



*Know-how for Horticulture™*

Horticulture Australia Ltd

**Public Submission to ACCC Grocery Inquiry by  
Horticulture Australia Ltd on 11<sup>th</sup> March 2008**

Submission No. 2

prepared by

CDI PINNACLE MANAGEMENT PTY LTD

---

## DISCLAIMER

This report has been prepared for Horticulture Australia Ltd, pursuant to a Consultancy Agreement between CDI Pinnacle Management and the Horticulture Australia Ltd.

This report has been prepared from data and information gathered from various sources and from primary research carried out by CDI Pinnacle Management. CDI Pinnacle Management has used its best endeavours and exercised the best of its skill and ability to ensure accuracy of the data, information and research materials. CDI Pinnacle Management believes the various sources to be reliable. However, CDI Pinnacle Management does not warrant the accuracy of any of the data or information provided by third parties or of research materials not created by CDI Pinnacle Management.

CDI Pinnacle Management accepts no responsibility for any error contained in or any omission from the report arising from the data or information provided by third parties or from the research materials not created by CDI Pinnacle Management.

This report is for the use only of the Horticulture Australia Ltd for the express purpose of providing a submission to the ACCC Inquiry into The Competitiveness of Retail Prices for Standard Groceries. CDI Pinnacle Management accepts no responsibility whatsoever to any third party in respect of the whole or part of this report (including all appendices) or its use.

© CDI Pinnacle Management Pty Ltd 2006.

All rights reserved.

## CDI PINNACLE MANAGEMENT

CDI Pinnacle Management ([www.pinnaclemanagement.com.au](http://www.pinnaclemanagement.com.au)) is an international consultancy specialising in the food and agribusiness sectors. We have been advising and assisting firms in food and agribusiness since 1989. Our core capabilities are in chain management, innovation, the development of new business opportunities and the application of new technologies, and assisting the re-engineering of industries and regions, across food and agriculture sectors.

Our clients are innovators, early adopters and industry leaders and agencies. They are corporations in the food and agribusiness industry, small to medium enterprises (SMEs), Individual Producer/marketers (and Grower-Packer-Marketers), producer groups, development and Government agencies, and marketers and Processors.

CDI Pinnacle Management takes a non-traditional, interactive approach to consultancy. Using a step-by-step process, we assist businesses and agencies in developing and implementing progressive and tailor-made solutions. We assist firms, industries and regions to develop and implement a global vision and provide the tools and assistance to achieve success in domestic and international arenas.

Contact: Shane Comiskey  
Unit 16 / 43 Lang Parade,  
Milton QLD 4064 Australia  
Tel: +61.7.3217 6466  
Email: [scomisk@pinnaclemanagement.com.au](mailto:scomisk@pinnaclemanagement.com.au)

## TABLE OF CONTENTS

<b>1.</b>	<b>EXECUTIVE SUMMARY .....</b>	<b>5</b>
1.1	HAL Position on Inquiry.....	5
1.2	Australian Horticultural Supply Chain .....	6
1.3	Cost of Production in Horticultural Crops .....	8
1.4	Alternative Channels to Market for Produce .....	9
1.5	Doing Business with MSC and Others .....	11
1.6	Grower Professionalism .....	12
<b>2.</b>	<b>MAJOR GROWER COST CENTRES .....</b>	<b>14</b>
2.1	Labour.....	14
2.2	Fuel & Oil.....	15
2.3	Packaging.....	18
2.4	Fertiliser .....	18
2.5	Crop Protection Chemicals .....	22
2.5.1	Prices for Crop Protection Chemicals .....	22
2.5.2	Rural Merchandisers.....	23
2.6	Water & Irrigation .....	23
<b>3.</b>	<b>FRUIT &amp; VEGETABLE COP ANALYSIS .....</b>	<b>27</b>
3.1	Leafy Vegetables – Eastern Australia (1).....	27
3.2	Leafy Vegetables – Eastern Australia (2).....	29
3.3	Strawberries and Mangoes – Eastern Australia.....	31
3.4	Tropical Fruit – Eastern Australia.....	33
3.5	Macadamia Nuts – Eastern Australia .....	35
3.6	Citrus Industry – South-Eastern Australia.....	38
3.7	Bananas– Northern Queensland (1) .....	39
3.8	Bananas– Northern Queensland (2) .....	41

- 3.9 Pineapples– South-Eastern Queensland ..... 43
- 4. GROWER VIEWS ON ALTERNATIVE MARKETING CHANNELS ..... 45**
  - 4.1 Factors Influencing Grower Choice of Marketing Channel..... 45
  - 4.2 Doing Business with MSC ..... 46
    - 4.2.1 Increased Costs of Business with a MSC .....46
    - 4.2.2 RPC’s and One-Touch Packaging .....47
  - 4.3 Chain Transparency Between Growers & Other Chains Participants .. 48
- 5. ADDITIONAL INFORMATION TO SUBMISSION ONE..... 51**
  - 5.1 ‘Combined Marketing’ and Horticultural Code..... 51
  - 5.2 Equivalence of Horticultural Product ..... 51
- BIBLIOGRAPHY ..... 53**

# 1. Executive Summary

---

## 1.1 HAL Position on Inquiry

This submission made by Horticulture Australia Limited (HAL) is the second one made to the ACCC Inquiry into the Competitiveness of Retail Prices for Standard Groceries.

Therefore this submission should be read in conjunction with the first submission of the 13<sup>th</sup> March, 2008.

The purpose of this second submission is to provide additional information which we believe to be relevant to the Inquiry, particularly focussed around the factors that are influencing the costs of production of fruits and vegetables in Australia. Further, we wish to present additional information provided by horticultural producers and other research previously conducted into issues pertaining to how the production sector 'do business' with the remainder of the horticultural supply chain.

In the first submission our central recommendation was:

**As has been.....discussed in detail throughout this submission, the time available to undertake the research that supports this submission was not adequate to investigate this complex supply chain, the costs, prices and margins being experienced at each level in the chain, and the issues of most concern to the fruit and vegetable Growers and other chain participants.**

**HAL's suggested approach is that an independent party be commissioned by the ACCC to conduct the investigation with its Terms of Reference agreed to by a Steering Committee of parties which the ACCC decide should be invited. The Inquiry should focus around a basket of horticultural products which exhibit a variation of characteristics (staple, non-staple, perishable, non-perishable, imported, exotic for example). HAL believes the results of the analysis should be made publicly available although the identity of contributing parties should be subject to confidentiality.**

One of the principle propositions of HAL in its inputs to this Inquiry is that it is the collection and use of objectively collected information, right across the chain from Growers to End Users, that will enable the Inquiry and ultimately consumers and participants to feel confident that the outcomes are an accurate reflection of the facts. HAL's core recommendation is that such a process be undertaken.

The time available for the preparation of this second submission has not allowed for this original recommendation to be addressed. As a consequence HAL continues to assert that this recommendation should be pursued.

The core elements of HAL's second submission are:

1. To provide the ACCC with **Costs of Production (COP)** information pertaining to the production of a narrow range of horticultural crops and changes that have occurred over time.

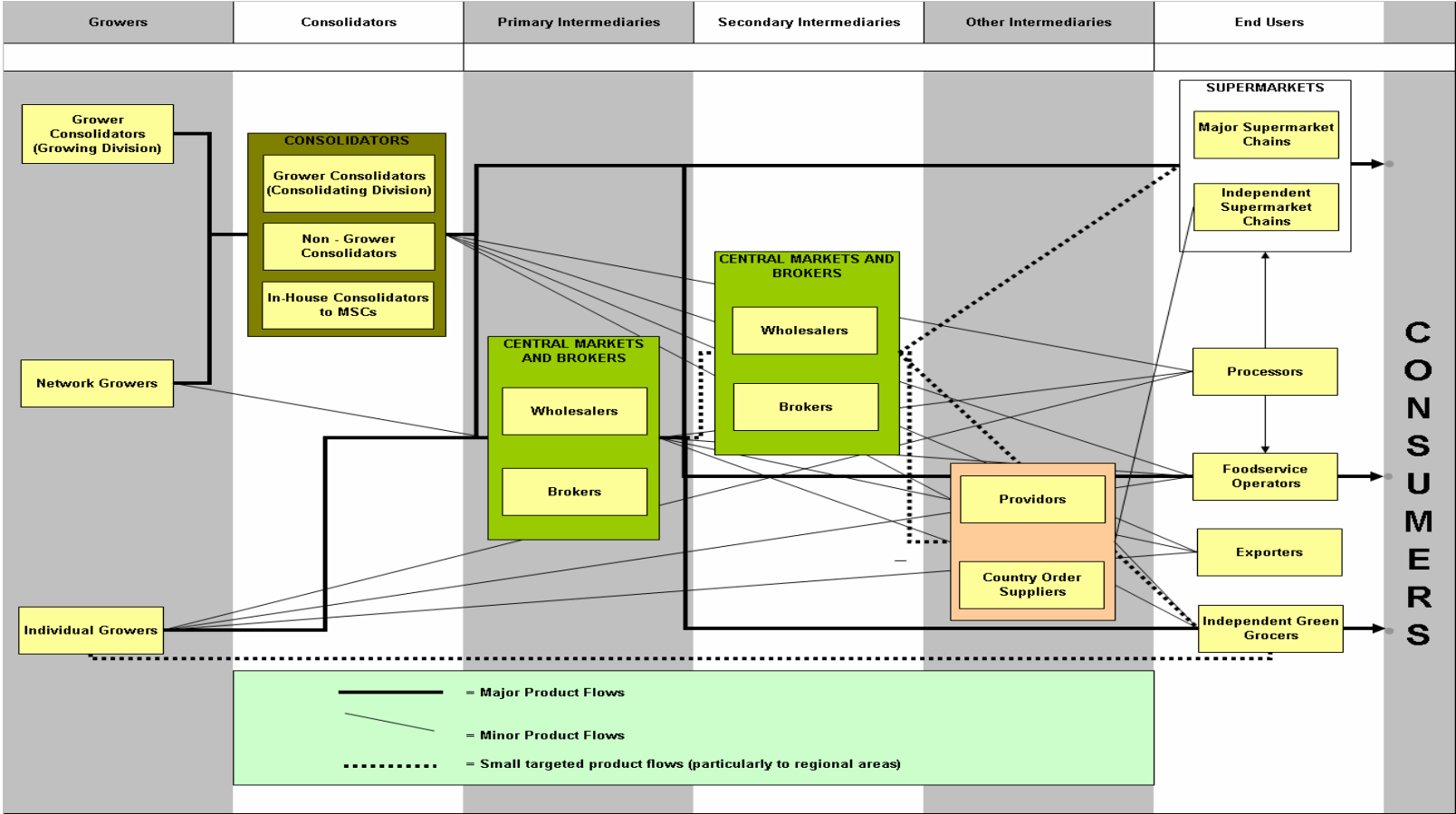
2. To provide the ACCC with a description of the major factors that have or are influencing the COP of horticultural producers and the ability of Growers to 'pass on' or otherwise COP increases.
3. To provide the ACCC with a description of recent issues that Growers have had in 'doing business' with MSC and the Mid-Chain participants.

---

## 1.2 Australian Horticultural Supply Chain

By way of background, Figure 1 diagrammatically represents the Australian horticultural supply chain and its participants.

Figure 1: Current Australian Horticultural Supply Chain Structure



Source: CDI Pinnacle Management, 2008.



## 1.3 Cost of Production in Horticultural Crops

In the time available to complete this submission initial information has been gathered specifically about key cost centres for horticultural production enterprises and also a small number of initial case studies have been collated, reflective of common Grower enterprises.

The key conclusions that this information either suggests or poses some basis for (until adequate time enables a more complete analysis to be completed) include:

1. Grower business case studies suggest that increasing costs in key inputs, in particular labour, transport, irrigation water (if temporary water is required to be purchased), fertilisers and chemicals have occurred between 2005 and 2007 and in some instances well before this.
2. In respect of labour costs the increase in costs are greater than any reflection in award rates. The shortage of labour, the need to compete for labour with other industries (e.g. mining and construction) and the need to shift to contract suppliers of labour (labour hire firms) to source labour in a tight market are key drivers of this. Evidence exists that labour shortages have resulted in crop losses through lack of harvesting personnel.
3. Information supplied by input supply industries suggests that with the global changes to the dynamics of supply and demand for fertilisers and chemicals, these costs can be expected to even increase further in the next to five years. This fact and its impact can be comprehensively addressed in a more detailed analysis as proposed by HAL herein.
4. Fuel price increases to Growers and transport operators continue to be a significant contributor to cost increases. By far the greatest impact is on the cost of freight paid by Growers which has increased around 35 per cent over the last five years and most notably within the last two years. Diesel rebates have remained the same for over five years.
5. Increased water costs are particularly notable where growers have to access water by purchasing temporary water. In some regions (e.g. lower Murray Darling basin) this has future potential to make water too costly for many smaller Growers, leaving corporates and MIS operators the main growers capable of funding in-season temporary water costs.
6. The lack of water needed to plant a full complement of annual crops (principally fresh and processing vegetables, tomatoes etc.) alone is a key cost impost to these growers. If a usual area of crop cannot be planted due to water limitations the overhead costs for every unit of actual production is increased. Conversely, Growers are faced with increased risks associated with significant investments in temporary water, because if rainfall events occur, as they did in the Murray Darling in 2007, the potential strategic market advantage they may have from having produced a crop may have been lost.
7. The Grower case studies, a limited number of which have been able to be collated, also show the extreme variability in the profitability of grower enterprises.
8. Certain case study examples also demonstrate that in 2007 some Growers achieved good returns for produce. This is reflective of the overall impact of the drought in many of the major production regions in Australia. Anecdotal evidence beyond the survey results indicates that some Growers were still in a position to be profitable in 2007 even with 'half a crop'. That said, there are also plenty of examples where Growers have not been able to produce annual crops or have produced poorer than normal quality perennial crops due to the lack of water

This submission was not able to fully determine the impacts of the drought on fruit and vegetable prices paid to Growers in 2007 (and to a lesser extent in 2006) and would be a key focus if the key recommendation of HAL'S is progressed by the ACCC. We must not also ignore the impact on supply, prices and returns (both highs and lows) for bananas and other tropical fruits in North Queensland.

