

# **Horticulture Innovation Australia**

## **Final Report**

### **Feasibility study to collect and report wholesale market price information for the Australian vegetable industry**

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GHD Pty Ltd

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VG15057

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## Summary

Currently market price reporting in Australian produce markets involves the collection of price information through in-person interviews with wholesalers and buyers, with daily reports produced and distributed to paid subscribers. This method has remained virtually unchanged for many years, despite the emergence of new technology.

This study explores the feasibility of alternative methodologies for the collection of market price information relating the Australian vegetable industry. The study reviews the current system well as other systems used in both international horticultural markets or other Australian agricultural commodity markets.

The study identifies the following alternative data collection options, which are evaluated in terms of feasibility:

1. Third person cloud-based data collection and sharing
2. First person cloud-based data collection and sharing
3. Accessing data from credit services
4. Accessing data from accounting software
5. Strengthening current system

The results do not identify a clearly feasible method of obtaining accurate price data, therefore the study provides a pathway for strengthening the current system.

## Keywords

Vegetable, price reporting, wholesale, technology, markets

## Introduction

GHD was commissioned by Horticulture Innovation Australia Limited (Hort Innovation) to explore the feasibility of alternative methodologies for the collection of market price information relating the Australian vegetable industry.

This study provides a review of the current market price reporting system as well as systems operating internationally and for other Australian agricultural commodities. Several alternative wholesale market price collection models are identified and evaluated against the current system.

This report contains information obtained through broad consultation with supply chain participants and stakeholders, including growers, wholesalers, retailers and market reporting service providers. GHD and Hort Innovation would like to thank all stakeholders for their valuable input.

The terms of reference for the study were as follows:

- Identify and evaluate potential wholesale market price collection models (including the development and operational costs) against an outcome of achieving transparent market price reporting across a range of supply chain arrangements for the Australian vegetable industry;
- Identify, define and evaluate the wider operating framework ('the environment') necessary to ensure effective implementation, adoption and function of the identified price reporting model(s), including technology requirements;
- Define the legal considerations, concerns and possible limitations that apply to the collection and reporting of price data collected through the identified models;
- Consider and discuss concerns relating to price reporting integrity and product quality/commodity definition;
- Discuss implementation options for the preferred model(s);
- Complete appropriate economic analyses and evaluation of the identified price reporting models;
- Evaluate potential identified operating models against the existing 'status quo' price reporting framework and existing usage and uptake through the supply chain; and
- Identify examples of other price reporting systems for agricultural industries (in Australia and internationally, how these are used for improving industry decision making and price transparency, and their relevance and compatibility regarding an Australian vegetable industry wholesale price reporting system.

## Methodology

This study was completed through the following steps<sup>1</sup>:

**Step 1: Background review:** The first stage of the project involved a background review of the current system of price reporting (Section 2.1), including the perceived issues and limitations of the current system (Section 2.3.6). GHD then reviewed similar daily price reporting systems operating internationally (Section 3.1) and for other agricultural commodities in Australia (Section 3.2).

**Step 2: Identifying options:** GHD then identified a number of broad options for undertaking market price reporting (Section 4).

**Step 3: Stakeholder consultation:** Stakeholders were forwarded a brief discussion paper and electronic survey to complete (Appendix A). A total of 59 responses via the online stakeholder survey, telephone and in-person interviews. A summary of results is presented in Appendix B.

**Step 4: Evaluation options:** Options were broadly evaluated using a range of selection criteria (Section 5).

**Step 5: Finding and recommendations:** Outlined in Section 6.

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<sup>1</sup> Section references mentioned through this report apply to the full GHD report, which is provided as an appendix.

## Outputs

Output from this study include:

- A review of the current system of market price reporting in Australian horticultural markets (Section 2)
- A review of market price reporting systems used in international horticultural markets (Section 3.1)
- A review of market price reporting systems used in other Australian agricultural commodities (Section 3.2)
- An evaluation of alternative options for undertaking market price reporting in Australian horticultural markets (Section 5)
- Findings and recommendations (Section 6)



## Outcomes

### *Review of market price reporting systems used in international horticultural markets*

The review did not identify any international systems which automatically collect actual transactional price data, without the need for 3<sup>rd</sup> party inspectors or surveys. The exception is the Netherlands system which can supply real-time actual prices, due to the Dutch auction sale method.

All international systems reviewed provide data to users/subscribers via a web portal and/or app, with most allowing for easy comparison and tracking of prices over time, as compared with the Australian system which relies on pdf. email reports.

