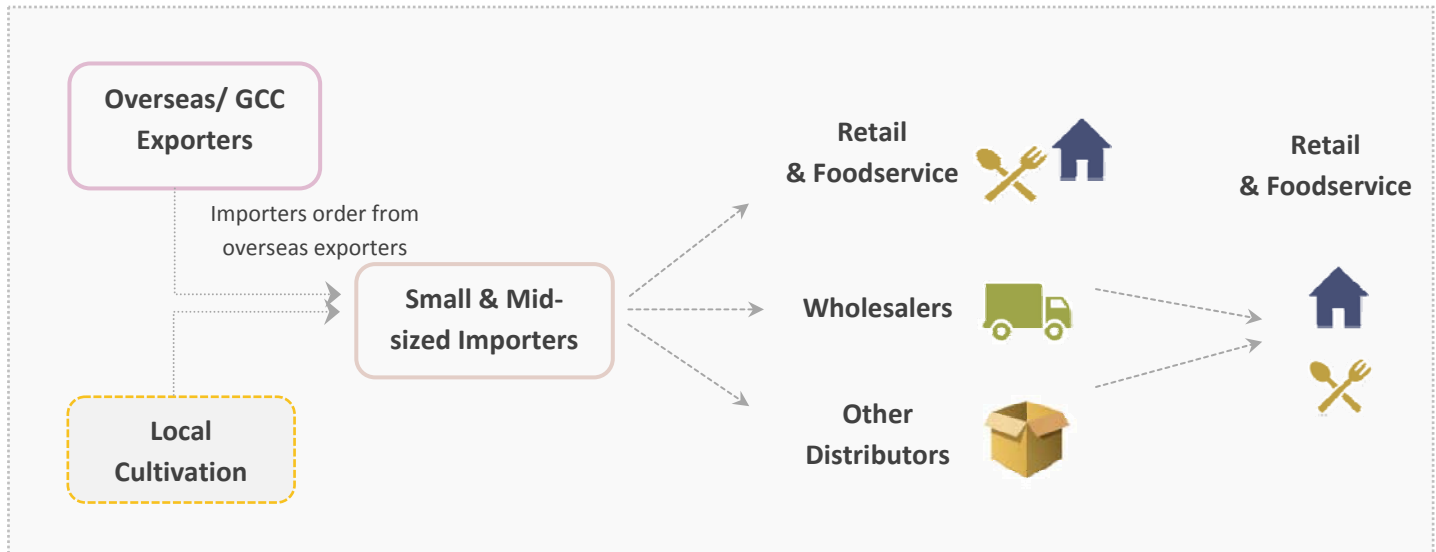
Meanwhile, yearly contracts are also entered into with major hypermarkets but on the basis of daily or biweekly quotations. Daily or biweekly pricing is a general prerequisite established by major hypermarkets, aimed at hedging against scenarios of commodity oversupply or undersupply, and allowing commodity prices to float as a reflection of current market prices. As major hypermarkets tend to have a comparatively higher bargaining power over importers, most importers abide by these terms.

Shipping Takes Place Regularly, Particularly from Holland

Large-scale importers ship regularly from Western countries, amounting up to four or six times per week. In certain cases, daily shipping even occurs for produce from popular countries of origin such as Holland and the United States. On the other hand, baby leaf imports from neighbouring GCC regions such as Oman and Iran typically arrive on a daily basis due to geographical proximity and well-established logistics facilities connecting these regions to the heartlands of the UAE. Freshness remains

a key consideration of large-scale importers, especially against a competitive backdrop where importers and distributors are vying to supply baby leaves and long beans of the freshest quality at the most optimal price in an attempt to increase the number of lucrative deals.

Supply Chain Analysis of Mid-sized and Smaller Importers



Small and Mid-sized Importers Have Direct Dealings with Foodservice Operators, Less with Retailers

Small and mid-sized importers cater predominantly to foodservice operators, including fast food and Western restaurants. Due to their smaller scale of operations, mid-sized importers can only accommodate smaller requests with a lower frequency of delivery, rendering them less able to cater to large-quantity orders from retailers and to adhere to the corresponding rigorous delivery demands.