HAL's belief is (in the absence of supporting data) is that the impacts of drought (and cyclones) have been a significant, but not necessarily the sole factor / contributor to the increased prices being paid by consumers for fruit and vegetables. Only a more detailed analysis in a reasonable timeframe will be able to test this belief.

## 1.4 Alternative Channels to Market for Produce

In its first submission HAL outlined the complexity of the many paths / channels for fruit and vegetables to move from Grower to Consumer. Feedback from Growers and others about the strengths and weaknesses, concerns and dynamics were also briefly covered.

The Grower case studies herein show a significant range of strategies used by Growers in the marketing of their produce. The channels used and their relative importance are presented in Table 1.

**Table 1: Market Channels Used by Growers in the Australian Fruit & Vegetable Industry.**

Grower Case Study	Volume Distributed via Channel in 2007				
	Direct to MSC	MSC via Consolidator	Wholesaler	Export Market	Processors Direct
Case Study (1) (Leafy Vegetables)	-	60%	15%	-	25%
Case Study (2) (Leafy Vegetables)	-	-	90%	-	10%
Case Study (3) (Strawberries)	82%	-	11%	1%	6%
Case Study (3) (Mangoes)	40%	-	47%	11%	3%
Case Study (4) (Tropical Fruit)	-	28%	52%	-	20%
Case Study (5) (Macadamia Nuts)	-	-	-	-	100%
Case Study (6) (Citrus)	N/a	N/a	N/a	N/a	N/a
Case Study (7) (Bananas)	80%	-	20%	-	-
Case Study (8) (Bananas)	-	-	100%	-	-
Case Study (9) (Pineapples)	72%	-	14%	1%	13%

Source: Grower Survey Data, CDI Pinnacle Management.

The diversity in market channels selected reflected in this small sample of growers is indicative of the horticultural industry. The vast differences between Growers and how they choose to do business is a fundamental factor behind the ongoing need for various channels to be available to receive produce. This information provided in Table 1 also highlights another critical fact about the fruit and vegetable industry. Growers are only able to sell a portion of their produce to the highest priced market due to its characteristics (size, colour, appearance, variety etc). Different market segments require different quality products. The opportunity to use multiple channels to market is therefore essential and is a core factor in the viability of the great majority of Growers.

A comment by some Growers and Wholesalers is that MSC take the pick / cream of the crops that are on offer. Opponents to this view firstly dispute it is as fact for the vast majority of product lines. Secondly, the contention is

that if buyers (Independent Supermarkets and Greengrocers) wish to purchase this product they should simply outbid MSC for access to it.

Some of the key comments / take-home messages from the case studies is presented in Table 2.

**Table 2: Key Comments Made by Growers Who Completed Case Studies.**

Grower Case Study	Key Comments
Case Study (1) (Leafy Vegetables)	<ul style="list-style-type: none"> <li>▪ Highest prices achieved in 2007 were via consolidator to a MSC.</li> <li>▪ In seasons of over supply prices in the Central Markets were lower and in seasons of short supply the Central Markets appear to pay the highest prices.</li> <li>▪ The need for additional working capital (+25 per cent) due to increased COP between 2005 and 2007.</li> </ul>
Case Study (2) (Leafy Vegetables)	<ul style="list-style-type: none"> <li>▪ Labour, Packaging, Transport and Repairs and Maintenance represented 77 per cent of total costs in 2007.</li> <li>▪ An increase of 40 per cent in sales revenue from 2005 was primarily due to drought and its impact on total supplies to the market. This example demonstrates the potential scale of impact that climatic variability can provide.</li> </ul>
Case Study (3) (Strawberries)	<ul style="list-style-type: none"> <li>▪ Labour in 2007 represented 48.8 per cent of COP.</li> <li>▪ Costs increased 69 cents per kilogram from 2005 to 2007.</li> <li>▪ Sales returns were 2 cents per kilogram less than the increase in COP.</li> <li>▪ 82 per cent of this Growers production is sold direct to MSC.</li> </ul>
Case Study (3) (Mangoes)	<ul style="list-style-type: none"> <li>▪ Labour in 2007 represented 40.2 per cent of COP.</li> <li>▪ The Growers supplies relatively equal volumes of product direct to MSC and to Wholesalers.</li> </ul>
Case Study (4) (Tropical Fruit)	<ul style="list-style-type: none"> <li>▪ In 2007 Labour, Packaging and Transport accounted for 68.5 per cent of total costs. The percentage increase between 2005 and 2007 were in was Transport costs.</li> <li>▪ Maximises sales through a Consolidator as average returns from this channel have been far superior price to that achieved through alternative market channels.</li> </ul>
Case Study (5) (Macadamia Nuts)	<ul style="list-style-type: none"> <li>▪ Macadamia growers effectively sell all produce to one of 12 processors located across the growing region. The only way macadamias growers can realistically influence the price and return they achieve is by growing quality and improving yield.</li> <li>▪ Labour and fertiliser are the two largest cost items for macadamia growers.</li> <li>▪ Growers of a nut product that is in many ways a commodity have little ability to influence price. The price per kg (NIS) received by macadamia growers reduced between 2005 and 2007 from \$3.65 to \$1.60 according to information provided by the Australian Macadamia Society (website)</li> </ul>
Case Study (6) (Citrus)	<ul style="list-style-type: none"> <li>▪ Labour represents 40.1 per cent of the total COP for the 31 growers surveyed.</li> <li>▪ EBITDA returns were negative for Growers in the lowest 25<sup>th</sup> percentile of</li> </ul>

	the sample group, \$335 per ha for the average and still low at \$1,238 per ha for the top 25 <sup>th</sup> percentile. These figures <u>do not</u> take into consideration the costs of labour for the owner
Case Study (7) (Bananas)	<ul style="list-style-type: none"> <li>▪ 80 per cent of sales were made direct to MSC by this Grower, up from 50 per cent in 2005.</li> <li>▪ The Net Profit before Tax (NPT) was 8.7 per cent, the first positive figure in four years of production</li> <li>▪ Banana Growers costs and returns have been impacted significantly due to the direct and carry-on effects of Cyclone Larry.</li> </ul>
Case Study (8) (Bananas)	<ul style="list-style-type: none"> <li>▪ This Grower supplies 100 per cent of their bananas to Wholesalers.</li> <li>▪ Banana Growers costs and returns have been impacted significantly due to the direct and carry-on effects of Cyclone Larry.</li> </ul>
Case Study (9) (Pineapples)	<ul style="list-style-type: none"> <li>▪ Labour represents 44.5 per cent of the variable COP.</li> <li>▪ EBIT per kilogram is 21 cents per kilogram (16.0 per cent) in 2007.</li> <li>▪ The proportion of sales direct to MSC in 2007 were 72 per cent of total production, up from 54 per cent.</li> <li>▪ Average sales returns 31 per cent higher from MSC when compared with Wholesalers.</li> </ul>

Source: Grower Survey Data, CDI Pinnacle Management.

## 1.5 Doing Business with MSC and Others

There have been a number of areas where input to this submission highlights added costs of doing business with MSC, either directly or via a Consolidator. They include:

1. Direct impact of MSC driven chain innovations such as Returnable Plastic Crates and One Touch Retail packaging.
2. Costs and through chain efficiency losses from standardised pallet configurations and the resulting reduced efficiency in transportation.
3. Additional impacts on transportation costs of the applying the MSC logistical requirements.
4. Costs associated with product being rejected by the MSC and then being redirected through central market systems in packaging and pallet configurations that clearly identify it as having been rejected by an MSC, in indeed repacking is not an additional requirements in the case of MSC-specific packaging.
5. Costs associated with complying with MSC quality assurance requirements which are not uniform or consistent which is surprising given the identical risk profile of all products.

There is further discussion herein about the benefits that flow from the operating models and chain innovations applied by MSC. Grower suggests however that much of the benefits do not flow to the Growers, Packers, Wholesalers, Consolidators and others that have the costs imposed on them. It is suggested that the MSC actively push costs back down the chain to growers and others.

Despite this there is a generally strong, positive view held by many Growers and Consolidators who supply MSC regarding the nature of the relationship between themselves and the MSC. Growers and Consolidators within the MSC loop believe that the best returns are achieved from the direct channel to MSC.

Table 30 herein provides summary comments about impacts on growers of key differences in transparency, price setting mechanisms, ability to pass costs from Growers into the chain, and Grower awareness of customer requirements. This information, which deserves further attention in a more detailed study as has been proposed by HAL, goes some way to explaining the way various channels operate and the ability of Growers to negotiate prices and pass genuine cost increases onto the rest of the chain.

It may also be of value to compare these summary comments to the way the supply chains operate for other food production sectors.

In the meat industry Growers (of cattle, sheep, pigs, and other species) effectively have two choices of how to distribute their products to the market, being:

- Sell direct to a processor (abattoir operator or consolidator that sources product for an MSC). In this channel the Grower has transparency and knows the price he is receiving per unit of product delivered (per kg on-hook); or
- Sell through a sale yard where an agent sells on the grower's behalf. In this transaction the Grower also has transparency, he is told how much his product sold for and who the buyer was.

In contrast, the area of the fruit and vegetable supply chain that some Growers and Consolidators have expressed concerns about is where a Mid-Chain party is involved (predominantly some of the Wholesalers in the central markets) and where the same level of transparency as that experienced by livestock growers through the saleyard system is not enjoyed by fruit and vegetable Growers.

None of the parties that provided input to this submission, or the first HAL submission, has expressed doubt regarding the need for the numerous alternative channels including the Central Market system and the importance of the role of Wholesalers and other Mid-chain participants. Similarly it is clear from feedback received that many Growers enjoy mutually beneficial relationships with Wholesalers and Non-Grower Consolidators (many of whom were originally Wholesalers) and rely heavily on this area of the chain for their viability.

The concerns raised are regarding situations where transparency and balanced use of market knowledge and power are not applied. The ongoing discussion regarding the success or otherwise of the new horticultural code is focused on this matter and related matters, e.g. levels of compliance, enforcement and awareness of the new code. The Horticulture Australia Council (HAC) will we understand provide further detailed commentary in regards this matter on behalf of Growers.

---

## 1.6 Grower Professionalism

In the preparation of submission one, HAL did not acknowledge on behalf of the Grower sector some of the deficiencies that at least some of its members have. These are discussed below:

1. Lack of a National Benchmarking System: Whilst there are sectoral examples of crop / enterprise benchmarking, a national benchmarking program does not exist and has not been seen as a high priority by industry generally, although HAL believes it should be. As a consequence there is no uniform mechanism by which any others in the supply chain can gain an objective (if average) understanding of the 'true' costs of production of horticultural producers and therefore make accurate assumptions of whether Growers are receiving market returns that are more, less or equal to their COP. Non-Grower chain members are therefore presented with a range of information by Growers when they are questioned in relation to their COP. Non-Grower chain members are then not able to assess the merits of the claims by the Growers relating to these COP. This situation may promulgate the distrust that

some other members of the supply chain have with the production sector.

HAL anticipates that if its Key Recommendation is adopted this will go some way to addressing the issues raised above. HAL further hopes that this may in fact be the precursor to a National Benchmarking System or at least more industry by industry benchmarking.

2. Growers Not Understanding Their Own Cost of Production (COP). Directly linked to the previous factor many Growers do not know their own COP and often not in any significant detail. This lack of understanding has further impacts as financiers and government agencies may have a skewed view towards assessing the individual and sectoral performance of the industry. This has follow-on effects of the sector not being 'supported' to the levels that it may otherwise have been.
3. National Grade Standards. There is no single common language or understanding applying to the description and / or specifications of produce that are uniformly adopted by the whole chain. Representative organisations of Wholesalers indicate that the lack of a common language is one of the areas that gives rise to disputes between Wholesalers and Growers. Initiatives to address this issue in the past have not been successful as could have been due in part to the number of crops involved, pre-existing investment in similar languages by supply chain members and low levels of commitment by all parties to achieve the end goal. It is hoped that the FreshSpecs initiative of the Australian Chamber will address this issue for the Wholesale markets sector.
4. Grower Business / Negotiation Skills. It is acknowledged that Growers within the horticultural industry have, like all industry sectors, varying levels of business skills. There have been a variety of initiatives pursued by a wide variety of industry, regional and local horticultural organisations that aim to build the business skill capacity of Growers. Many of these initiatives have had mixed success in part due to general high age of the production sector who generally have a lower preparedness to undertake change. As the generational shift progresses it is readily apparent that the next wave of Growers coming into the industry have greater skills and willingness to adopt innovation and change, as it is hoped does the rest of the horticultural supply chain.

## 2. Major Grower Cost Centres

The major variable cost centres impacting on Growers in horticulture are:

- Labour (No 1 cost centre for all growers).
- Transport
- Packaging
- Fertiliser
- Crop Protection Chemicals
- Water / Irrigation

Costs changes and the factors that influence these changes are discussed in detail in the following sections.

---

### 2.1 Labour

In Australia, horticultural workers are covered under a variety of State Awards and / or Federal Awards.

Currently, where a State Award exists (which is all states in Australia except Victoria) the relevant state award applies to sole traders and partnerships. Constitutional corporations which include 'Pty Ltd' and 'Ltd' companies are covered under a Federal Award but under provisions covered by the Notional Agreement Preserving a State Award (NAPSA). In effect the Federal award mirrors the State award with a few exceptions outlawed under the previous Federal government.