### International comparison of market price reporting systems

Country	Subscription cost	Collection method	Format
Australia	\$150-400/annum	In person, some verification and cross checking	Email reports
USA	Free (government service)	Telephone and in person Some statistical verification (removal of outliers)	Web database
Canada	Free (government service)	Face to face interviews with a sample of wholesalers  Some statistical verification (removal of outliers)	Web database
Russia and Ukraine	\$780/annum	Mostly telephone interviews, with growers, traders, importers, exporters and wholesalers.	Email, web database
Cambodia	Free (government service)	In person collection by government officers, as well as voluntary prices submitted by traders via SMS	Web database, SMS price alerts for each trader
Netherlands	User pays (€30-35 per month)	Price data collected from Dutch auction systems	Web portal and app
India	Free (government service)	In person  No verification	Web database  (apps, sms and voice planned)

### *Review of market price reporting systems used in other Australian agricultural commodities*

The review found that the type of market price reporting system adopted by different industries is often reflective of the type of sale method used and the variation in quality and demand. Accurate data can readily be collected when commodities are sold by auction (livestock, wool, seafood) or when buyers advertise price offers (grain). Some of the commodities reviewed (grain, wool) are much less perishable than horticultural produce, and therefore have less need for daily price reporting as they are less susceptible to short term market fluctuations.

For different commodities market information is funded via statutory levies (livestock, pork) or via various user pay models (wool, grain, seafood).

### *Summary of market price reporting in other food or agricultural commodities*

Industry	Sale method	Data collection method	Service Provider	Funding method
Horticulture	Direct sale (prices not advertised)	Consultation	Private (Ausmarket Consultants)	User pays
Livestock	Auction or direct sale (prices not advertised)	Auction attendance and processor consultation	Industry (MLA)	Statutory levy
Wool	Auction	Electronic	Industry (AWEX)	User pays
Pork	Direct sale (prices not advertised)	Survey of both buyers and producers	Industry (APL)	Statutory levy
Grain	Direct sale (prices advertised)	Publically available data	Private	Free/user pays
Seafood	Direct sale (prices not advertised)	Electronic from Dutch auction system	Sydney Fish Market	Free service for registered suppliers

### Evaluation of alternative data collection models

Based on the background information and analysis above, GHD identified five different options for market price data collection. Each option, including the status quo, were evaluated against a range of important criteria, using the following rating system: 1. very poor, 2. poor, 3 neutral, 4 good, 5 very good. The results are provided below with 'very poor' or 'poor' ratings highlighted in red. More detailed justification for ratings is provided in Section **Error! Reference source not found.** of the report.

	Status quo	Option 1 Third person cloud-based data collection and sharing	Option 2 First person cloud-based data collection and sharing	Option 3 Accessing data from credit services	Option 4 Accessing data from accounting software	Option 5 Strengthening current system
Data accuracy	3	2	1	3	3	4
Timeliness	4	5	5	2	2	4
Data usability	2	4	4	4	4	4
Technical feasibility	5	3	3	4	3	4
Likely wholesaler participation/ coverage	4	3	1	4	5	4
Legal feasibility	5	5	5	1	1	5
Cost	4	3	4	4	4	3
<b>TOTAL</b>	<b>27</b>	<b>25</b>	<b>23</b>	<b>22</b>	<b>22</b>	<b>28</b>

The results suggest that Option 5 (Strengthening current system) is the most suitable, with Options 1 to 4 all scoring lower than the current Status Quo, with key issues including data accuracy, timeliness and need for legislative change.

## Evaluation and discussion

Key findings from this study are listed below.

### *Data accuracy*

The perceived inaccuracy of data was a key issue for many stakeholders. Many growers clearly distrust the prices which wholesalers are reporting, and some cited anecdotal evidence of perceived inaccuracy in market reports.

Generally, growers believed wholesalers were reporting lower prices to hide profits. Counter to this, some wholesalers and market reporters believed some growers regularly over-estimate the quality and therefore value of their produce.

### *Data access and price*

Many growers resent having to pay for market information, particularly if they also question the accuracy of price data, and believe they should be afforded better price transparency via the Horticultural Code.

Many wholesalers also resent having to pay subscriptions for market reports, when they are each day asked to freely provide prices to market reporters.

### *Confusion around market information versus price transparency*

Consultation found that many stakeholders do not make a clear distinction between the provision of market information, which provides insights around market trends and movement, versus price transparency whereby involved parties are able to know prices received for particular products.

Many growers have long campaigned for price transparency measures, allowing them to know exactly what their produce sold for, however this is not the typical function of market information services, which instead aims to provide an indicator of overall market trends.

Consistent with the terms of reference, this study has focussed on ways to improve market information, rather than achieving ultimate price transparency, which would be better pursued through the Horticultural Code, with improved wholesaler-grower reporting. Indeed, none of the identified options are capable of achieving ultimate price transparency, as all would involve aggregation of data and/or the removal of identifying personal information, so as to protect privacy and ensure wholesaler participation.