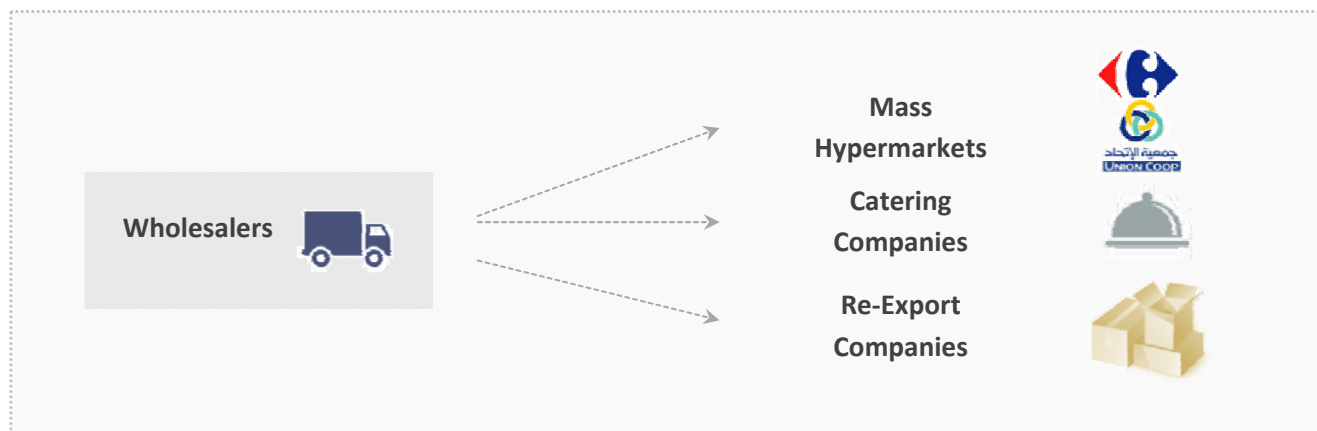
Foodservice Outlets Commonly Demand Dutch and Australian Imports

Demand for Dutch imports is widespread due to Holland's wide assortment and constant year-round supply. Australian imports are also sought after for their well-known high-quality produce. Notwithstanding the comparatively higher pricing of Australian produce, high-end foodservice operators are willing to pay a premium in exchange for the finest quality. On the other hand, local sources tend to be considered a final alternative only when imported supplies are inadequate to satisfy customers' needs.

Negotiated Terms Are Dictated by Contracts

Contracts with restaurants are typically established on monthly or yearly bases. Yearly contracts are normally initiated with only minute changes in pricing or supply quota requirements throughout the year. Discount incentives are usually granted to customers who purchase in large quantities. However, discounts tend to be small in nature, in the range of 1%-2%, such that they do not drastically impact the importers' bottom-line profit margins. Importers are typically in charge of direct deliveries to foodservice outlets (or in certain cases, hypermarkets). Fresh baby leaves are often delivered to foodservice outlets in small quantities for the purpose of daily replenishment.

Supply Chain Analysis of Wholesalers



Wholesalers Supply to Re-export Companies

A significant proportion of supplies (40%-60%) are channelled to re-export companies, who distribute baby leaves such as brassica to the neighbouring countries of Oman, Kuwait and Saudi Arabia, as well as lettuce to Qatar, Pakistan and Afghanistan. Meanwhile, 30%-40% are supplied to mass hypermarkets with the remainder channelled to catering companies.

Shorter-term Contracts

Contract terms tend to be shorter, lasting between 60 days and six months, with prices generally fixed with catering companies and re-exporters. However, quotations with large-scale hypermarkets such as Carrefour and Union Co-op are typically set on a weekly basis.

Special Incentives Not Conventionally Accorded

Larger-scale wholesalers typically deliver on a daily basis and thus are able to meet the stringent delivery demands of hypermarkets. Due to the smaller scale of operations, no special incentives are generally provided. Transactions are mainly entered into on the basis of good-quality produce sold at optimal pricing.

Retailer Dynamics

Preference for Working with Large-scale Importers and Distributors with Established Warehousing Facilities

Mainstream hypermarkets such as Carrefour and Union Co-op with daily operations require timely deliveries on a daily basis, entailing collaboration with importers or distributors who possess an established and seamless inventory and logistics structure, coupled with the ability to undercut market prices and offer discounts for bulk orders.

Private Labels Used as Alternative Strategy to Secure Higher Brand Identification

Private labels commonly come into play when premium retailers cater to higher-income demographics and typically purchase directly from importers, wholesalers and distributors, repackaging the produce with their own labels. Apart from premium outlets, Carrefour also exhibits a strong presence of lower-end private labels, carrying mainly locally produced lettuce and spinach baby leaf varieties as well as

ready-mix salads. Private labels allow for effective marketing, as customers tend to manifest higher confidence in a premium retailer's label, while identifying less with the country of origin.

Foodservice Dynamics

Lettuce and Cabbage Comparatively Popular Baby Leaf Categories

Lettuce and cabbage are highly popular baby leaf categories in demand by Western and Iranian foodservice outlets and used mostly in salads and sandwiches. Meanwhile, spinach and chard see comparatively less usage in food preparations due to limited demand for these baby leaf types.

Small Volume Orders per Transaction Preferred

To ensure the freshness of baby leaves, foodservice operators are predisposed to ordering in small quantities per transaction. Procurement is generally in the range of 0.2-0.5 tonnes per order, typically consisting of lettuce varieties in darker green hues such as romaine, lollo bionda and oak leaves. On the other hand, long beans are typically ordered in small quantities of 0.05 tonne per transaction as they are not a key ingredient in most of the international cuisines featured in the UAE.