Both the current State (Queensland) and Federal Awards as they apply to horticultural workers is presented in Table 3.

**Table 3: Changes and Comparisons Between Federal and State Awards for Casual Workers in Queensland.**

Year	Queensland Fruit & Vegetable Industry Growing Award – State Employees	Queensland Fruit & Vegetable Industry Growing Award NAPSA – Federal Award
2002	\$13.27	N/a
2003	\$13.79	N/a
2004	\$14.37	N/a
2005	\$14.90	N/a
2006	\$15.49	N/a
2007	\$16.28	\$16.93
2008	\$16.28	\$16.93

Source: Growcom

The general practice across Australia is to use the Federal award as the base pay level.

If HAL uses the Queensland award as the basis for wage rate movements for horticultural workers, official award rates of pay have increased 27.6 per cent since 2002.

Discussions with Growers have however highlighted that the actual rate of pay paid to farm workers has increased at a greater rate than the award rates of pay. This has occurred because of a shortage of supply of farm workers. This has largely been driven by growth in demand and hence wage rates paid for workers in the mining and construction industries. Further, some Growers are reporting decreasing numbers of backpackers and 'grey nomads' working in horticulture as hospitality jobs are more plentiful and grey nomads are less likely to need to work due to higher retirement incomes.

The impact of each of these factors is that Growers are having to pay higher rates of pay than the award in order to attract workers. As a consequence the actual increase in hourly rates of pay has been in excess of the 27.6 per cent stated above, since 2002.

An increasing number of growers are abdicating the responsibility for staff recruitment to external contractors. These labour contractors have the responsibility to source, train (sometimes) and manage (sometimes) for which they generally receive a flat fee per hour on top of what is paid to the worker, or a percentage of the flat fee. The rate paid to labour contractors appear to represent around 5-10 per cent on top of the base rate paid.

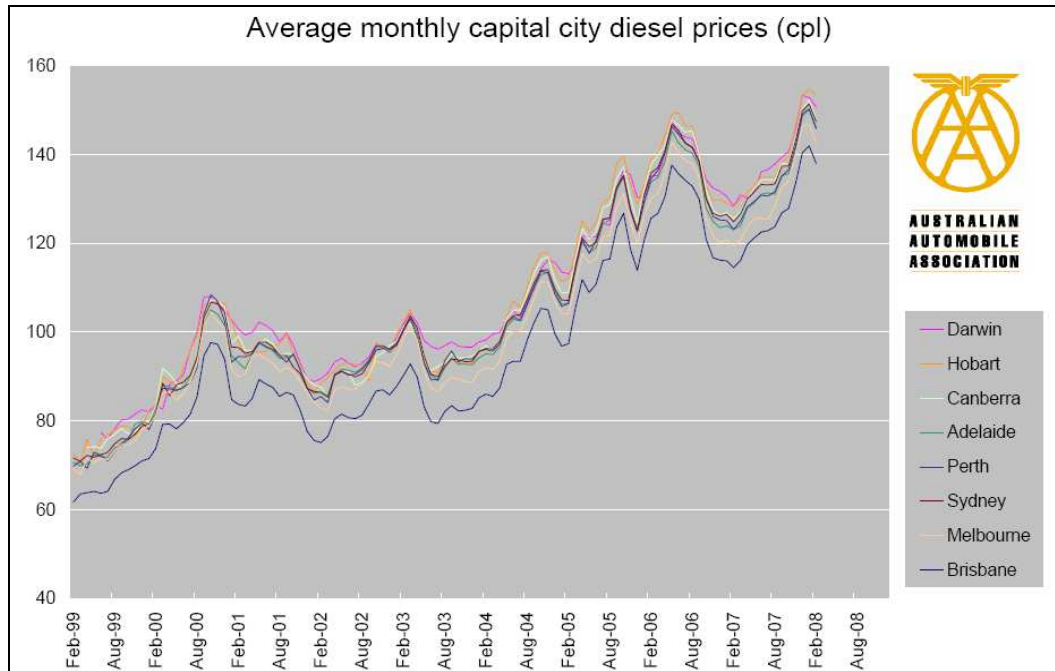
---

## 2.2 Fuel & Oil

The average retail prices paid for diesel in each of the major capital cities is presented in Figure 2. The prices paid in each capital city track one another closely. Further, industry sources suggest that the price paid per litre by farmers roughly approximates that paid by consumers in the major metropolitan centres.



Figure 2: Average Monthly Capital City Diesel Prices, 1999-2008 (February).



Source: FUELtrac, IPIP

An analysis of the average wholesale price paid for diesel in Melbourne is provided in Table 4. As can be seen in Figure 2 the prices paid across Australia roughly track one another and so HAL is confident to use the Melbourne figures as a representation of price movements.

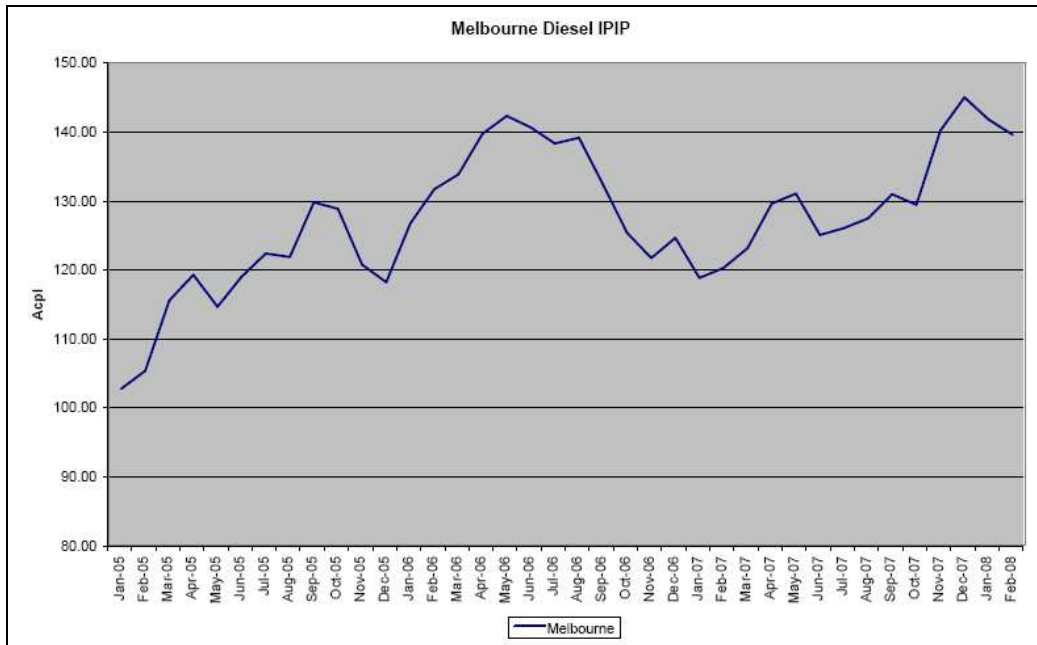
Table 4: Average Wholesale Diesel Prices in Melbourne, 2005 to 2008.

Month	2005	2006	2007	2008
January	102.63	126.62	118.70	141.69
February	105.23	131.57	120.15	139.49
March	115.45	133.73	123.02	n/a
April	119.17	139.61	129.48	n/a
May	114.53	142.20	130.94	n/a
June	118.89	140.53	124.94	n/a
July	122.25	138.21	125.95	n/a
August	121.74	139.03	127.35	n/a
September	129.67	132.26	130.84	n/a
October	128.72	125.27	129.30	n/a
November	120.65	121.58	140.09	n/a
December	118.09	124.51	144.91	n/a

Source: FUELtrac

The above table is represented graphically in Figure 3.

Figure 3: Monthly IPIP Diesel Prices in Melbourne, January 2005 to February 2008.



Source: FUELtrac

By using February 2008 as the reference point, the percentage increase in prices from February in 2005, 2006 and 2007 to that in 2008 are;

February 2005 to February 2008	32.6%
February 2006 to February 2008	6.0%
February 2007 to February 2008	16.1%

Over this period of time of time the rebate paid to farmers for on-farm diesel fuelled vehicles and other equipment has remained the same at 38.143 cents per litre. Therefore if we take the diesel fuel rebate into account the net percentage increases in diesel costs to farmers have in fact been:

February 2005 to February 2008	51.1%
February 2006 to February 2008	8.5%
February 2007 to February 2008	23.6%

The figures above therefore represent the effective price increase paid by farmers for diesel over the periods identified.

As will be demonstrated in Section 3, fuel and oil costs for on-farm operations generally represent only 1-4 per cent of total costs. Where the greatest impact of diesel prices is felt is in respect of freight costs of produce from farm and the hidden (as it is included in the price of inputs) costs of transportation of inputs to the farm.

Transportation companies have not been able to absorb all of the increases in the price of diesel and so these costs have been passed onto the farmer (and input suppliers). Freight companies over the last five years have typically increased freight charges in the region of 33-40 per cent inclusive of the additional fuel levy charges. Diesel fuel levies are currently in the range of 8.5-10.5 per cent.

Again as will be demonstrated in Section 3 the impact of increases in the price of diesel has been significant and are expecting to be lasting.

## 2.3 Packaging

Packaging prices (non-RPC) in horticulture have remained relatively constant over the last three years. The factors that our research and industry observers believe are the major reasons for this stability in cardboard packaging prices are:

1. Lower Raw Material Input Prices. Since 2001 the average price of pulp has increased from around US\$500 per tonne to US\$720 per tonne. Over that time however the exchange rate (in 2001) has moved from \$0.50 to current rates of around \$0.90. Depending on actual prices for pulp, exchange rate on the day and FOREX management, the actual price paid for pulp in Australia dollars has decreased by 20 per cent in this period.
2. Amcor / Visy Price 'Management'. The highly publicised Amcor / Visy price 'management' investigations have contributed to both companies adopting a more 'cautious' or circumspect approach to carton pricing.
3. Impacts of RPC. Industry observers also believe that the two major carton companies have sought to maintain market share of horticultural packaging by keeping carton prices at constant prices, so as not to provide a price advantage over RPC's.

Discussions with a number of Growers indicate that carton prices are now entering a pricing increase cycle, with increases in the range of 4 per cent due to price increases associated with increased costs of energy, transportation and labour costs. The increase is currently only applicable to Visy.

There are two principal packaging suppliers in Australia, Visy and Amcor, with a smaller third player Carter Holt Harvey. Growers therefore have limited choice in terms of manufacturers. The horticultural sector, although comparatively small in terms of total dollar contribution to sales, contributes significant margins to manufacturers. The recent Amcor / Visy price 'management' discussions indicate that these margins may have been kept artificially high.

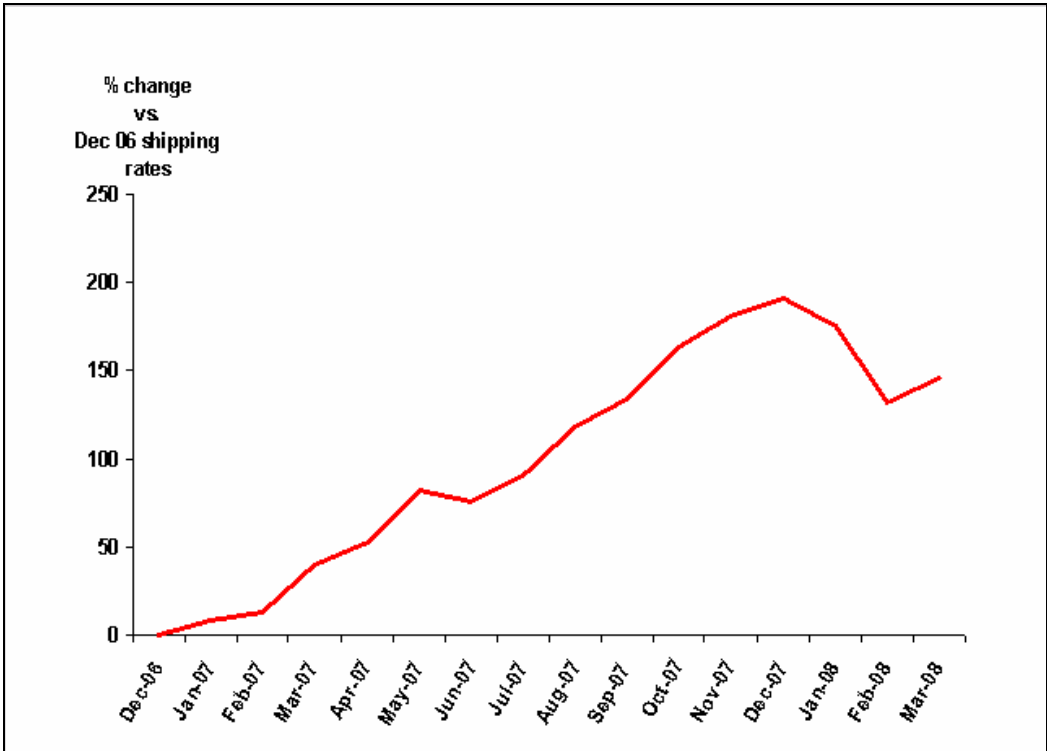
## 2.4 Fertiliser

The three major plant nutrition elements used in horticulture are nitrogen (N), phosphate (P) and potassium (K). Fertiliser costs represent between 5 and 12 per cent of total variable costs for horticultural producers. The relative importance to different horticultural crops is discussed in Section 3. All major fertilisers are traded internationally and are priced in US\$. With the appreciation of the Australian dollar against the US dollar over the last five years (at least) the net impact of the dramatic price increases in N, P and K based fertilisers has to some extent been lessened to Australian Growers.