However, a robust and well utilised market reporting system can contribute to price transparency, by providing a meaningful guide from which growers can compare their individual returns and discuss with wholesalers.

### *Potential harm from destabilising current system*

Wholesale market price reporting in Australia has been privatised and is now being delivered by a range of private service providers. While the current service, delivered by Ausmarket Consultants and their contributing service providers, has been operating successfully for over 20 years, it remains somewhat fragile due to:

- Limited profitability
- Reliance on a small group specialised market inspectors, working in a sometimes difficult market environment
- Aging software
- The ongoing challenge to demonstrate the integrity and accuracy of the system.

While exploring opportunities for improved services, industry should be mindful not to discredit and weaken the current system, which only survives through the support and co-operation of wholesalers (voluntarily providing prices) and subscribers (paying for the service). If stakeholders lose confidence in the current system, it may not survive into the future and this would leave the industry with no national market price reporting system and be a poor outcome for industry, including growers.

### ***No clearly viable opportunity to automatically obtain price data***

Most international market price reporting systems rely on obtaining data via in-person, telephone or email consultation with wholesalers, importers, exporters and growers. GHD did not identify any international systems which automatically collect actual sales data, with the exception of the Netherlands system which is able to collect actual data via to the Dutch auction sale method. This system also allows for real-time reporting of prices after auctions are complete.

GHD explored potential options for obtaining data automatically via either wholesaler accounting software or credit services. In both cases stakeholder consultation found that wholesalers or credit service agencies are unlikely to voluntarily share data. Therefore data could only be obtained in this way, if some form of new regulation were introduced.

### ***The WA experiment***

In Western Australia, Market West is developing a new price data collection system, which will automatically obtain price information directly from the accounting systems used by wholesalers in the Perth Markets. It should be noted that at Perth Markets it is a lease requirement for wholesalers to provide throughput information, which is not the case in other states.

It remains to be seen if this system will be successful in delivering rigorous, accurate and timely market price information. However, if so it may path the way for other markets to consider this option.

### ***Opportunities to improve data usability***

At present there is no way for Australian growers (including subscribers to Ausmarket Consultants) to access, chart and analyse price data from different categories/markets over different time periods (weeks, months, years).

This type of analysis can readily be undertaken for other Australian agricultural commodities, and is key for helping producers understand market trends and cycles, and to benchmark their own business performance and profitability.

Subscribers to Ausmarket Consultants receive emailed pdf reports, whereas all international market information systems reviewed provide data to users/subscribers via a web portal and/or app, with most allowing for easy comparison and tracking of prices over time.

### ***Opportunity to develop national consistency in reporting***

There is a need for nationally consistent product categories and data collection protocols to help streamline price data collection. A significant amount of time is currently spent converting different state based reports into a nationally consistent report.

### ***Opportunity for broader industry engagement and input***

All industry sectors have a strong interest in receiving accurate and reliable market information. Ausmarket Consultants and their contributing service providers have close relationships with the wholesale and retail sectors, due to their regular market floor engagement, however there is much less direct engagement and dialogue with the growing sector.

Providing a forum for all interested sectors to have input into market price reporting could help resolve issues and ensure the service meets stakeholder expectations.

### *Opportunity for industry investment in current system*

Given the relatively small number of growers currently subscribed to market reporting services, there is an opportunity for industry-wide investment in the current system, to make data available to all growers.

The 20 year historical database of daily prices maintained by Ausmarket Consultants is a valuable resource which could be utilised more to understand long-term trends, market cycles, and impacts when production from different regions reach markets. While many growers question the accuracy of data, when industry levy funds have been used to provide market information to growers, including the Horticultural Statistical Handbook and Australian Mango Market Report (discussed in **Error! Reference source not found.**), the outputs have generally been valued by growers.

Stakeholder consultation suggests there is limited support for a wholly levy funded market reporting system, however most stakeholders support a combination of user pays and levy funding. Many other Research and Development Corporations offer market price reporting services, which are typically well utilised and valued by levy payers.

## Recommendations

Given the above findings it is recommended that Hort Innovation seeks to strengthen the current system of market price reporting, through collaboration with key stakeholders. In acknowledging the fact that many growers question the accuracy of market information, a trial exercise conducted over 12 months would be an appropriate way for Hort Innovation and growers to gauge the value of strengthening the current system through collaboration, without committing to any ongoing arrangements. The trial could include a number of different components, outlined below.