Smaller Foodservice Operators Opt for Self-procurement

Smaller foodservice outlets typically bypass importers and distributors to procure fresh produce through the morning market, which is cheaper than procuring through a supplier. It also allows for self-selection and ensures the freshness of produce procured. Smaller foodservice outlets also mainly request Indian, Egyptian and UAE produce for their decent quality and cheaper pricing compared to European and African imports.

Product Mix Based on In-store Observations

Baby Leaves Prevalently Found in Premium Hypermarkets/ Supermarkets

Baby leaves are predominantly carried in high-end hypermarkets/ supermarkets located within affluent suburbs and they cater mostly to Western expatriates and high-income Emiratis with high purchasing power. Ready-mix salads register a strong presence for the target market, appealing to their daily staple needs and convenience on-the-go.

Dutch Imports Are Popular in Premium Hypermarkets/ Supermarkets

Produce is usually arranged top-down according to the level of freshness. Dutch produce, which registers a strong presence in baby leaves within these premium outlets, is generally placed strategically at eye level. Among expatriate consumers, Dutch imports are popular, well-known for their premium quality, year-round availability and assorted varieties, especially in lettuce. However, aside from baby leaves, Dutch imports tend to report a negligible presence in other vegetable and fruit commodities.

Italian and US Imports Register Marked Presence in Baby Leaves; Kenyan Imports Prominent in Long Beans

Aside from Holland, baby leaf imports from Italy and the United States also register a marked presence. Produce packaging is generally attractively arranged in plastic boxes or plastic packs, which communicate the health and nutritional benefits of consumption, coupled by versatile usage in various

recipes. Meanwhile, high-quality long beans imported from Kenya and packaged by European retailers such as Waitrose and Sunripe are also placed in a strategic eye-level position and accorded higher-end pricing to reflect their top-notch quality.

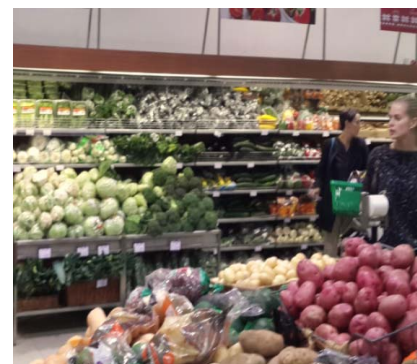
On the other hand, lower-quality produce imported from South Africa and the UAE tends to be placed on the bottom rung of refrigerated shelves, in addition to products such as shredded cabbage and low-grade lettuce. Long beans of low to medium quality imported from Kenya, Egypt and the UAE are likewise placed on the bottom rung and sold at comparatively lower pricing.



Brussels sprouts on display in Waitrose Supermarket



Packaged baby leaves on refrigerated rungs



Produce display in Waitrose

Large-scale Mass Hypermarkets Provide Affordable Options through Local Produce and Private Labels

Mass hypermarkets such as Carrefour and Lulu Hypermarket, typically located in suburbs characterised by average purchasing power, tend to cater to all nationalities and Emiratis with varying levels of purchasing power. Due to economies of scale and the distribution leverage of larger-scale mass hypermarkets, baby leaves are priced lower than they are at premium hypermarkets. The presence of ready-mix salads is strong, as well as lower-end private labels in lettuce and spinach.

Mass Hypermarkets Carry More Locally Cultivated Produce

Refrigerated aisles tend to be dominated by local brands such as Fresh Express and Barakat, attributable to their exclusive distribution incentives with Carrefour. On this basis, Carrefour is also one of the major proponents of locally cultivated produce. Separate non-refrigerated stands exist to promote organic local long beans alongside other vegetable commodities, but traffic seems to be higher for imports that are not organic but have a strong reputation for freshness and quality and are priced on par. A similar observation was also recorded at Lulu Hypermarket, where local baby leaf produce is replenished on a daily basis and sold in bunches at lower prices to generate traffic among lower-income consumers.

Western Imports Less Popular in Mass Channels

Aside from refrigerated aisles, baby leaves are also displayed in loose formats in non-refrigerated sections, segmented and grouped according to European and local produce. The dominance of Dutch produce is pronounced, followed by Spanish and French varieties which are of lower quality and pricing. On the other hand, higher-quality long beans from Kenya and Lebanon are comparatively more popular than lower-quality imports from Egypt and India.

Meanwhile, at Lulu Hypermarket, Dutch produce is placed sparingly, with some shelved on the lowest rung in the refrigerated section. The random placement of Dutch produce indicates low preference due to its high-end pricing, with some produce showing older production dates and starting to change in colour. Given the lower traffic, their frequency of replenishment is not as often compared to cheaper commodities that are in higher demand.