Australia is a very small player in world terms in respect of fertiliser usage therefore the major fertiliser companies in Australia have little or no impact on world prices. Although Australia is a producer in particular of Urea and Di-Ammonium Phosphate (DAP) pricing to Australian customers is still in world terms.

Combined with the price increases associated with the purchase of N, P and K fertilisers has been a 146 per cent increase in average freight costs. These figures are presented in Figure 4.

Figure 4: Percentage Change in World Freight Rates, December 2006 to March 2008.



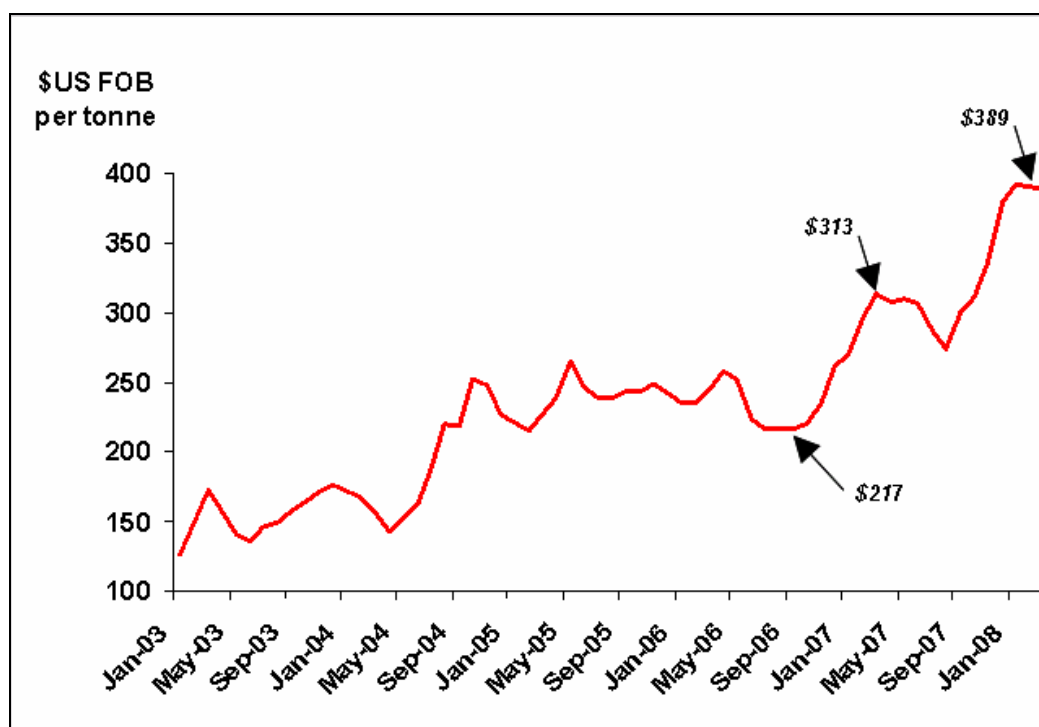
Source: Confidential

**Nitrogen**

Since 2003, the US\$ price for urea (the primary source of nitrogen used in horticulture) has increased in price from around \$150 per tonne to a January, 2008 price of \$389 per tonne (a 159 per cent increase). However, with the appreciation of the \$A against the \$US the net increase price reduces to around 86.1 per cent, a still not inconsequential amount.

The movement of prices for Urea from 2003 to 2008 is presented in Figure 5.

Figure 5: Urea Price US\$ FOB, 2003-2008.



Source: Middle East Granular Urea FOB

The primary factors contributing to the rapid increases in prices for urea (particularly in the last 15 months) are:

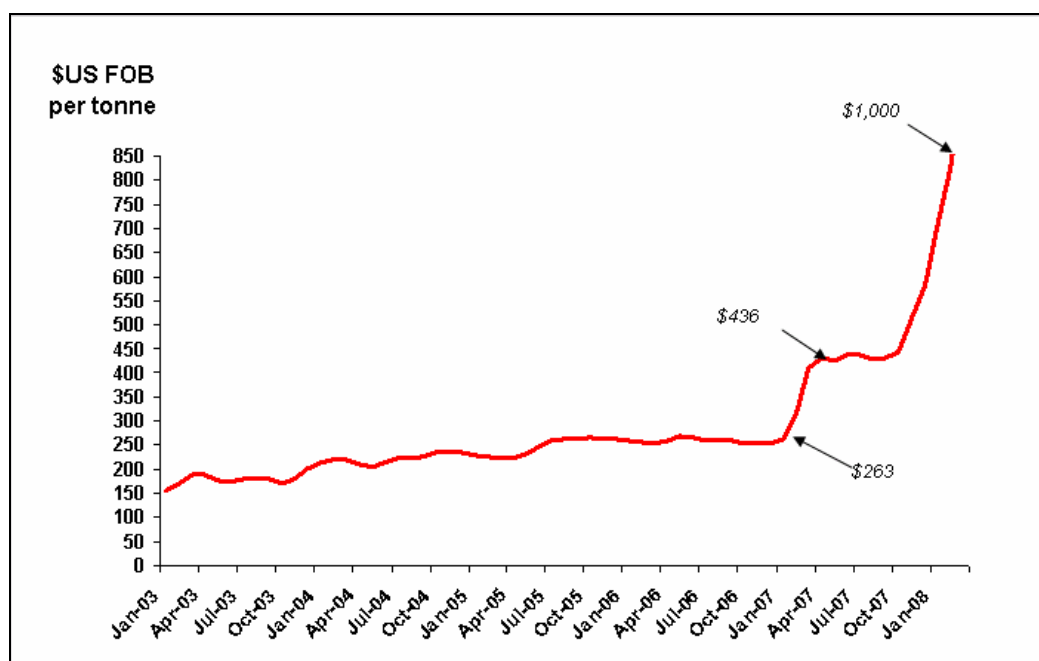
1. Increases in raw material costs particularly liquid natural gas (LNG) which has more than doubled in price over the last five years. Other sources of hydrogen include crude oil and coal.
2. Ammonia, the other principle raw material used in nitrogen fertilisers, whilst widely produced has production concentration in only a few countries, notably India and China. The ability of these countries to cope with increased demand through additional capacity is restricted due to the time associated with developing new plants.
3. Increased areas of land planted to grain due to recent increases in soft commodity pricing including in particular wheat.
4. Enormous increases in the areas planted to bio-fuel crops.

### Phosphate

Virtually all of the phosphate produced in the world is produced from rock phosphate. Three regions currently mine 77 per cent of the world's supply, Morocco and Western Sahara, China and the United States.

Australia also has significant production capacity of phosphate although like all world traded commodities it is sold to the Australian fertiliser companies and re-sellers at world traded prices.

Figure 6: Di-Ammonium Phosphate Prices per US\$ per Tonne, FOB Tampa, 2003 to 2008.



Source: Confidential

The growth in the price of DAP and other phosphate based fertilisers has been nothing short of spectacular. Since February / March 2007 prices have increased 280 per cent from US\$263 to US\$1,000 per tonne.

The rapid recent increases in the price of phosphate have been driven by:

- Increased areas of land planted to grain due to recent increases in soft commodity pricing including in particular wheat;
- Enormous increases in the areas planted to bio-fuel crops;
- The inability of miners and processors to ramp up production at short notice. No new significant productive capacity in the product of phosphate fertilisers is expected to come on stream for the next three years; and,
- Higher costs being paid for products used in the manufacture of DAP as they have a range of alternative uses. These inputs include phosphate rock and sulphur which is used in the production of Single Super Phosphate (SSP) and also phosphoric acid.

Industry sources suggest that over time (next two years) that the price of phosphate based fertilisers may moderate as the speculative nature of the market hopefully commences to slow down.

Phosphate prices are not however expected to go back to levels of say five years ago unless there are significant new minable resources identified.

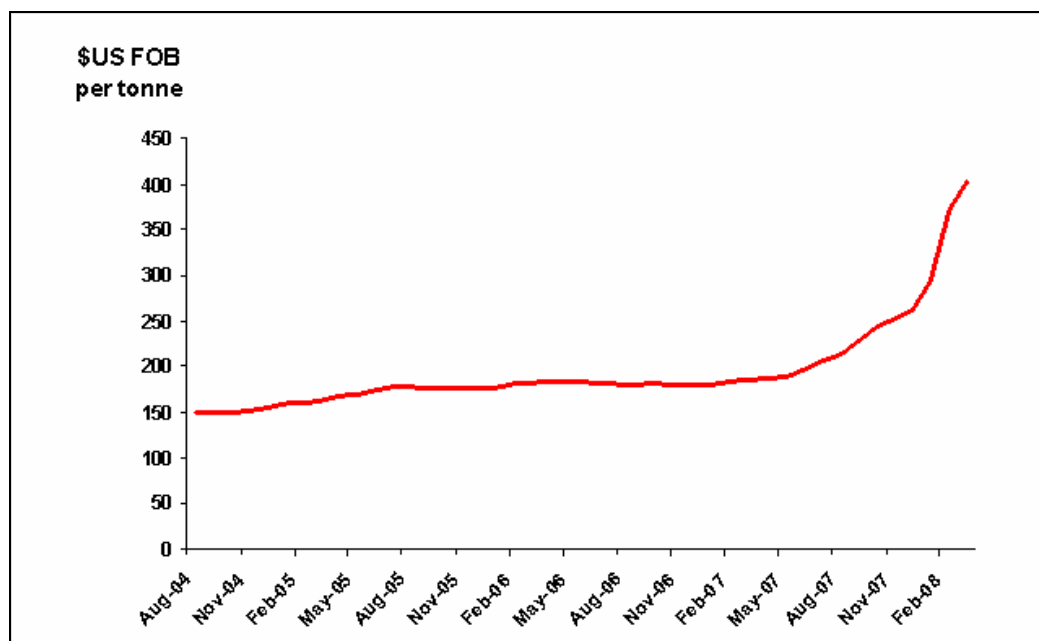
### Potassium

Only five countries in the world mine potassium salt which is then used in the production of potassium fertilisers. These are Canada, Russia, Germany, Belarus and Brazil.

A single company, Potash Corp, currently holds 38 per cent of global productive capacity.

Since July, 2007 the US\$ price for Muriate of Potash (MOP) has increased from US\$189 to US\$403 per tonne. Refer to Figure 7 to show the movement in the price of MOP since mid-2004.

**Figure 7: Muriate of Potash Prices per US\$ per Tonne, Vancouver.**



Source: Confidential

The rapid recent increases in the potassium prices has been driven by the same factors as for phosphate, notably:

- Increased areas of land planted to grain due to recent increases in soft commodity pricing including in particular wheat; and
- Enormous increases in the areas planted to bio-fuel crops.

During the period July 2007 to March 2008 the exchange rate has moved only fractionally so the full effect of the price increases have flowed from fertiliser manufacturer / reseller through to Growers. Growers are expected to pay even higher prices in the short term for potash based fertilisers.

Potassium prices are not however expected to go back to levels of say five years ago unless there are significant new minable resources identified.

## 2.5 Crop Protection Chemicals

### 2.5.1 PRICES FOR CROP PROTECTION CHEMICALS

The majority of chemicals utilised in horticulture in Australia are imported or the raw materials involved in their production are produced overseas. Australia represents only three per cent of worldwide demand for agricultural chemicals and so is generally regarded as a price-taker on the world stage.

As a consequence the majority of chemicals are internationally priced, based on the international supply and demand for the product and / or its components.

For example, the most used herbicide in horticulture, glyphosate, has increased in price since 2005 from around A\$4.50-\$5.00 per litre (retail sales price) to a current price of A\$13.00-\$13.50 per litre. The key drivers to this

price increase of 160-200 per cent have been:

- Decreased supply from China, the principle production source, as the Chinese government removes large numbers of 'backyard' / smaller operators. This situation applies to both the production of glyphosate and its key ingredient glycine acid.
- Increased demand from glyphosate-ready crops particularly in the USA, Canada and South America.
- Increased worldwide grain production driving increased demand.

So severe is the current worldwide shortage for glyphosate that even major Australian suppliers are having to pay for the product on ordering.

Industry observers suggest that in the short term there are limited prospects for the prices to be reduced.

Another chemical in wide use in horticulture, copper based fungicides, have in the last two years increased from A\$3.50 to around A\$7.00 per kilogram. Copper fungicide prices directly follow the movements in international metal prices. Other elemental fungicides such as manganese and zinc also track the commodity price.

As discussed previously the majority of farm chemicals (and fertilisers) are traded in US\$. Since January 1, 2007 the Australian dollar has appreciated against the US dollar by 20.3 per cent. This appreciation has negated the full flow on effects of price increases in a wide range of chemicals (and fertilisers). Any significant depreciation of the Australian dollar against the US dollar will result in even greater price increases to input suppliers and ultimately Growers.

## 2.5.2 RURAL MERCHANDISERS

In Australia, there are two national rural merchandisers, Landmark and Elders. Further, there exist a number of smaller operators who either act as buying groups e.g. CRT and NRI or other collectives such as IHD. Overall the competitive market environment is regarded as being highly competitive. The market environment in recent times has been particularly competitive as the drought has reduced overall sales volumes. One industry source suggested that as the seasonal conditions tend to improve, rural merchandisers may seek to extract small increases in margins, therefore increasing the prices paid by Growers.

As discussed previously, rural merchandisers, particularly in respect of chemicals and fertilisers which are 'traded' internationally, are price takers. As a consequence they are generally 'cost plus' businesses who have to compete for business heavily based on price and servicing.

The same industry source suggested that the majority of rural merchandisers will seek to achieve a storewide gross margin of around 15 per cent. Target gross margins have increased over time as rural merchandisers have had to employ more staff in the role of agronomists and similar as government agencies reduce their investment in this area.