- Hort Innovation should establish a small steering committee of vegetable producers with an interest in market reporting. The committee would include one grower representing each of the largest 4-6 vegetable crops, as well as a representative from Ausmarket Consultants. There may also be scope for including a wholesaler (or representative) on the committee, to provide input from the perspective of the wholesaling sector.
- The steering committee would be tasked with developing a weekly market report which would best suit growers needs. Reports may include tailored analysis around price trends (short and long term), comparisons across different markets, quality, supply and commentary about prevailing market conditions driving market prices. Reports should be formatted with capability to be accessed from a number of platforms, e.g. mobile, desktop, email etc. to improve engagement.
- Hort Innovation purchase data from Ausmarket Consultants over a 12 month period to produce separate weekly market reports for 4-6 vegetable commodities in line with the format agreed to by the steering committee. Reports will be published on the Hort Innovation website and also made available to other relevant industry bodies, and circulated to vegetable growers.
- During the trial growers will be encouraged to report any perceived inaccuracies directly to Ausmarket Consultants and/or the Steering Committee. Each reporting event will be followed up by Ausmarket Consultants through discussions with growers and wholesalers. Where appropriate findings will be published in the following week's report.
- In order to understand and appraise the data collection methodology and systems used by Ausmarket Consultants, the Steering Committee should spend one morning with market inspectors in the Brisbane Markets, including meeting with the wholesaling sector.
- At the conclusion of the 12 month trial, the success of the initiative should be evaluated in a number of ways:
  - Uptake: Track the number of times the reports are downloaded in total and by unique users
  - Value and usefulness: Randomly select a group of 10-20 growers of each commodity who will be asked to review the weekly reports and assess the value and benefit for their business
  - Perceived accuracy: Track the number of reported inaccuracies (and outcomes from follow-up)
  - Steering committee feedback: The committee's view on the success of the trial and the suitability of data collection and reporting.

Depending on the results of the trial, industry may wish to pursue a number of different options, including: discontinuing, continuing or expanding the service e.g. by adding additional commodities or through the development of searchable web databases, apps etc. The results of the trial may also encourage industry to pursue improvements to the current system including through improved data validation, development of standard protocols for data collection and development of agreements with other industry sectors on the role of market reporting.

If at the end of the trial, the current market reporting system is found to be deficient, industry may wish to continue to explore alternative options.

## Intellectual property/commercialisation

No commercial IP generated' if there is none to report



## Acknowledgements

GHD acknowledge and thank the many stakeholders who provided input into the study, including growers, wholesalers, retailers, credit service agencies and market reporters. GHD particularly thank Ausmarket Consultants for allowing access to their business operations.

## Appendices

GHD, 2017. *Feasibility study to collect and report wholesale market price information for the Australian vegetable industry*. Horticulture Innovation Australia.



## **Horticulture Innovation Australia Limited**

Feasibility study to collect and report wholesale market price information for the Australian vegetable industry

March 2017

# Executive summary

GHD was commissioned by Horticulture Innovation Australia Limited (Hort Innovation) to explore the feasibility of alternative methodologies for the collection of market price information relating the Australian vegetable industry.

This study provides a review of the current market price reporting system as well as systems operating internationally and for other Australian agricultural commodities. Several alternative wholesale market price collection models are identified and evaluated against the current system.

## *Current Market Reporting System*

Currently national market price reporting is undertaken predominately by Ausmarket Consultants, with a number of agencies (industry bodies and private service providers) contributing data from each state, see below.