**Loose string beans on display
at Lulu Hypermarket**



**Plastic packaged long beans
from Egypt**



**Iceberg lettuce from Holland
at Lulu Hypermarket**

Long Beans Typically Carried in Lower-end Mass Hypermarkets

Lower-end mass hypermarkets, located in suburbs characterised by low purchasing power, typically cater to Asian expatriates. Baby leaves and long beans are of low to medium quality at best, targeting nearby demographics such as blue-collar workers from the Philippines and India.

The presence of Indian and Emirati produce is strong, attributed to lower pricing and regular stock replenishment due to direct and strong links with wholesalers in UAE open markets, which results in the daily pickup and delivery of bulk orders at lower prices for both local and imported products. Western imports register a modest presence by comparison, as their appearance deteriorates due to high pricing and low pickup. The observation is attributed mainly to lower-end hypermarkets which buy off lower-quality imports from other hypermarkets and wholesalers or, in some instances, higher-end hypermarkets diverting their older stocks to counterpart stores in lower-income areas before discarding them.



**Produce display at Union Co-op
Supermarket**



**Beans on display at Union Co-op
Supermarket**

6. STRATEGIC RECOMMENDATIONS

6.1 MALAYSIA

*Strategic recommendations for Malaysia are mainly reserved for baby leaves only. Given the high self-sufficiency ratio of long beans, opportunities for long bean imports are generally limited.

The 4Ps	Strategic Recommendations
Product	<ul style="list-style-type: none"> ▪ <i>Grow Foodservice Consumption (Baby Leaves), Especially Among Fast-growing Western and Japanese Foodservice Chains</i> ▪ <i>Strong Australian Branding on Packaging of Baby Leaves</i> ▪ <i>Import Baby Leaves in Lighter Shades of Green</i> ▪ <i>Distribute Organic Produce</i>
Price	<ul style="list-style-type: none"> ▪ <i>Mitigate Production Costs and Freight Forwarding Fees to Lower Import Expenses of Local Importers</i> ▪ <i>Seek Alternative Technological Means to Yield Higher Price Competitiveness</i> ▪ <i>Consolidation of Australian Export Logistics</i>
Promotion	<ul style="list-style-type: none"> ▪ <i>Promotional Campaigns to Educate the Masses</i> ▪ <i>Strategic Collaboration with TV Cookery Shows</i> ▪ <i>Increase Usage of Online Advertising to Extend Consumer Outreach</i> ▪ <i>Provide a Better Communication Platform through Collaboration among Trade Associations</i>
Placement	<ul style="list-style-type: none"> ▪ <i>Collaborate with a 'Master Distributor'</i> ▪ <i>A One-stop Shop for Mainly Australian Produce</i> ▪ <i>Initiate Direct Collaboration with Major Hypermarkets and Supermarkets</i>

Product Mix Recommendations

Recommendation: *Grow Foodservice Consumption (Baby Leaves), Especially Among Fast-growing Western and Japanese Foodservice Chains*

- Baby leaf consumption has been on an uptrend since 2010, with a projected CAGR of 18.2% between 2013 and 2015. Throughout this period, baby leaves are expected to witness increasing usage in foodservice outlets, served mainly as salad dishes.
- Foodservice industry is projected to attain a CAGR growth of 2.9%⁵⁰ per annum over the next three to five years. In particular, an increasing number of international operators are expected to be introduced in Malaysia as consumers become more embracing of new gourmet choices. For instance, Malaysia has seen the advent of a larger number of Korean, Japanese and North American full-service restaurants in the past years to accommodate stronger consumer demand.
- Premium restaurants serving Japanese and Western cuisines are constantly on the lookout for better quality produce, such as from Australia, which represents an opportunity for point of entry.

⁵⁰ Passport database of Euromonitor International

Recommendation: Strong Australian Branding on Packaging of Baby Leaves

- Local consumers readily perceive Australian produce as high-quality. Despite higher pricing, quality, reliability, availability and supply continuity also play a significant role in attracting consumer purchases.
- Australia has a high potential for exporting baby leaves packaged at the source in the preferred formats of plastic packs to ensure freshness and facilitate distribution logistics.
- Hygienic and eye-catching branding on packaging tends to capture consumers' attention. Educate consumers on the benefits of Australian produce, using packaging graphics which highlight details/ recipes for baby leaves.

An example:



Australian producers can enhance the reputation and appeal of their products by promoting the sustainable attributes of their products and Australia's superior food production regulations.

Recommendation: Import Baby Leaves in Lighter Shades of Green

- More than 48.4% of respondents preferred a lighter shade of green for baby leaves over darker shades of green. Meanwhile, yellow, magenta and red had low response.
- The observation is attributed to the general consumer perception in Southeast Asia (including Malaysia) that green produce are fresher, with a more appealing taste and texture to supplement. Consumers are generally unacquainted with consumption of baby leaves, and are thus more likely to steer away from unfamiliar colours of yellow, magenta and red.