Due to the highly competitive market environment for chemicals and fertilisers, larger Growers are able to negotiate better prices for the majority of their inputs. Conversely, the significance of these negotiated benefits are not large in the overall perspective of the operation of a farm due to the low margins existing in the industry.

---

## 2.6 Water & Irrigation

Both the cost and availability of water have had a significant impact on the financial performance of individual horticultural enterprises across Australia. The impact does vary depending on the farms locations.



The impact of the drought has been felt greatest in the Murray-Darling irrigation areas. In 2005, the average price paid for temporary or annual water allocation range from \$50-\$90 per megalitre. The price in 2007 fluctuated from \$800-\$1,200 per megalitre and is now currently around \$350 per megalitre (end of summer). Permanent water licences have increased in this three year period from around \$1,200-\$2,400 per megalitre. By their very nature, temporary water prices will always vary more widely than prices for permanent licences due to the impact on short-term supply and demand. For instance, currently irrigators in the Lower Murray-Goulburn are only able to access 43 per cent of their entitlement (in the Goulburn, this figure is presently 55 per cent and in South Australia 32 per cent and NSW 25 per cent) and therefore the demand for temporary water is greater than if those allocations were closer to 100 per cent. Further, as the season approaches winter (when the majority of rainfall is generally received) and water usage decreases, the price generally decreases.

Irrigation allocations for the Murray-Darling may change monthly and so therefore growers must manage their allocations carefully. Allocation percentages vary greatly depending on the outcome of rainfall events. For instance, forecasts suggest that provided the Lower Murray and Goulburn catchments receive average rainfall during the coming autumn-winter period, the forecast allocation will be 63 per cent and 82 per cent respectively by October 2008 and increasing to 100 per cent by February 2009..

Uncertainty regarding available water allocations may have the following impacts on producers in these regions:

1. Growers may plant a area of crops than they may have otherwise, which has the impact of increasing per unit overhead costs.
2. Growers focussing on higher return crops at the expense of those that provide a lower return per unit.
3. Growers who grow tree or vine crops either deciding to abandon or only apply maintenance levels of irrigation. In the latter instance, this directly impacts on the total harvest volume.

An example of how irrigation shortages and increased purchase costs for temporary water impact on the costs of production of horticultural crops is presented in Table 5. The figures present a case which calculates the additional revenue that the grower must receive per tonne of citrus to justify the investment in temporary water purchases. Further, the case study also demonstrates the importance that irrigation water costs have on the variable cost of production of a tonne of citrus.

**Table 5: Breakeven Analysis Example for Application of Irrigation to Valencia Oranges (Per Ha).**

Item	Quantum	Unit
<u>Assume:</u> Average Irrigation use per annum	8.00	megalitres
<u>Assume:</u> Percentage of entitlement available	45	%
Irrigation Available from allocation	3.60	megalitres
Additional Irrigation to Purchase	4.40	megalitres
<u>Assume:</u> Purchase Cost for Temporary Water	\$1,200	per megalitre
Total Purchase of Temporary Water	\$5,280	per Hectare
<u>Assume:</u> Valencia Volume Harvested	50	tonnes
Additional Revenue per tonne of Valencias to achieve breakeven	\$105.60	per tonne
<u>Assume:</u> Total costs of production per hectare for Valencia crop (excluding purchase of temporary water and harvest costs)	\$5,000	per Hectare
Total costs of production per hectare for Valencia crop (including purchase of temporary water but excluding harvest costs)	\$10,280	per Hectare
% Change in production costs per hectare with purchase of temporary water	105.6%	

Source: Confidential, CDI Pinnacle Management

This example demonstrates that with the purchase of temporary water the costs of production per hectare have more than doubled (if we ignore harvest costs).

Further, a Grower firstly needs to assess whether the return they may receive is greater than the \$105.60 per tonne they will have had to spend on irrigation water and that the risk of doing so is acceptable. Secondly, a Grower would need to have the funds available to pay for the additional water, which in the case of many Valencia orange growers in the Murray-Goulburn may not be the case.

The price paid by Processors (predominately) for Valencias is directly dependant on both the supply of Valencias in Australia (particularly for fresh) and the Brazilian Frozen Concentrated Orange Juice (FCOJ) price. If the Valencia crop received rain, the irrigation water seasonal allocation would be expected to be larger and so the Grower may lose money on their 'investment' in the temporary water. Similarly, if the FCOJ price dropped dramatically the same could have occurred.

In Western Australia the vast majority of horticultural land is irrigated via bores and underground aquifers. Water is not tradeable as the water asset is tied to the land parcel. Water charges are currently in the range of \$45 per megalitre with minimal change beyond consumer price index increases.

In Queensland, the situation with regards to irrigation water varies from region to region. In the Lockyer Valley irrigation for horticultural crops has not been gazetted. Therefore, provided supplies are available Growers are permitted to access the water in any volume. The issue in that region is that in recent times due to drought Growers have not had unfettered access to irrigation water. This has had an impact on the supply of salad vegetables in particular during winter across Australia. In the Wide Bay (which includes Bundaberg) both groundwater and bore water use is regulated. Growers are able to purchase allocation (medium priority) for approximately \$1,000 per megalitre. Growers are also permitted to purchase temporary allocations from other Growers, under similar arrangements to what occurs in the Murray-Darling system. Temporary water prices vary considerably depending on seasonal conditions. Current prices are now less than \$200 per megalitre although in January, 2008 prior to the seasonal break the price was over \$400 per megalitre.

Similar to Bundaberg, the Bowen, Burdekin and Atherton Tableland districts are subject to regulation (bore and / or groundwater). Growers in the Burdekin have always been permitted full access to their groundwater quotas.

## 3. Fruit & Vegetable COP Analysis

Within the production side of horticulture there is a distinct lack of recent and objectively collected information pertaining to the Costs of Production (COP) for the very diverse range of fruit and vegetables produced in Australia. No national benchmarking analysis is undertaken in Australia.

Further complicating the analysis of data are factors such as the variation in business size, impact of environmental factors and data collection mechanisms employed by Growers.

Section 3 will provide COP on a narrow range of crops, as well as provide discussion on the factors that are contributing to rising COP, changes in average revenues and the ability / inability of growers to 'pass on' cost increases.

---

### 3.1 Leafy Vegetables – Eastern Australia (1)

This Grower case study involves a business with an annual turnover of \$2.5-5.0 million per annum.

Please note in this example the Growers chemical and packaging costs are included under Other Crop and Management Costs. The breakdown of costs for this operator for the two years 2005 and 2007 are presented in Table 6.

**Table 6: Production Cost Structure – Medium Sized Farm – Leafy Vegetables.**

Cost Item	2005 %	2007 %
Fuel & Oil	1.5	1.7
Seedlings / Seed etc.	14.7	17.0
Fertiliser (solid & liquid)	11.3	8.0
Labour (crop establishment, harvesting, packing), include all costs eg. Superannuation, Workers Compensation	36.1	40.0
Other Planting Materials (plastic etc)	-	-
Chemicals (pesticides, fungicides, wetters etc)	-	-
Irrigation – Annual Consumables (tape etc)	3.6	4.5
Irrigation – Water Purchasing / Leasing	0.1	0.1
Packaging (cartons, liners, tape etc)	-	-
Other Packing	-	-
Transport (outward)	11.8	12.1
Other Crop & Management Costs eg. Chemicals, Insurance, Packaging and Finance costs	18.7	14.7
All Other Costs	2.2	1.9
<b>Total Cost as % of Total Costs</b>	<b>100.0</b>	<b>100.0</b>

Source: Confidential

This Grower respondent made the following comments in regards to the variation in costs and returns associated with their business.

- Both 2005 and 2007 crop years were lower than normal due to reduced availability of irrigation water.
- In particular, water supply availability dropped from 25 per cent to 15 per cent.
- In 2007, this Grower received the highest yearly average price in over two decades of farming. These price levels were achieved only due to the drought which occurred in all leafy vegetable production districts at that time. The lower volumes on offer resulted in the higher prices. By careful management of the irrigation resources this Grower produced significantly less crop volume, however profitability was significantly enhanced between 2007 and 2005 (Grower declined to share revenue figures).
- Whilst the average prices received were higher through sales to MSC, the Central Markets in times of extreme shortness of supply may have higher average prices. Conversely, in periods of oversupply the Central Markets generally pay prices lower on average. This Grower commented there generally was little benefit to them of the higher Central Market price because that generally coincides with when they have no or limited product to offer.
- In the period 2005 and 2007 the return per kilogram for lettuce sold to a processor had increased by 2 cents. Over the same timeframe costs had increased by 6 cents.
- Due to the increasing costs of production, the levels of Working Capital needed to be increased by 25 per cent. This adds further to annual interest payments.

In general, this Grower believes that the greatest contributor to changes in cost and returns per unit for Growers were extreme variations due to seasonal conditions e.g. Drought, flood and temperature (hot and cold). Their perception was that these variations were greater than would normally be experienced.

The analysis of this business shows that the top four cost categories in 2007 were Wages (40.0 per cent), Seedlings / Seed (17.0 per cent), Other Crop & Management Costs (which includes chemicals and packaging) (14.7 per cent) and Transport (12.1 per cent).

An estimated breakdown of the next party in the chain who handled this Growers produce is provided in Table 7.

**Table 7: Estimated Volumes of Product Handled by Next Business in the Chain.**

Item	2005 %	2007 %
% Direct to Supermarket	30	-
% To Supermarkets via Consolidator	30	60
% To Wholesalers	15	15
% To Export / Exporters	-	-
% Direct to Processors	25	25

Source: Confidential

The Grower commented that their business strategy involved maximising the volume of product to MSC either directly or via Consolidators as the average return they have received historically is superior to that received from Wholesalers. Whilst the margins received from Processors is declining in absolute terms the fact that the Grower is able to 'lock in' a price and volume provides a level of certainty of sales turnover which underpins the business. Security of return in terms of projected sales volumes and higher average returns are the two governing factors behind the business strategy of this Grower.

## 3.2 Leafy Vegetables – Eastern Australia (2)

This Grower case study involves a business with an annual turnover of \$2.5-5.0 million per annum.

The breakdown of costs for this operator for the two years 2005 and 2007 are presented in Table 8.

**Table 8: Production Cost Structures – Medium Sized Farm – Leafy Vegetables.**

<b>Cost Item</b>	<b>2005 %</b>	<b>2007 %</b>
Fuel & Oil	3.8	4.1
Seedlings / Seed etc.	2.1	2.7
Fertiliser (solid & liquid)	2.9	3.0
Labour (crop establishment, harvesting, packing), include all costs eg. Superannuation, Workers Compensation	44.6	39.6
Other Planting Materials (plastic etc)	-	-
Chemicals (pesticides, fungicides, wetters etc)	4.0	4.0
Irrigation – Annual Consumables (tape etc)	1.7	1.3
Irrigation – Water Purchasing / Leasing	-	-
Packaging (cartons, liners, tape etc)	20.4	23.4
Other Packing	-	-
Transport (outward)	7.2	7.7
Repairs & Maintenance	4.3	6.0
Electricity	2.9	2.5
All Other Costs	6.1	5.7
<b>Total Cost as % of Total Costs</b>	<b>100.0</b>	<b>100.0</b>

Source: Confidential

The four major cost centres for the business in order of importance (based on 2007 prices) are Labour (39.6 per cent), Packaging (23.4 per cent), Transport (7.7 per cent) and Repairs & Maintenance (6.0 per cent). The total of these four cost centres is 76.7 per cent.

Total sales revenues for this business in the period 2005 increased by 39.9 per cent although costs increased by a smaller amount of 14.4 per cent. It must be noted that the 2005 year showed a loss on sales revenue of 6.1 per cent. The single greatest factor contributing to the turnaround were the impacts of the drought in local and nearby regions where Growers had limited access to water resources. This Grower had access to irrigation water through past initiatives and so was able to benefit from it.

The Gross Profit percentage was calculated at 13.3 per cent of sales.

This Grower maintains a strong commitment to the supply of their produce to the Central Market. Their philosophy is that others in the chain have skills in marketing that they do not possess and so are prepared to pay / accept the fees that they charge for the provision of this service. The marketing channels supplied and estimated volumes are presented in Table 9.

**Table 9: Estimated Volumes of Product Handled by Next Business in the Chain.**

Item	2005 %	2007 %
% Direct to Supermarket	-	-
% To Supermarkets via Consolidator	-	-
% To Wholesalers	90	90
% To Export / Exporters	-	-
% Direct to Processors	10	10

Source: Confidential

### 3.3 Strawberries and Mangoes – Eastern Australia

This Grower case study involves a business producing strawberries and mangoes.

The breakdown of costs for this Grower in the production of strawberries in 2005 and 2007 is presented in Table 10.

**Table 10: Production Cost Structure – Large Sized Farm – Strawberries, 2005 and 2007.**

Cost Item	2005 %	2007 %
Fuel & Oil		
Seedlings / Seed etc.	7.8	6.9
Fertiliser (solid & liquid)	2.0	2.0
Labour (crop establishment, harvesting, packing), include all costs e.g. Superannuation, Workers Compensation	47.3	48.8
Other Planting Materials (plastic etc)	3.2	3.4
Chemicals (pesticides, fungicides, wetters etc)	2.2	2.3
Irrigation – Annual Consumables (tape etc)		
Irrigation – Water Purchasing / Leasing		
Packaging (cartons, liners, tape etc)	13.2	12.1
Other Packing		
Transport (outward)	1.6	1.6
All Other Variable Costs	22.7	23.0
<b>Total Cost as % of Total Costs</b>	<b>100.0</b>	<b>100.0</b>

Source: Confidential

Total COP has increased by 69 cents per kilogram between 2005 and 2007, or 14 per cent. Between 2005 and 2007 sales revenue increased by 67 cents per kilogram. The primary reason given by the Grower for the increased price were adverse weather conditions impacting the total volume of strawberries that were sold in the market. COP increases were due principally to increases in labour costs (41 cents per kilogram), although each of the cost centres had small increases.