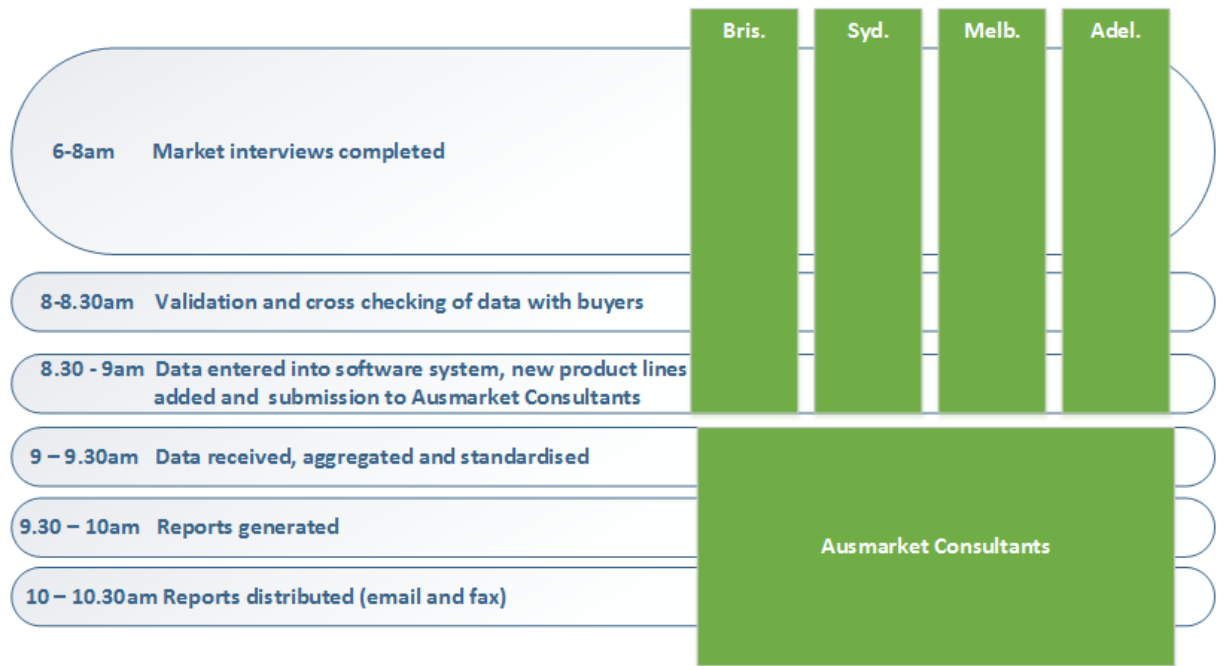
Market	Service Provider
Brisbane	<b>Market Information Services</b> is a private service provider operating alongside Ausmarket Consultants in the Brisbane Markets.
Melbourne	<b>Data Fresh</b> operates as a subsidiary business to <b>Fresh State</b> which is a member organisation representing Melbourne wholesalers.
Sydney	<b>Sydney Produce Surveyors Pty Ltd</b> is a private service provider operating in the Sydney Produce Market.
Adelaide	Wholesale Price Reporting operated as a subsidiary business of <b>Adelaide Produce Markets Ltd.</b> which is a private company formed by growers, wholesalers and retailers to develop and operate the South Australian Produce Market.

In Western Australia, Market West is responsible for market price reporting, however they do not contribute to the national Ausmarket Consultants service.

In November 2016, FarMate launched a new app, which includes a subscription service offering market prices across around 300 horticultural commodities. The FarMate app offers an alternative service for obtaining national market price information.

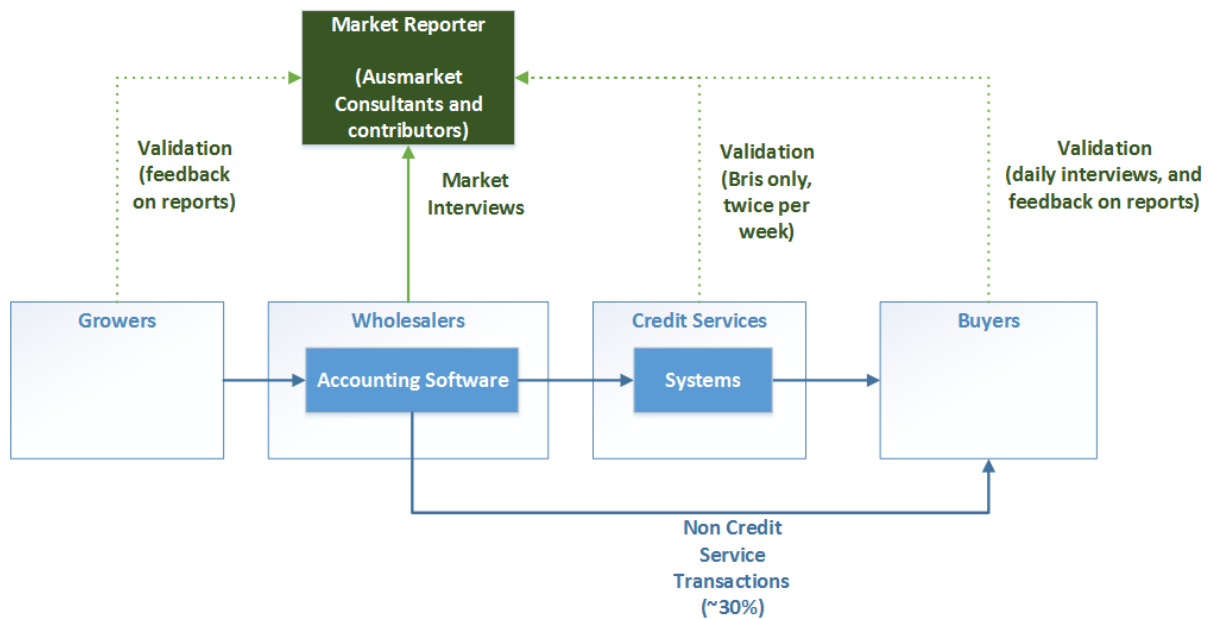
## Current methodology

Under the current system, price data is collected daily from wholesalers by inspectors on the market floor. Later in the morning, data is vetted to verify outliers, cross checked with buyers and incorporated into reports, which are distributed to subscribers.