Recommendation: Distribute Organic Produce

- Organic vegetables are gaining ground in main cities, where urbanised consumers are becoming increasingly aware of the cultivation process of vegetables and health benefits of organic produce, attributed to increasingly widespread circulation of news and magazine articles covering its health benefits.
- Western and Japanese foodservice chains, as well as other higher-end foodservice outlets tend to indicate a higher need for high-quality organic produce, which suggests opportunities for point of entry.

Pricing Recommendations

Recommendation: Mitigate Production Costs and Freight Forwarding Fees to Lower Import Expenses of Local Importers

- Both large-scale and smaller-scale importers unanimously view high cost prices, freight costs and exchange rate fluctuations as mainstay deterrents to bringing in Australian imports. Consumers' continued lack of familiarity with the consumption of baby leaves, coupled with the availability of locally cultivated varieties, has combined to produce limited market demand.
- Compared to full-grown vegetables, baby leaf vegetables are priced much higher (a higher price for less volume) and have a shorter shelf life. Thus foodservice operators prefer to use cheaper full-grown substitutes, given their ready availability. To preserve profit margins, suppliers are shying

away from costly imports and opting for cheaper alternatives from either local suppliers or Chinese imports.

- Moderating the price of Australian produce while upholding produce quality will entice higher purchase activity among local consumers who are well-acquainted with Australian produce but deterred by the high pricing. Price moderation can likely be derived in the form of mitigated production costs or freight forwarding fees.

Recommendation: Seek Alternative Technological Means to Yield Higher Price Competitiveness

- Price competition from China and neighbouring countries is intense, given lower costs of transportation and production in these countries.
- Cost reductions can be achieved via other methods, such as drawing upon the technological advantages of:
 - Improving the shelf life of vegetables to reduce wastage on outstanding inventory
 - Farm technologies that increase efficiency and reduce dependence on labour to salvage costs
 - Improvement in transportation efficiency

Recommendation: Consolidation of Australian Export Logistics

- Australia imports a wide spectrum of fruit and vegetables varieties to Malaysia.
- Forming a coalition to consolidate export activities and logistics of various smaller exporters would provide greater bargaining power, better pricing, credit management, funding marketing and Australian brand-building opportunities due to economy of scale.

Promotional Recommendations

Recommendation: Promotional Campaigns to Educate the Masses

- Despite growing interest in fresh salads (e.g. lettuce, spinach), consumers are largely not cognizant of the health benefits and difference in usage between full-grown and baby varieties. Therefore, price elasticity is high as consumers are inclined to opt for cheaper full-grown varieties.
- Hypermarkets represent the main go-to channel to purchase baby leaves; more than 64% listed 'often' or 'always' as their frequency of visit.
- Conduct promotional campaigns, in-store promotional displays and above-the-line advertising to educate consumers on the health benefits of baby leaf consumption, as well as to highlight the availability and benefits of Australian imports over those of other countries.

Recommendation: Strategic Collaboration with TV Cookery Shows

- A total of 24.0% of respondents cited TV cookery shows as a primary influence on their purchases of baby leaves and long beans.
- Strike up a strategic advertising collaboration with cooking shows. For instance, 'Master Chef Australia' has a sponsorship with Coles Australia. Similarly, some form of collaboration can be initiated with 'Master Chef Malaysia'.
- Commercial advertising of Australian produce and its benefits during commercial breaks in between TV cookery shows or on popular TV food channels would be advantageous.

Recommendation: Increase Usage of Online Advertising to Extend Consumer Outreach

- A total of 27.0% of respondents noted Internet blogs and online sources as the predominant media outlets they used to obtain information pertaining to health, nutrition and the cooking of baby leaves and long beans.
- Food blogs and Facebook were cited as popular channels for reference by survey respondents.

- A population that predominantly uses the Internet as a source of information can be reached via a more elaborate and comprehensive online advertising campaign.

Recommendation: Provide a Better Communication Platform through Collaboration among Trade Associations

- Initiate collaboration among Australian and Malaysian trade associations as a common platform to provide growers (both old and new) an avenue to share valuable experiences and knowledge.
- Benefits include: identifying regulatory and logistical hurdles, identifying trade partners and building relationships with importers as well as packaging and delivery companies.

Placement Recommendations

Recommendation: Collaborate with a 'Master Distributor'

- The distributor landscape is fragmented, with many players holding a small market share. Distributors are often sandwiched in between with squeezed profit margins due to increasing pressures from the government, retailers and consumers to lower their prices. Over the years, imports from Australia have become prohibitively expensive for distributors, forcing them to switch to cheaper produce from local and Chinese suppliers.
- Collaborate with a 'master distributor' which serves as the primary representative in Malaysia, rendering it the go-to recognised main distributor for Australian baby leaves and beans and providing more coherent and solid branding for Australian produce.