The marketing channels supplied and estimated volumes are presented in Table 11.

**Table 11: Estimated Volumes of Product Handled by Next Business in the Chain.**

Item	2005 %	2007 %
% Direct to Supermarket	70	82
% To Supermarkets via Consolidator	-	-
% To Wholesalers	23	11
% To Export / Exporters	1	1
% Direct to Processors	6	6

Source: Confidential

This Grower has been a committed programmed supplier to one of the major MSC over a number of years. The percentage of their business with the MSC has increased due to a better matching of supply with sales demand from that MSC. This Grower supplies limited volumes by comparison to the Wholesale market, generally as an overflow from MSC orders.

In respect of mango production, the breakdown of costs for this Grower in 2005 and 2007 are presented in Table 12.

**Table 12: Production Cost Structure – Medium Sized Farm – Mangoes, 2005 and 2007.**

Cost Item	2005 %	2007 %
Fuel & Oil	-	-
Seedlings / Seed etc.	-	-
Fertiliser (solid & liquid)	6.6	7.2
Labour (crop establishment, harvesting, packing), include all costs e.g. Superannuation, Workers Compensation	42.7	40.2
Other Planting Materials (plastic etc)	-	-
Chemicals (pesticides, fungicides, wetters etc)	4.7	5.1
Irrigation – Annual Consumables (tape etc)	-	-
Irrigation – Water Purchasing / Leasing	-	-
Packaging (cartons, liners, tape etc)	12.3	11.0
Other Packing	-	-
Transport (outward)	6.6	6.4
All Other Variable Costs	27.0	30.1
<b>Total Cost as % of Total Costs</b>	<b>100.0</b>	<b>100.0</b>

Source: Confidential

COP data for this data may indicate higher than industry standard costs as the orchards owned by the Grower are not fully mature and so have a higher proportion of non-productive costs e.g. fertiliser and maintenance labour.

An estimated breakdown of the next party in the chain who handles this Growers mangoes is provided in Table 13.

**Table 13: Estimated Volumes of Product Handled by Next Business in the Chain.**

Item	2005 %	2007 %
% Direct to Supermarket	40	40
% To Supermarkets via Consolidator	-	-
% To Wholesalers	47	47
% To Export / Exporters	11	11
% Direct to Processors	2	3

Source: Confidential

This Grower has not increased the proportion of business done with the MSC because as a producer of a premium quality product, the Grower believes that the Central Markets is prepared to pay a higher price for the product they produce. That said, the Grower did comment that it was only one MSC that was not prepared to pay the premium price demanded.

Detailed analysis suggests that returns for mangoes sold to MSC were 31 per cent higher (select sizes) and for strawberries 18 per cent higher than the average returns from Wholesalers in 2007.

### 3.4 Tropical Fruit – Eastern Australia

This Grower case study involves a business with an annual turnover of \$0.5-1.0 million per annum.

The breakdown of costs for this operator for the two years 2005 and 2007 are presented in Table 14.

**Table 14: Production Cost Structures – Medium Sized Farm – Tropical Fruits.**

Cost Item	2005 %	2007 %
Fuel & Oil	3.9	3.2
Seedlings / Seed etc.	-	-
Fertiliser (solid & liquid)	5.9	4.0
Labour (crop establishment, harvesting, packing), include all costs e.g. Superannuation, Workers Compensation	39.2	37.1
Other Planting Materials (plastic etc)	-	-
Chemicals (pesticides, fungicides, wetters etc)	4.9	4.0
Irrigation – Annual Consumables (tape etc)	-	-
Irrigation – Water Purchasing / Leasing	4.9	2.4
Packaging (cartons, liners, tape etc)	17.6	15.3
Other Packing	1.0	9.7
Transport (outward)	11.8	16.1
All Other Variable Costs	10.8	8.1
<b>Total Cost as % of Total Costs</b>	<b>100.0</b>	<b>100.0</b>

Source: Confidential

This Grower respondent made the following comments in regards to the variation in costs and returns associated with their business.

1. Overall on-farm costs increased by 21.6 per cent. Overall costs including marketing commissions and fixed costs increased by 23.9 per cent.
2. Labour, packaging and transport accounted for 68.5 per cent of production costs in 2007. If we include all costs except taxation ie. fixed costs and marketing charges, these three cost centres still represent 48.3 per cent of costs. If we add commissions and levies for the four cost centres (labour, packaging, transport, commissions and levies) they account for 63.6 per cent of all production costs.
3. For the same period net profit (after deductions for fixed costs including interest but not taxation) rose from 0.7 per cent of sales to 15.3 per cent of sales. The increase in net profit was due to greater volumes of PBR protected varieties being sold direct to MSC by a consolidator. Despite this costs still increased at a faster rate than sales.
4. Commissions and levies increased from 11.8 to 15.8 per cent of total sales.
5. The major cost increases per kilogram of product sold were transport (8 cents per kg or 67 per cent), other packing costs (11 cents per kg) and labour (6 cents per kg or 15 per cent). Transport costs increased due to the increased price of diesel and fuel levies imposed by transport companies. This business being located in North Queensland already has a comparatively high per unit cost for transport due to the distance to major southern markets. Despite the introduction of labour saving practices labour costs still increased by 15 per cent due to the higher labour rates that must be paid due to increases in award payments and the competitiveness of sourcing labour willing to work.
6. During this period the operator was able to either lower or keep constant virtually all other major on-farm costs on a per kilogram basis. This was achieved through the adoption of new / more advanced irrigation and fertilising techniques, harvesting processes and greater packing automation.

This is a representative example of a medium sized business that, despite investing significantly in technologies to lower costs, reduce usage of farm inputs and to grow products more desired by the marketplace (PBR varieties), the cost increases are still greater than the increase in revenues that are received. This business commented that if they were growing 'more traditional' varieties their long term viability may be placed into question.

The Grower commented that their business strategy involved maximising the volume of product sold via their Consolidator as the average return that they have received is superior to that received from Wholesalers. This Grower also commented that they received feedback from Wholesalers that their product was sold to one or both MSC, although this Grower was sceptical that this was the case. Processing of this product results from the product being unsuitable for the fresh market. Processing sales whilst contributing to the bottom line is regarded as a by-product or salvage activity.

Estimates on the relative percentage shares that each of the major channels have of this Growers produce is shown in Table 15.

**Table 15: Estimated Volumes of Product Handled by Next Business in the Chain.**

Item	2005 %	2007 %
% Direct to Supermarket	-	-
% To Supermarkets via Consolidator	1	28
% To Wholesalers	70	52
% To Export / Exporters	5	-
% Direct to Processors	24	20

Source: Confidential

### 3.5 Macadamia Nuts – Eastern Australia

The macadamia nut industry in Australia has a different supply chain to that evident in the fruit and vegetable industry. Firstly, macadamia nuts are not sold through Central Markets in any volume. Rather the industry comprises a series of 12 processors in Australia who then process and market macadamias, through a series of brokers located in both overseas and domestic markets. Other processors sell macadamias direct to MSC here in Australia generally after value adding (salting, roasting, chocolate coating etc), or again via a series of Brokers who then supply the MSC.

Whilst Australia is the leading producer in the world, macadamias are regarded as a commodity which is traded around the world. Macadamia nuts compete with other shelf-stable nuts for market share in some markets, such as snack foods. Prices paid for Nut-in-Shell (NIS) and processed macadamias are directly reliant on relative levels of supply and demand. There is also a strong speculative element associated with macadamias which industry observers believe contributes significantly to price variability at each level of the market.

Growers are not able to influence the price that they receive for their NIS beyond producing and supplying the best quality NIS that they can.

A benchmarking program conducted by O'Hare et al (2008) confirmed that there is significant variability between different sized macadamia enterprises and their location. That said labour and fertiliser remained the two greatest input costs for macadamia farms. Fertiliser costs for macadamias represent a far greater percentage of total costs than in any other sector of horticulture examined in the writing of this submission.

The costs associated with macadamia production for orchards greater than 35 hectares in size for two different age ranges is presented in Table 16.

**Table 16: Percentage Costs on Major Inputs for Macadamia Production of Farms Greater than 35 ha in size, 2004-2006.**

Cost Item	2004-2006(1) %	2004-2006(2) %
Fuel & Oil	5.8	4.2
Seedlings / Seed etc.	-	-
Fertiliser (solid & liquid)	10.8	12.3
Labour (crop establishment, harvesting, packing), include all costs eg. Superannuation, Workers Compensation	32.3	32.4
Management Costs	12.4	8.7
Other Planting Materials (plastic etc)	-	-
Chemicals (pesticides, fungicides, wetters etc)	3.3	4.9
Irrigation – Annual Consumables (tape etc)	1.1	2.4
Irrigation – Water Purchasing / Leasing	-	-
Packaging (cartons, liners, tape etc)	-	-
Other Packing	-	-
Transport (outward)	2.7	1.9
Repairs & Maintenance	8.6	9.5
Electricity	0.6	1.6
Finance Costs	9.1	4.0
Contractors (Harvesting)	0.9	9.9
All Other Variable Costs	12.2	8.2
<b>Total Cost as % of Total Costs</b>	<b>100.0</b>	<b>100.0</b>

Source: O'Hare et al, 2008.

(1) Trees between 6 and 10 years but farms greater than 35 hectares

(2) Trees > 10 years of age but farms greater than 35 hectares

The analysis conducted by O'Hare et al shows that over the period of 2003 to 2006 the profit before tax (PBT) for all macadamia businesses were positive with the exception of the smallest businesses with young trees. The financial performance figures are demonstrated in Table 17 and Table 18. The analysis was conducted on a total of 41 farms.

**Table 17: Summary of Financial Performance of Macadamia Farms between 6 and 10 years of age, 2003-2006.**

Farm Size	Revenue per Ha	Expenses per Ha	Profit per Ha	\$ per kg NIS	Average Yield (t/ha)
<15 ha	\$5,087	\$5,341	-\$254	\$3.22	1.58
>15 ha but <35 ha	\$5,654	\$4,164	\$1,490	\$3.40	1.66
>35 ha	\$7,268	\$3,759	\$3,509	\$4.11	1.77

Source: O'Hare et al, 2008.

**Table 18: Summary of Financial Performance of Macadamia Farms Greater Than 10 years of Age, 2003-2006.**

Farm Size	Revenue per Ha	Expenses per Ha	Profit per Ha	\$ per kg NIS	Average Yield (t/ha)
<15 ha	\$9,289	\$5,574	\$3,714	\$2.99	3.11
>15 ha but <35 ha	\$10,647	\$5,931	\$4,716	\$2.93	3.64
>35 ha	\$11,193	\$5,948	\$5,245	\$3.03	3.69

Source: O'Hare et al, 2008.

What is not captured in the figures presented are that macadamias are a long lead time crop with crops not being harvested generally until four to five years of age, although these crops are generally quite small. Any movement in input costs, in particular labour and fertiliser, impact greatly on the long term viability of macadamia orchard establishment.

We believe this assertion would hold true for any tree crop that has multiple years until the first significant crops are harvested.

A prime example of macadamia industry growers (and we believe anecdotally almonds and hazelnuts) being price takers and not being able to influence prices is demonstrated by the average NIS prices paid in the last two years as shown in Table 19.

**Table 19: Australian Macadamia Harvest Volumes and Average NIS Prices Received by Growers, 1995 to 2007.**

Year	Australian NIS Harvest (tonnes)	Farmgate NIS Price (\$/kg)
1995	17,000	\$3.00
1996	19,000	\$3.05
1997	21,133	\$2.70
1998	24,133	\$2.45
1999	28,300	\$2.25
2000	29,667	\$2.12
2001	32,433	\$2.45
2002	31,500	\$2.75
2003	31,567	\$3.20
2004	34,600	\$3.45
2005	36,233	\$3.65
2006	40,500	\$2.70
2007	38,800	\$1.60

Source: Australian Macadamia Society.

At the 2007 price of \$1.60 per kg NIS no matter what size the property Growers in this year made a PBT loss.

### 3.6 Citrus Industry – South-Eastern Australia

Research was conducted by RMCG in the Sunraysia and Riverina Districts on 31 citrus farms who provided detailed COP data associated with their business operations, for F2004, F2005 and F2006.

A summary of the financial results for these farms is provided in Table 20.

**Table 20: Average Financial Performance of Citrus Farms in the Riverina & Sunraysia Districts, 2004 to 2006.**

Cost Item	F2004 %	F2005 %	F2006 %
Fuel & Oil	2.8	3.1	3.4
Seedlings / Seed etc.			
Fertiliser (solid & liquid)	5.1	6.6	5.4
Labour (crop establishment, harvesting, packing), include all costs eg. Superannuation, Workers Compensation)	30.4	33.4	40.1
*Owners Labour	24.7	21.2	16.7
Other Planting Materials (plastic etc)			
Chemicals (pesticides, fungicides, wetters etc)	4.2	3.7	5.0
Irrigation – Annual Consumables (tape etc)			
Irrigation – Water Purchasing / Leasing	6.1	5.6	5.3
Packaging (cartons, liners, tape etc)			
Other Packing			
Transport (outward)			
Repairs & Maintenance	5.5	4.6	4.2
Electricity	3.2	3.2	3.0
All Other Costs (including freight & packaging)	17.6	18.4	17.0
<b>Total Cost as % of Total Costs</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Source: RMCG, March 2008.