### Process and typical timeline for report generation

The figure below depicts the typical flow of data between parties within a market transaction (blue) and how data is captured by the market price reporting system (green).



### The current system of market price reporting

The above method of market price data collection has remained virtually unchanged for many years, despite the emergence of new technology.

### Service offering

Ausmarket Consultants offers market price reports or historic market data where two or more Markets are involved<sup>1</sup>. Subscribers can choose to receive daily, weekly or monthly reports for particular markets and commodities.

For each product category observed in the market, the report provides information across a range of fields including, product description/category, origin, price range, best price, supply, demand, carryover and quality.

Ausmarket Consultants provides grower subscriptions at a reduced rate to other industry stakeholders, including wholesalers, retailers, banks and media outlets. The table below outlines the grower pricing schedule.

	3 month subscription	6 month subscription	12 month subscription
2 Markets	\$154	\$264	\$440
3 Markets	\$231	\$369	\$666
4 Markets	\$308	\$528	\$888

Included in the above subscription, growers can select from the following options:

- Up to 5 nominated crops
- One of three reporting options
  - daily reports (Monday and Thursday)
  - daily reports (Tuesday, Wednesday, Friday)
  - weekly summary (Friday)

### Software

When market price reporting was privatised in the early 1990's, Ausmarket Consultants engaged a local software developer to develop a tailor-made software system for inputting market price information and generating reports for subscribers.

This software system is still in use today, however has undergone a series of upgrades, including in late 2016, when the existing 32 bit program was migrated to a 64 bit operating server in a virtual space with some upgrades and additions, to allow for greater functionality, security and efficiency.

### Business

Ausmarket Consultants, and their contributing service providers, rely predominately on paid subscribers for income. Subscription costs vary depending on the level of service required. Subscribers include wholesalers, market authorities, retailers (chain stores, green grocers and restaurants), government departments, consultancy firms, banks and media outlets. Grower subscriptions contribute to 40% of total subscription volumes but only around 10% of revenue due to the subsidised rate offered by Ausmarket Consultants.

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<sup>1</sup> Those wishing to receive data for a single market, can subscribe via an individual state based market reporter.

### Evaluation of alternative data collection models

Based on the background information and analysis above, GHD identified five different options for market price data collection. Each option, including the status quo, were evaluated against a range of important criteria, using the following rating system: 1. very poor, 2. poor, 3 neutral, 4 good, 5 very good. The results are provided below with 'very poor' or 'poor' ratings highlighted in red. More detailed justification for ratings is provided in Section 5 of the report.

	Status quo	Option 1 Third person cloud-based data collection and sharing	Option 2 First person cloud-based data collection and sharing	Option 3 Accessing data from credit services	Option 4 Accessing data from accounting software	Option 5 Strengthening current system
Data accuracy	3	2	1	3	3	4
Timeliness	4	5	5	2	2	4
Data usability	2	4	4	4	4	4
Technical feasibility	5	3	3	4	3	4
Likely wholesaler participation/ coverage	4	3	1	4	5	4
Legal feasibility	5	5	5	1	1	5
Cost	4	3	4	4	4	3
<b>TOTAL</b>	<b>27</b>	<b>25</b>	<b>23</b>	<b>22</b>	<b>22</b>	<b>28</b>

The results suggest that Option 5 (Strengthening current system) is the most suitable, with Options 1 to 4 all scoring lower than the current Status Quo, with key issues including data accuracy, timeliness and need for legislative change.

### Findings

Key findings from this study are outlined below

#### Data accuracy

The perceived inaccuracy of data was a key issue for many stakeholders. Many growers clearly distrust the prices which wholesalers are reporting, and some cited anecdotal evidence of perceived inaccuracy in market reports.

Generally, growers believed wholesalers were reporting lower prices to hide profits. Counter to this, some wholesalers and market reporters believed some growers regularly over-estimate the quality and therefore value of their produce.

#### Data access and price

Many growers resent having to pay for market information, particularly if they also question the accuracy of price data, and believe they should be afforded better price transparency via the Horticultural Code.

Many wholesalers also resent having to pay subscriptions for market reports, when they are each day asked to freely provide prices to market reporters.

#### Confusion around market information versus price transparency

Consultation found that many stakeholders do not make a clear distinction between the provision of market information, which provides insights around market trends and movement, versus price transparency whereby involved parties are able to know prices received for particular products.

Many growers have long campaigned for price transparency measures, allowing them to know exactly what their produce sold for, however this is not the typical function of market information services, which instead aims to provide an indicator of overall market trends.

#### Potential harm from destabilising current system

While exploring opportunities for improved services, industry should be mindful not to discredit and weaken the current system, which only survives through the support and co-operation of wholesalers (voluntarily providing prices) and subscribers (paying for the service). If stakeholders lose confidence in the current system, it may not survive into the future and this would leave the industry with no national market price reporting system and be a poor outcome for industry, including growers.