Recommendation: A One-stop Shop for Mainly Australian Produce

- The bulk of retail food sales are channelled through independent small grocers, commanding close to 60% of food sales. This channel serves as a convenient access point within residential neighbourhoods as well as in regional Malaysian states, where the presence of independent small grocers is even more pronounced. However, they remain generally ill-equipped to carry fresh produce due to a lack of extensive cold-chain facilities, thus limiting their distribution potential to urban cities.
- Collaborate with independent small grocers to provide cold-chain facilities and marketing support for fresh produce, possibly through a voluntary chain store system⁵¹.

Recommendation: Initiate Direct Collaboration with Major Hypermarkets and Supermarkets

- Modern channels such as hypermarkets and supermarkets captured a total of 44.0% of grocery retailing in 2012, with intense competition seen among large international players such as Tesco and Giant, who frequently engage in price wars to entrench their footholds in the market. The price cuts place significant downward price pressure on vegetable suppliers, with retailers demanding higher discount incentives from suppliers. To preserve profit margins, suppliers shy away from costly imports and opt for cheaper alternatives from local supplies or Chinese imports.
- Initiate a partnership with mass hypermarkets/ supermarkets to provide special discount incentives and an end-to-end supply system. In parallel, provide marketing support to hypermarkets/ supermarkets for Australian produce through signage displays and promotional counters that publicise salads and salad dressings to elevate the familiarity and appeal of baby leaves with consumers.

⁵¹ Voluntary chain store: a collaborative system first adopted by cosmetics giant Shiseido with small independent stores. The independent stores carry Shiseido-branded goods, while Shiseido provides marketing and advertising support, including appointment of in-store personnel and dictation of price promotion terms etc. The system was successful in helping Shiseido to enhance its outreach to the hinterlands of Japan and broach untapped channels.

6.2 UNITED ARAB EMIRATES

Strategic recommendations are mainly for baby leaves. Considering the limited consumption of long beans in the UAE, existing imports from neighbouring countries that are sufficient to sustain demands and the geographical distance between Australia and the UAE, it is not recommended to export beans to the UAE.

The 4Ps	Strategic Recommendations
Product	<ul style="list-style-type: none"> ▪ Strong Branding for Pre-packed Baby Leaves ▪ Cater to Growing Foodservice Demand ▪ Import Organic Produce into the UAE ▪ Collaborate with Retailers on a Co-branding Effort to Pre-package Baby Leaves into Private Labels
Price	<ul style="list-style-type: none"> ▪ Adopt Technological Advantages to Gain Price Competitiveness
Promotion	<ul style="list-style-type: none"> ▪ Promotional Campaigns to Educate the Masses ▪ Strategic Collaboration with TV Cookery Shows
Placement	<ul style="list-style-type: none"> ▪ Placing Focus on a Niche Market ▪ Circumvent Mark-ups by Middlemen ▪ Collaboration with Mid-to-Upper Tier Hypermarkets

Product Mix Recommendations

Recommendation: Strong Branding for Pre-packed Baby Leaves

- Pre-packed baby leaves are preferred over loose and plastic box formats.
- Attractive packaging helps showcase produce benefits and enhance produce appearance.
- Helps strengthen the positioning of Australia’s produce compared to other competitors to achieve a stronger, entrenched presence which commands premium prices and earns wider acceptance for Australian produce.
- Also represents one of the most effective branding strategies, as basic commodities such as fruits, vegetables and poultry are prohibited from sales promotions such as price discounts and bundled discounts.

An example:



Woolworths Select alfresco salad packaging showcases the advantages of Australian produce. Premium and eye-catching packaging is found to cater well to Western expatriates and high-income Emiratis who tend to frequent premium hypermarkets/ supermarkets located in affluent suburbs.

Recommendation: Cater to Growing Foodservice Demand

- Consumer foodservice saw a strong performance in 2012, especially fast food and cafés. Domestic franchisees operating global brands such as Kuwait Food Co (Americana) with KFC and Pizza Hut and Emirates Fast Food Co with McDonald's led sales shares in 2012.
- The overall consumer foodservice industry witnessed a rise in current value sales by 9%, whilst transactions recorded a rise of 8% and outlet volumes increased by 7% over the previous year⁵².
- The country's population increased rapidly over the 2007-2012 period, while tourist arrivals also saw significant growth, creating stronger demand for consumer foodservice.
- Lettuce and cabbage are popular and in demand by foodservice outlets, used in salads and sandwiches. Foodservice operators are willing to pay a premium for high-quality imports, such as Australian produce.
- Main supplier Holland, has low supply rates during off-season periods (winter season in the northern hemisphere, December – March), thus lends Australian imports a window of opportunity into foodservice channels.