\* Not Included in Other Analysis

Again, as for nearly all farming enterprises in this submission the principal cost centres revolve around labour (and in this study owners' labour), packaging and transport, irrigation and fertilisers.

A financial analysis presented in Table 21 demonstrates that if Growers exclude the cost of their own labour, whilst the EBITDA results remain positive, the total funds available to service capital and costs of finance have declined dramatically from \$3,151 to just \$355 per hectare. By taking into consideration the Growers own labour costs EBITDA's are negative for two out of three years.

**Table 21: Summary Financial Position of Citrus Farmers in the Riverina & Sunraysia, F2004 to F2006.**

Item	F2004 \$	F2005 \$	F2006 \$
Citrus Income	9,136	7,619	6,742
Less: Total Operating Costs (excluding Owners Labour)	5,985	6,825	6,407
<b>EBITDA (excluding Owners Labour)</b>	<b>3,151</b>	<b>794</b>	<b>335</b>
Less: Owners Labour	1,967	1,831	1,285
<b>EBITDA (including Owners Labour)</b>	<b>1,184</b>	<b>-1,037</b>	<b>-950</b>
Citrus Yield (tonnes per ha)	22	26	27

Source: RMCG, March 2008.

The analysis conducted by RMCG also evaluated the performance of the top and bottom 25<sup>th</sup> percentiles in the study group for F2006. These figures are presented as Table 22. Please note the author requested that readers should take care when comparing low and high groups as the averages can be misleading. They indicate that an excessively high or low value may in fact distort the figures.

**Table 22: Summary Financial Position of Citrus Farmers in the Riverina & Sunraysia, F2006 (Top and Bottom 25<sup>th</sup> Percentile & Average).**

Item	Low 25 <sup>th</sup> Percentile \$	Average	High 25 <sup>th</sup> Percentile \$
Citrus Income	4,549	6,742	9,365
Less: Total Operating Costs (excluding Owners Labour)	4,626	6,407	8,127
<b>EBITDA (excluding Owners Labour)</b>	<b>-77</b>	<b>335</b>	<b>1,238</b>
Citrus Yield (tonnes per ha)	21	27	33

Source: RMCG, March 2008.

### 3.7 Bananas– Northern Queensland (1)

This Grower case study involves a business with an annual turnover of \$7.5-10.0 million per annum.

The breakdown of costs for this Grower in 2007 is presented in Table 23.



**Table 23: Production Cost Structures – Large Sized Farm – Bananas.**

Cost Item	2007 %
Fuel & Oil	1.8
Seedlings / Seed etc.	0.3
Fertiliser (solid & liquid)	7.4
Labour (crop establishment, harvesting, packing), include all costs eg. Superannuation, Workers Compensation	48.1
Other Planting Materials (plastic etc)	
Chemicals (pesticides, fungicides, wetters etc)	4.1
Irrigation – Annual Consumables (tape etc)	1.1
Irrigation – Water Purchasing / Leasing	
Packaging (cartons, liners, tape etc)	3.2
Other Packing	
Transport (outward)	16.4
Repairs & Maintenance	
Electricity	
All Other Costs including Interest, Accountancy, Rates, Rent, R&M, Electricity and Insurance (therefore includes overhead costs)	17.6
<b>Total Cost as % of Total Costs</b>	<b>100.0</b>

Source: Confidential

The three most significant costs in the operation of this banana farm are Labour (45.5 per cent), Transportation (16.2 per cent) and Fertiliser costs (7.4 per cent), if we ignore the collective Other Costs which comprise multiple smaller cost centres.

This Grower indicated that per unit costs were higher than normal in 2007 as the financial impacts of Cyclone Larry resulted in lower average yields and higher costs associated with the establishment of new plantations.

Net Profit before Tax (NPT) was 8.7 per cent. This Grower did comment that 2007 was the first profitable year for their enterprise for three years.

An estimated breakdown of the next party in the chain who handled this Growers produce is provided in Table 24.

**Table 24: Estimated Volumes of Product Handled by Next Business in the Chain.**

Item	2005 %	2007 %
% Direct to Supermarket	50	80
% To Supermarkets via Consolidator	-	-
% To Wholesalers	50	20
% To Export / Exporters	-	-
% Direct to Processors	-	-

Source: Confidential

This Grower commented that the increase in sales volumes direct to MSC was not necessarily due to the fact that they paid more, but rather due to the fact that the costs of doing business with them was lower than through the Wholesaler network in the Central Markets. The return advantage of MSC over Wholesalers was approximately 10-15 per cent.

---

## 3.8 Bananas– Northern Queensland (2)

This Grower case study involves a business with an annual turnover of \$2.5-5.0 million per annum.

The breakdown of costs for this Grower in 2007 is presented in Table 25.

**Table 25: Production Cost Structures – Medium Sized Farm – Bananas.**

<b>Cost Item</b>	<b>2005 %</b>	<b>2007 %</b>
Fuel & Oil	1.7	2.6
Seedlings / Seed etc.	-	0.4
Fertiliser (solid & liquid)	7.2	7.5
Labour (crop establishment, harvesting, packing), include all costs eg. Superannuation, Workers Compensation	34.4	25.4
Other Planting Materials (plastic etc)	0.1	-
Chemicals (pesticides, fungicides, wetters etc)	0.1	6.6
Irrigation – Annual Consumables (tape etc)	3.1	0.9
Irrigation – Water Purchasing / Leasing	-	0
Packaging (cartons, liners, tape etc)	20.0	18.8
Other Packing		
Transport (outward)	28.2	23.8
Repairs & Maintenance		
Electricity		
All Other Costs including Land Rental, Leasing, R&M, Phone, and Bank Interest	5.1	6.6
<b>Total Cost as % of Total Costs</b>	<b>100.0</b>	<b>100.0</b>

Source: Confidential

The three most significant costs in the operation of this banana farm in 2007 were Labour (25.4 per cent), Transportation (23.8 per cent), Packaging (18.8 per cent) and Fertiliser costs (7.5 per cent), if we ignore the collective Other Costs which comprise multiple smaller cost centres.

The average COP increased by 22.0 per cent between 2005 and 2007. The areas of greatest cost increase was associated with Packaging and Chemicals.

The lack of time available did not permit HAL to discuss with this Grower the factors that contributed to the reduced labour costs from 2007 to 2005.

This Grower indicated that per unit costs were higher than normal in 2007 as the financial impacts of Cyclone Larry resulted in lower average yields and higher costs associated with the establishment of new plantations.

Average net sales returns were 37.6 per cent higher in 2007 when compared with 2005. Reduced supply caused by Cyclone Larry was the major reason why returns were higher according to this Grower.

An estimated breakdown of the next party in the chain who handled this Growers produce is provided in Table 26.

**Table 26: Estimated Volumes of Product Handled by Next Business in the Chain.**

Item	2005 %	2007 %
% Direct to Supermarket	-	-
% To Supermarkets via Consolidator	30	0
% To Wholesalers	70	100
% To Export / Exporters	-	-
% Direct to Processors	-	-

Source: Confidential

This Grower believes that whilst the MSC may on average be prepared to pay an extra \$1-2 more per carton and meet the ripening costs, the added costs of the Non-Grower Consolidator did not result in any farm gate benefit to this Grower. As a consequence this Grower moved away from supplying the MSC Non-Grower Consolidator to supplying only the Wholesale sector.

Further, this Grower had experienced situations where their green Bananas were rejected by one MSC. The Grower then needed to place these bananas onto the Central Market and sell them at a considerable discount as the buyers used this knowledge to 'knockdown' the price.

This Grower also commented that their belief was that the MSC had negotiated with larger Growers price arrangements that included a maximum / minimum pricing formula. This Grower contends that in times of excess supply that consumers do not benefit from the lower prices that are on offer in the general market place due to this pricing formula. The late arrival of this Grower's information did not permit HAL to investigate this claim further.

### 3.9 Pineapples– South-Eastern Queensland

This Grower case study involves a pineapple production business with an annual turnover of between \$10 and \$15.0 million.

The breakdown of costs for this Grower in the production of pineapples in 2005 and 2007 is presented in Table 27:

**Table 27: Production Cost Structure – Large Sized Farm – Pineapples, 2005 and 2007.**

Cost Item	2005 %	2007 %
Fuel & Oil	-	-
Seedlings / Seed etc.	-	-
Fertiliser (solid & liquid)	4.4	4.5
Labour (crop establishment, harvesting, packing), include all costs e.g. Superannuation, Workers Compensation	42.3	44.5
Other Planting Materials (plastic etc)	-	-
Chemicals (pesticides, fungicides, wetters etc)	2.8	2.7
Irrigation – Annual Consumables (tape etc)	-	-
Irrigation – Water Purchasing / Leasing	-	-
Packaging (cartons, liners, tape etc)	13.3	13.6
Other Packing	-	-
Transport (outward)	17.8	17.3
All Other Variable Costs	19.4	17.3
<b>Total Cost as % of Total Costs</b>	<b>100.0</b>	<b>100.0</b>

Source: Confidential

For pineapples the production costs have increased 12.2 per cent from 2005 to 2007. Although the lack of rain in the area has added marginally to costs, the cost increases are due simply to increases in costs of inputs.

EBIT per kilogram has decreased from 28 cents per kilogram to 21 cents per kilogram over the survey period, even though gross returns per kilogram have increased 5 cents per kilogram.

The market channels that this Grower supplies is presented in Table 28.

**Table 28: Estimated Volumes of Product Handled by Next Business in the Chain.**

Item	2005 %	2007 %
% Direct to Supermarket	54	72
% To Supermarkets via Consolidator	-	-
% To Wholesalers	32	14
% To Export / Exporters	2	1
% Direct to Processors	12	13

Source: Confidential

The principal reasons why this Grower is delivering increased volumes of pineapples direct to MSC reflects the quality of the produce that is offered and the systems (communication, production etc) that the Grower is able to offer the MSC. The Grower seeks to maximise the volumes of product sold direct to MSC. Sales returns are 31 per cent higher to MSC in comparison to Wholesalers.

# 4. Grower Views on Alternative Marketing Channels

## 4.1 Factors Influencing Grower Choice of Marketing Channel

Growers consulted by HAL indicated a wide variety of channels to which they sold their produce (see Figure 1). Some Growers marketed the vast majority of their produce to MSC, others sold no produce directly to a MSC preferring to supply to the Wholesale markets or to Processors, whilst yet others supply a combination of market channels. Factors which determine to whom Growers transact include:

1. Price Return. The major factor. Growers will typically seek to trade where they believe they are able to achieve the highest price for their commodity.
2. History. Growers may chose a particular channel based on the fact that it is the channel that they have supplied in the past and so will continue to do so.
3. Belief / Philosophy in the Central Market. Growers may believe that by supporting and maintaining the strength of the Central Market that the forces of supply and demand act in a more perfect manner, rather than have the 'distortionary' effects of market sales outside of the Central Market system.
4. Marketing Skills. A number of Growers contacted indicated that their skills lie in the production of horticultural produce and not in its marketing. These Growers typically appoint Wholesalers to perform this role on their behalf.
5. Risk Minimisation. Growers may choose to supply multiple channels in order to minimise or average the risk associated with a particular market channel. Further, by doing so the Grower also believes that this gives them greater market knowledge in negotiating with the various channels.
6. Volume Fit. Smaller growers who have no unique product or supply timing advantages and low product volumes will typically not be able to access MSC as an Approved Supplier.

Certainly in respect of MSC there are limited number of 'slots' available for Growers / Suppliers to supply produce. Both MSC have a stated policy that the number of Approved Suppliers will continue to decline over time. As stated in the first submission this will result in either:

- More Growers becoming Network Growers on behalf of Consolidators who supply MSC; and / or,
- more Growers supplying produce to the Central Markets, if Grower Consolidators seek to increase their own supply volumes to MSC.

## 4.2 Doing Business with MSC

Only a proportion of all Growers do business direct with MSC. In the time associated with the preparation of this submission it was not possible to determine the percentage of Growers who either directly or indirectly supply produce to a MSC.

### 4.2.1 INCREASED COSTS OF BUSINESS WITH A MSC

Both MSC and non-MSC Suppliers raised a number of negative factors associated with 'doing business' with a MSC. The majority of these factors are raised by comparing the costs of doing business with the Mid-Chain. These are discussed in Table 29.

**Table 29: Issues Raised by Suppliers on Additional Costs of "Doing Business" with MSC.**

Factor	Discussion
Packhouse Re-Configuration	Packers who are required to supply RPC's have in many instances had to meet the additional costs of re-configuring their packhouse operation to enable this to occur. This has / will result in additional capital expenditure.
Carton Stock Management	Packers who are required to supply RPC's must carry at least one additional stock line.
Palletising	MSC require suppliers to standardise pallet counts / no. of packs per pallet so as to fit directly into their racking. As a consequence pallet usage is not maximised. Different numbers of units per pallet provide additional management issues at packhouse.
Transportation	Lower counts per pallet demanded by MSC do not allow maximisation of volume of pallet space therefore increasing per unit costs associated with transportation.
Transportation	Suppliers are required to deliver direct to Distribution Centre (DC). Transporters charge a premium for these deliveries as they are not able to backload out of the distribution centre and unless they are Full Truck Loads (FTL) will then need to deliver to another site/s.
Transportation	Suppliers delivering to DC's must meet specific time slots, have specific truck / product temperatures and truck types. Failure to meet standards may result in produce being rejected.
Carton Labelling	Suppliers to MSC are required to print additional labelling information pertaining to dates packed etc on the day of shipment. This may also require additional capital expenditure.
Pallet Labelling	As per "Carton Labelling".
Consignment Rejection	Suppliers to MSC may on occasion have their consignments rejected which is very unlikely through the Central Markets. Product which is packed into RPC's or One-Touch Packaging may then have to be sold on the Central Markets often at a considerable price markdown as the product is perceived by buyers as "Rejected". Further, the packaging type may not 'fit' with that of others. Also, a Supplier may be required to re-pack the product at any additional expense to them.
RPC Stock Management	Suppliers have an added responsibility for the orderly management of RPC stock for which daily rental is charged if a Woolworths RPC. Loss of stock results in added costs to the Supplier.