#### No clearly viable opportunity to automatically obtain price data

GHD did not identify any international systems which automatically collect actual sales data, with the exception of the Netherlands system which is able to collect actual data via to the Dutch auction sale method. This system also allows for real-time reporting of prices after auctions are complete.

GHD explored potential options for obtaining data automatically via either wholesaler accounting software or credit services. In both cases stakeholder consultation found that wholesalers or credit service agencies are unlikely to voluntarily share data. Therefore data could only be obtained in this way, if some form of new regulation were introduced.

However, In Western Australia, Market West is developing a new price data collection system, which will automatically obtain price information directly from the accounting systems used by wholesalers in the Perth Markets. It should be noted that at Perth Markets it is a lease requirement for wholesalers to provide throughput information, which is not the case in other states.

It remains to be seen if this system will be successful in delivering rigorous, accurate and timely market price information. However, if so it may path the way for other markets to consider this option.



### Opportunities to improve data usability

At present there is no way for Australian growers (including subscribers to Ausmarket Consultants) to access, chart and analyse price data from different categories/markets over different time periods (weeks, months, years).

This type of analysis is key for helping producers understand market trends and cycles, and to benchmark their own business performance and profitability.

### Opportunity to develop national consistency in reporting

There is a need for nationally consistent product categories and data collection protocols to help streamline price data collection.

### Opportunity for broader industry engagement and input

Ausmarket Consultants and their contributing service providers have close relationships with the wholesale and retail sectors, due to their regular market floor engagement, however there is much less direct engagement and dialogue with the growing sector.

Providing a forum for all interested sectors to have input into market price reporting could help resolve issues and ensure the service meets stakeholder expectations.

### Opportunity for industry investment in current system

Given the relatively small number of growers currently subscribed to market reporting services, there is an opportunity for industry-wide investment in the current system, to make data available to all growers.

The 20 year historical database of daily prices maintained by Ausmarket Consultants is a valuable resource which could be utilised more to understand long-term trends, market cycles, and impacts when production from different regions reach markets. While many growers question the accuracy of data, when industry levy funds have been used to provide market information to growers, including the Horticultural Statistical Handbook and Australian Mango Market Report (discussed in Appendix F), the outputs have generally been valued by growers.

Stakeholder consultation suggests there is limited support for a wholly levy funded market reporting system, however most stakeholders support a combination of user pays and levy funding. Many other Research and Development Corporations offer market price reporting services, which are typically well utilised and valued by levy payers.

## **Recommendations**

Given the above findings it is recommended that Hort Innovation seeks to strengthen the current system of market price reporting, through collaboration with key stakeholders. In acknowledging the fact that many growers question the accuracy of market information, a trial exercise conducted over 12 months would be an appropriate way for Hort Innovation and growers to gauge the value of strengthening the current system through collaboration, without committing to any ongoing arrangements. The trial could include a number of different components, outlined below.

- Hort Innovation should establish a small steering committee of vegetable producers with an interest in market reporting. The committee would include one grower representing each of the largest 4-6 vegetable crops, as well as a representative from Ausmarket Consultants. There may also be scope for including a wholesaler (or representative) on the committee, to provide input from the perspective of the wholesaling sector.
- The steering committee would be tasked with developing a weekly market report which would best suit growers needs. Reports may include tailored analysis around price trends

(short and long term), comparisons across different markets, quality, supply and commentary about prevailing market conditions driving market prices. Reports should be formatted with capability to be accessed from a number of platforms, e.g. mobile, desktop, email etc. to improve engagement.

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  - Perceived accuracy: Track the number of reported inaccuracies (and outcomes from follow-up)
  - Steering committee feedback: The committee's view on the success of the trial and the suitability of data collection and reporting.

Depending on the results of the trial, industry may wish to pursue a number of different options, including: discontinuing, continuing or expanding the service e.g. by adding additional commodities or through the development of searchable web databases, apps etc. The results of the trial may also encourage industry to pursue improvements to the current system including through improved data validation, development of standard protocols for data collection and development of agreements with other industry sectors on the role of market reporting.

If at the end of the trial, the current market reporting system is found to be deficient, industry may wish to continue to explore alternative options.

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# Appendices

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Appendix B Stakeholder Consultation Summary

Appendix C Legal and privacy issues around data use

Appendix D International market information collection models

Appendix E Market price reporting in other primary industries

Appendix F Learnings from the Australian Mango Report

# 1. Introduction

## 1.1 Purpose of this report

GHD was commissioned by Horticulture Innovation Australia Limited (Hort Innovation) to explore the feasibility of alternative methodologies for the collection of market price information relating the Australian vegetable industry.