Recommendation: Import Organic Produce into the UAE

- The surge of local organic produce in mass hypermarkets and supermarkets signifies ready demand for organic produce.
- Although the purchase of organic produce has long been fuelled by Western expatriates, local consumers and other expat communities have only begun to get acquainted with organic varieties and previously stayed away from them due to price-point concerns and a lack of understanding of their benefits. However, consumption patterns are changing, with consumers demonstrating higher acceptance of organic produce.
- There is a white space for Australia to import organic baby leaves of comparatively higher quality at affordable pricing, coupled by comprehensive branding and marketing efforts to tap into mass hypermarkets/ supermarkets and compete against local cultivation⁵³.

Recommendation: Collaborate with Retailers on a Co-branding Effort to Pre-package Baby Leaves into Private Labels

- Premium retailers catering to higher-income demographics typically purchase directly from importers, wholesalers and distributors and repackage the produce with their own labels.
- Private labels facilitate consumers' brand identification with commodities, which tend to be homogenous and generic in nature, where consumer trust is often placed in the retailer brands rather than the country of origin.
- To compete against other Western imports, Australian suppliers can collaborate with big-scale retailers to pre-package the produce at source with private labelling, co-branded with 'Australian-grown branding' on the packaging.

Pricing Recommendations

Recommendation: Adopt Technological Advantages to Gain Price Competitiveness

- Countries such as Iran, Jordan and China command the largest shares in mass hypermarkets/ supermarkets and wet/ open markets, where consumers are more inclined to opt for affordable pricing.

⁵² Passport database of Euromonitor International

⁵³ Note that trade interviews and consumer surveys indicate that local cultivations are also well-received for their decent quality and affordable pricing, which poses stiff competition to new market entry from other imports.

- Meanwhile, Dutch and US imports in premium supermarkets/ hypermarkets have led to stiff price competition among Western imports, especially given the lower pricing of Dutch imports complemented by high quality, which has stronger appeal for consumers.
- Australian suppliers can explore other means to establish price-competitive operations, making use of technological advantages to:
 - Improve shelf life to reduce wastage of outstanding inventory
 - Seek and adopt new farm technologies to increase efficiency and reduce dependency on labour
 - Seek improvement in transportation facilities both in Australia and outside Australia

Promotion Recommendations

Recommendation: Promotional Campaigns to Educate the Masses

- The majority of respondents (29.0%) remarked that food blogs and online websites are their typical sources used to obtain information related to health, nutrition, cooking and recipes for baby leaves and long beans.
- More than 85% of the UAE's population are Internet users⁵⁴.
- A population that is increasingly using the Internet as a source of information should be tapped via more elaborate and comprehensive online advertising campaigns.

Recommendation: Strategic Collaboration with TV Cookery Shows

- 26.0% of respondents cited TV news/ other cookery shows as a major influence (second-most important after online channels).
- Collaboration opportunities exist in the form of ingredient sponsorships for TV cookery shows.
- Airing commercials during commercial breaks in between food shows or on TV food channels will help boost the appeal of Australian produce.

Placement Recommendations

Recommendation: Placing Focus on a Niche Market

- Emphasis should be placed on specific high-end hypermarkets/ supermarkets or independent organic shops that cater to an expatriate or higher-income community seeking higher quality and freshness and willing to pay a premium.

Recommendation: Circumvent Mark-ups by Middlemen

- Distributors are less willing to serve large retailers which dominate the UAE landscape as a result of their economies of scale and distribution leverage with importers, and thus these importers have to deal with the hidden costs and heavy capital required and timely deliveries of large quantities, to which often complicated pricing and payment stipulations are attached and waived in the case of delays. Many of these retailers have established ties with exclusive distributors and importers and, thus, gaining further access within the retail landscape will become even more difficult.
- As a result of market domination by large hypermarket and supermarket chains within the retailing landscape, players try to undercut each other in terms of product pricing (produce are sold at the lowest price possible), which place significant downward price pressure on vegetable suppliers, with retailers demanding higher discount incentives from suppliers.

⁵⁴ Sinclair K. 2013, *UAE has the Third Most Internet Users in the Middle East*, The National, viewed 17th January 2014, <<http://www.thenational.ae/business/technology/20131003/uae-has-third-most-internet-users-in-the-middle-east>>

- Bypass middlemen parties and circumvent the issue of mark-ups, which inflate commodity prices, by initiating direct collaboration with large-scale retailers (premium or mass) through special discount incentives in exchange for strategic placement of Australian produce, akin to the current privileges enjoyed by local brands such as Fresh Express and Barakat.

Recommendation: *Collaboration with Mid-to-Upper Tier Hypermarkets*

- Up-and-coming mass hypermarkets such as Lulu Hypermarket positioned in the mid-to-upper tier retail segment signify private label collaboration opportunities for fresh produce providers.
- The mid-to-upper tier pricing plays to the strength of Australian imports, allowing Australian produce to carve a distinctive recognition among frequent shoppers of this grocery segment.