Factor	Discussion
Quality Systems	Each MSC has a different QA system requirements for direct and indirect suppliers.

Source: Various pers comm., CDI Pinnacle Management.

In general, views expressed by growers are that both MSC are seeking to increasingly move more costs of doing business back down the chain to Growers, Wholesalers etc. This is reflected in respect of transportation of produce to DC's, stock management of RPC's and introduction of traceability systems (product labelling / tracking).

Sources suggest that the next focus of both MSC will be in the area of developing systems that provide for greater adherence to quality specifications and more complex on-farm and in-packhouse quality assurance systems. This will add further costs to the Grower Packer and Packhouse, neither cost of which will have any mechanism for the Packer or Packhouse to re-coup.

#### 4.2.2 RPC'S AND ONE-TOUCH PACKAGING

The most significant initiatives of the two MSC, that have impacted directly on Growers within the last three years, has been the introduction of RPC's by Coles Supermarkets in 2006 and One-Touch Packaging (OTP) and RPC's by Woolworths Supermarkets.

HAL's first submission provides some general details on the introduction of RPC's and OTP, although some further discussion is warranted.

Growers were initially concerned about impacts on their business viability with the introduction of RPC and OTP. However, both MSC have undertaken strategies to ameliorate these concerns as well as mitigate possible concerns associated with third line forcing.

Both Coles and Woolworths contend that by moving to the RPC program that they have or are able to achieve (in comparison with standard cardboard packaging):

- More rapid cooling of produce resulting in longer shelf life and better presentation to the customer;
- Low levels of in-transit damage to produce;
- Less damage in DC handling; and,
- Lower environmental impact due to their ability to recycle.

Suppliers do not directly benefit from the cost savings achieved from MSC moving to RPC's. This is exacerbated by having parallel systems that are not compatible, a further but avoidable burden on businesses that supply both MSC.

Independent sources have however commented that with the introduction of the RPC program, both MSC have had to develop better communication systems with Suppliers particularly in regards to product needs and specifications, a situation obviously viewed positively by the supply end of the industry.

#### Coles Supermarkets

Coles Supermarkets operates its own 'in-house' RPC pooling system, with ownership of crate, washing and logistics assets.



For each new Supplier a Coles representative negotiates with them on the basis that the cost to the Supplier does not increase in comparison with using traditional cardboard cartons. Factors that are taken into consideration when determining the rate to be charged include:

- current cost of cardboard or other packaging materials;
- cost of collection of RPC's;
- erection cost differences between RPC's and traditional packaging;
- freight differences per unit between RPC's and traditional packaging; and,
- capex costs associated with re-configuring packhouse layout and handling systems (these costs are amortised).

RPC costs are fixed for a period of three years so as to provide 'certainty' to the Supplier in respect of packaging costs to the MSC.

The Coles RPC program commenced operation in October, 2005 with a rollout on a product by product basis from that date. Discussions with MSC Suppliers indicate that despite in some instances significant teething problems the Coles RPC system is generally working well, although there are still some concerns with logistical issues in high volume, short season crops and the need to switch between different pack types (where a Supplier is supplying other customers).

Suppliers have hire fees deducted from remittances. Payment deductions occur 14 days after pick up of their crates.

### **Woolworths**

The Woolworths RPC program relies on an external source provider, Chep, to provide RPC's to packhouses. HAL understands the costs negotiated by Woolworths with CHEP were strongly linked to cardboard carton prices available to packhouses at the time. Currently CHEP charges Packhouses an issue fee, daily hire fee and additional charges if RPC's are moved across state borders or zones within states. The rate does vary between locations. A Packhouses ability to negotiate on RPC rates is dependant on the volume of existing business they do with CHEP.

Currently, Woolworths do not insist that Packhouses pack their product in RPC's. Our observations suggest however that having the two systems that are currently in place can't be continued for an extended period. Unless there is a strong cost reduction incentive provided in switching to RPC's, Growers are concerned that any added costs of Woolworths RPC will further erode their profitability.

---

## **4.3 Chain Transparency Between Growers & Other Chains Participants**

There are distinct differences between how Growers 'do business' with MSC, Wholesalers and Processors. These differences are discussed in Table 30. HAL wishes to acknowledge that these are general observations and do not necessarily encompass all Grower and MSC, Wholesaler and Processor interactions.

**Table 30: Characteristics of Growers Ability to Negotiate on Prices Received and Cost Increases with Major Customer Groups.**

Item	MSC	Wholesaler	Processor
Price Setting Mechanism	Central Market price used as the benchmark pricing mechanism.	Central market pricing based on supply and demand. The price balance largely determined by volume / quality relationship of wholesalers and their customers.	<p><u>Fresh Food Processors:</u> Price paid by processors to Suppliers calculated on final end price that the Processor can achieve for their product less a margin. Reference however made to Central Market price in order to identify cost competitiveness.</p> <p><u>Non-Fresh Processors:</u> Typically base prices on final end price they can achieve. Reference often made also to price of imported raw ingredients.</p>
Transparency of Price Information	<u>High.</u> Supplier is aware prior to shipment of the price to be received.	<u>Variable.</u> Supplier typically is not aware of price to be paid <u>prior to shipment</u> , although indicative prices may be indicated. Exception where fixed price deal is agreed to prior to shipment. This type of transaction forms only a small part of total transactions to this segment of the chain.	<u>High.</u> Supplier is aware prior to shipment of the price to be received and is usually aware well in advance of harvest, and on occasion depending on the crop before the production season commences. A industry source suggests that up to 25 per cent of transactions are based on fixed pricing arrangements over extended time periods.
Ability to Pass on Cost Increases	<p><u>Fixed Price / Fixed Term Negotiations.</u> Comparatively high as price for product negotiated is independent of the market price, although reference is made to market prices as benchmark.</p> <p><u>Weekly Agreed Price / Volume Negotiations.</u> Low as price is negotiated predominately on the basis of market prices. If extremely high market prices,</p>	<u>Low.</u> Comparatively low incidence levels of Suppliers and Wholesalers negotiating and then achieving price increases for products based on cost increases. Market forces of supply and demand are used as the price setting mechanism. Growers generally indicate that they do not perceive that the Central Markets is an area where	<u>Higher comparatively.</u> Price paid to Suppliers typically a fixed price for a period of time, subject to reviews. Suppliers who are able to demonstrate cost increases may be able to pass on cost increases, however this depends on the nature of the commodity, the total number of actual or potential suppliers, in some instances the import replace ability of the product and the ability of the

Item	MSC	Wholesaler	Processor
	<p>MSC may wish to negotiate a lower price. Conversely, at low market prices, including below of cost of production, the Supplier may be able to negotiate some increase above market price.</p>	<p>cost increase negotiations can occur in a meaningful way, based on tradition.</p>	<p>Supplier to differentiate their product in the eyes of the Processor. Suppliers and Processors may explore co-jointly methods to lower supply costs. Processors have been known to subsidise input costs (eg water during drought) and make earlier payments to Growers to assist with harvest costs / cash flow.</p>
<p>Supplier Awareness of Quality Specification Requirements</p>	<p><u>Very High.</u> Suppliers are very aware of expectations of MSC in terms of acceptable / unacceptable quality parameters.</p>	<p><u>Variable but typically low but improving.</u> Wholesalers typically do not impose quality standards on Suppliers. Wholesalers may communicate quality issues to Suppliers, although some Wholesalers see a risk that they may lose the supplier, if complaints about quality supplied to them are made too often. The absence of a national quality standard for fruit and vegetables seen by Wholesalers as a major weakness of their ability to develop uniform quality standards. The development of FreshSpecs by the Australian Chamber may/will assist with this issue.</p>	<p><u>High to Very High.</u> For fresh food processing Suppliers are very aware of quality standards required. Where products are to be supplied to non-fresh market segments, whilst standards are in existence the compliance may be variable.</p>

Source: CDI Pinnacle Management, 2008.

## 5. Additional Information to Submission One

---

### 5.1 'Combined Marketing' and Horticultural Code

The mandatory Horticultural Code of Conduct was executed on December 13<sup>th</sup> 2006 and became operational in early 2007. The Trade Practices (Horticulture Code of Conduct) Regulations 2006 (HCOC) very specifically applies to traders (agents and merchants) and Growers selling their produce to an agent or merchant.

An anomaly exists however in the HCOC whereby Network Growers through the provision of service providers such as an Agent, Merchant or Non-Grower Consolidator, have their returns 'averaged' through a pooling mechanism. Under the current definitions of the HCOC an Agent, Merchant or Non-Grower Consolidator would be committing an offence under the HCOC, despite the fact that the Network Growers are in agreement that it should occur.

For example, a group of Growers may decide to have their returns averaged by the Agent, Merchant or Non-Grower Consolidator on the basis of a period of time (week, month or year), regional location, across a grade/s, End User / Customer etc. The group of Growers may willingly enter into such an arrangement so that in-equities or perception of same do not occur. By pooling, a marketer does not have to be concerned which Growers product goes to which market. For instance, if an export market is being developed which has provides lower returns initially, the marketer does not need to be concerned that all of Grower A's product continues to go to export, because with pooling they will receive some of the benefit of going to the higher priced markets through averaging.

Pooling does not imply that packout is not a major factor in net return calculations or that the transaction is not transparent.

Network Growers or other similar Grower groups have expressed concerned that the HCOC does not cover this eventuality which is quite common across a broad range of fruit and vegetables.

---

### 5.2 Equivalence of Horticultural Product

HAL and the production sector have in the past expressed concern that the importation of some fruit and vegetables currently permitted into Australia may present a risk to either human health or bio-security.

In the report entitled "Ensure Equivalence of Imported Product", 2007, prepared by Food Compliance Australia Pty Ltd on behalf of HAL, the report concluded

*“it is likely that current administrative processes set up in the Imported Food Inspection Scheme do assure the Australian community that all food imported into Australia complies with all requirements of the Code”.....In principle, domestic producers must comply with all the requirements of food as set out in the Code”.*

HAL wishes to seek assistance from all parties that are involved in the importation of fruit and vegetables into Australia that they seek to ensure that the processes applied to evaluation of the product in terms of the Code are complied with and where necessary lobby government to ensure equivalence of the standards described in the Code between imported and domestically produced fruit and vegetables.

# Bibliography

Australian Automobile Association, **Retail Diesel Fuel Prices**. [Online] Available at <http://www.aip.com.au/pricing/retail/diesel/national.htm>

Australian Competition and Consumer Commission, 2007. **Examination of the prices paid to farmers for livestock and the prices paid by Australian consumers for red meat**. Canberra, Australia

Baker, M, 2008. **Small retailers must hunker down**. [Online] Available at <http://www.smallbusiness.theage.com.au/managing/sales/small-retailers-must-hunker-down>

CDI Pinnacle Management Pty Ltd, 2005. **Horticultural Labour Situation Statement**. Brisbane, Australia.

Department of Employment & Industrial Relations, 2007. **Wageline - Award Summary Sheet Retail Industry Award – State 2004**. Canberra, Australia.

Department of Primary Industries & Fisheries, University of Southern Queensland, New South Wales Department of Primary Industries, 2008. **Interim Final Report – On-farm economic analysis in the Australian macadamia industry**. Queensland, Australia.

Growcom, 2007. **Fruit and Vegetable Growing Industry Award – Historical Review of Wage Increases**. Brisbane, Australia.

Growcom, 2007. **Fruit and Vegetable Growing Industry Award State 2002 – Pay Rates Summary Sheet – State Employers**. Brisbane, Australia.

Growcom, 2007. **Fruit and Vegetable Growing Industry Award State 2002 – Pay Rates Summary Sheet – Federal Employers**. Brisbane, Australia.

Herald Sun, 2007. **Water nears \$1000 mark**. [Online] Available at <http://www.news.com.au/heraldsun/story/0,21985,22390053-2862,00.html>

Incitec Pivot, 2008. **High pre-season demand for fertilizer**, Melbourne, Australia.

Maiden, M, 2007. **Gunns still likely to enjoy higher world pulp prices**[Online] Available at <http://www.smh.com.au/news/business/gunns-still-likely-to-enjoy-higher-word-pulp-p...>

NSW Farmers Association, 2008. **Fertiliser Prices**. Sydney, Australia.

Poyry, 2007. **World Pulp and Paper Demand with Special Emphasis on Bleached Hardwood Market Pulp**. Legislative Council, Tasmania, Australia.

Pulp and Paper, 2006. **Pulp and Paper NetLetter. Pulp Prices Rising in World Markets.** [Online] Available at <http://www.pulpandpaper.net/NetLetter/Features/04192006.asp>

Rabobank, 2007. **Agricultural fertilizer prices set to remain high on back of upsurge in global demand – industry report.** [Online] Available at [http://www.rabobank.com.au/inside\\_rabobank/news/media\\_release\\_29...](http://www.rabobank.com.au/inside_rabobank/news/media_release_29...)

Rabobank, 2007. **Rabobank Global Focus. Fertiliser – a precious commodity.** Sydney, Australia.

RMCG, 2008. **Part One Report on Results BizCheck Australian Citrus Industry, Draft Report.** Victoria, Australia.

The Age Company Ltd, 2008. **Food prices: who's to blame?** [Online] Available at <http://www.theage.com.au/news/in-depth/stronginsightstrong>

Uren, D & Waiquist A, 2007. **Wages outstrip food rises.** The Australia, 12 July 2007.