7. ACKNOWLEDGEMENTS

The input and advice shared by the following parties throughout the course of the research have been crucial to the successful completion of the study. Their support is sincerely appreciated:

Horticulture Australia member: David Chenu

Euromonitor Consulting team members: Ben Dunsheath and Graham Gilbert (Australia office), Farzana Mohsin, Umesh Madhavan and Ewen Lau (Singapore office), Maya Shehayeb and Ahmed Naim (Dubai office).

As well as Industry players and trade interviewees who have been forthcoming with their information sharing and have cordially allowed the team to glean first-hand and accurate insights to the baby leaf and long bean markets in Malaysia and the United Arab Emirates.

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9. APPENDIX

Definition & HS Code Classification

Category	Description	Sub-category HS codes	Definitions
Baby Leaves	Kohlrabi, kale and similar edible brassicas, fresh or chilled	0704.10 - Cauliflowers and headed broccoli 0704.20 - Brussels sprouts *0704.90 - Other brassicas	Also known as <i>cole crops</i> , meaning stem or cabbage. Certain brassicas come in purple foliage/ flower heads, such as the purple cabbage. The most prevalently seen brassicas are kale, cabbage, broccoli, cauliflower, kai-lan, brussel sprouts and kohlrabi. The extensive list of brassicas: Chinese broccoli (kai-lan), broccoli, raab broccoli, sprouting broccoli, brussel sprouts, cabbages, calabrese, cauliflower, Chinese cabbage, collard greens, kale, kohlrabi, komatsuna, mibuna greens, mizuna greens, mooli/ daikon, swede, tatsoi, texsel greens and turnips.
	Lettuce (<i>lactuca sativa</i>) and chicory (<i>cochorium</i> spp.), fresh or chilled	Lettuce: 0705.11 - Cabbage lettuce (head lettuce - iceberg lettuce, english lettuce) *0705.19 - Others (rockets and mache are included here)	Comes in different shapes and textures, most notably from the dense heads of iceberg type to the notched, scalloped, frilly and ruffly leaf varieties. The extensive list of lettuce: Arugula, butter, Boston lettuce, little gems, mesclun, mizuna, mache, oak leaf lettuce, purslane, romaine hearts, watercress, radicchio, red leaf, green leaf, oak leaf, frisee, endive, escarole and iceberg.
		Chicory: 0705.21 - Witloof chicory (<i>cichorium intybus</i> var. <i>foliosum</i>) 0705.29 - Others	Salad chicory can be found in 5 types: (i) Radicchio (ii) Sugarloaf (iii) Large-leafed chicory (iv) Catalogna or asparagus chicory (v) Belgian endive/ witloof chicory.

Category	Description	Sub-category HS codes	Definitions
Baby Leaves	Other vegetables, fresh or chilled	0709.70 - Spinach, New Zealand spinach and orache spinach (garden spinach)	<p>Spinach comes in 3 main varieties:</p> <ul style="list-style-type: none"> (i) Savoy - with deeply crinkled leaves (Varieties: Regiment, Bloomsdale) (ii) Semi-savoy - leaves are not as crinkly as savoy (Varieties: Tye, Catalina, Teton, Indian Summer) (iii) Smooth-leafed - smooth, flat leaves, the main choice for spinach processing (Varieties: Space, Red Cardinal) (iv) Others grown in the summer - New Zealand spinach, Malabar spinach
		*0709.90 - Others (chards are included here)	
Beans (Long beans)	Leguminous vegetables, shelled or unshelled, fresh or chilled	*0708.20 - Beans (Vigna spp. Phaseolus spp.)	<p>Yardlong bean, otherwise known as asparagus bean, snake bean or the Chinese long bean, can be found in different varieties:</p> <ul style="list-style-type: none"> (i) Yardlong bean, black seed (ii) Yardlong bean, white seed (iii) Yardlong bean, stickless wonder (iv) Yardlong bean, purple pod (v) Yardlong bean, red seed (vi) Yardlong bean, orient extra-long (vii) Yardlong bean, 3-feet-plus (viii) Yardlong bean, white galaxy (ix) Yardlong bean, southern winner

Sub-category HS Codes - Detailed Explanations

Code	Sub-category	Description
0704.90	Other Brassicas	Include cabbage, Chinese cabbage, red cabbage and kohlrabi.
0709.90	Others	Include baicai, xiao baicai, caixin, chrysanthemum bloom, fu kui cai, chrysanthemum garland, water spinach, mustard leaf, sweet potato leaf, tapioca leaf, matrimony vine, sweet shoot, swiss chard and watercress.
0708.20	Beans (Vigna spp. Phaseolus spp.)	Include cluster bean, French bean, kidney bean, lima bean, long bean , stink bean (petai) and winged bean.
0705.19	Others	Include asparagus lettuce, butter head lettuce, frisee lettuce, romaine lettuce, roquette lettuce (rocket), oak lettuce and other lettuces.