This study provides a review of the current market price reporting system as well as systems operating internationally and for other Australian agricultural commodities. Several alternative wholesale market price collection models are identified and evaluated against the current system.

This report contains information obtained through broad consultation with supply chain participants and stakeholders, including growers, wholesalers, retailers and market reporting service providers. GHD and Hort Innovation would like to thank all stakeholders for their valuable input.

## 1.2 Terms of reference

The terms of reference for the study were as follows:

- Identify and evaluate potential wholesale market price collection models (including the development and operational costs) against an outcome of achieving transparent market price reporting across a range of supply chain arrangements for the Australian vegetable industry;
- Identify, define and evaluate the wider operating framework ('the environment') necessary to ensure effective implementation, adoption and function of the identified price reporting model(s), including technology requirements;
- Define the legal considerations, concerns and possible limitations that apply to the collection and reporting of price data collected through the identified models;
- Consider and discuss concerns relating to price reporting integrity and product quality/commodity definition;
- Discuss implementation options for the preferred model(s);
- Complete appropriate economic analyses and evaluation of the identified price reporting models;
- Evaluate potential identified operating models against the existing 'status quo' price reporting framework and existing usage and uptake through the supply chain; and
- Identify examples of other price reporting systems for agricultural industries (in Australia and internationally, how these are used for improving industry decision making and price transparency, and their relevance and compatibility regarding an Australian vegetable industry wholesale price reporting system.

### 1.3 Methodology

This study was completed through the following steps:

**Step 1: Background review:** The first stage of the project involved a background review of the current system of price reporting (Section 2.1), including the perceived issues and limitations of the current system (Section 2.3.6). GHD then reviewed similar daily price reporting systems operating internationally (Section 3.1) and for other agricultural commodities in Australia (Section 3.2).

**Step 2: Identifying options:** GHD then identified a number of broad options for undertaking market price reporting (Section 4).

**Step 3: Stakeholder consultation:** Stakeholders were forwarded a brief discussion paper and electronic survey to complete (Appendix A). A total of 59 responses via the online stakeholder survey, telephone and in-person interviews. A summary of results is presented in Appendix B.

**Step 4: Evaluation options:** Options were broadly evaluated using a range of selection criteria (Section 5).

**Step 5: Finding and recommendations:** Outlined in Section 6.

### 1.4 Assumptions

All information provided by stakeholders is assumed to be correct and accurate. Where possible GHD has sought to verify information provided by stakeholders with other sources. Where no information was obtainable GHD has made assumptions which are listed throughout the report. Cost modelling undertaken in this report is based on hypothetical situations, and do not represent actual past or present company performance.

### 1.5 Description of involved parties

Table 1 below describes the relevant parties involved in wholesale produce transactions and data collection and management.

**Table 1 Involved parties**

Party	Description
Growers	Producers of horticultural produce
Market wholesalers	Wholesalers operating in central markets
Non market wholesalers	Wholesalers operating outside of central markets
Buyers	Retailers, exporters and processors buying produce from wholesalers and/or directly from growers
Wholesaler chambers of commerce	Wholesaler member organisations, often providing market services
Market authorities	Authorities managing central markets
Data collection agencies	Organisations collecting and selling price data (may be private companies, wholesaler organisations or market authorities)
Market credit services	Organisations managing credit transactions within central markets (usually a subsidiary of wholesaler organisations or market authorities)

## **1.6 Scope and limitations**

This report: has been prepared by GHD for Horticulture Innovation Australia Limited and may only be used and relied on by Horticulture Innovation Australia Limited for the purpose agreed between GHD and the Horticulture Innovation Australia Limited as set out in section 1.1 of this report.

GHD otherwise disclaims responsibility to any person other than Horticulture Innovation Australia Limited arising in connection with this report. GHD also excludes implied warranties and conditions, to the extent legally permissible.

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The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.

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## 2. Background

This section provides an overview of the current price reporting system operating in Australia, including explanation of the historical context, stakeholders involved, systems and pricing

### 2.1 Introduction to market price reporting

#### *What is market price reporting?*

Market price reporting usually involves the collection of sample price information from a particular market, which is distilled and published to provide stakeholders with an indicator of the prevailing prices.

#### *Value of market price reporting for horticultural producers?*

Horticultural markets are complex, dynamic and often decentralised. Markets are highly sensitive to supply and demand fluctuations as well as variations in product quality. Market price reporting is critical in helping growers make informed short-term marketing decisions, as well as longer-term benchmarking and production decisions. Table 2 below outlines in more detail how market price reporting can assist growers.

**Table 2 Value of market price reporting to horticultural producers**

Functions of market price reporting	Helps growers to...
Benchmarking of price received against market indicators	Understand the quality of their produce, compared to the rest of the market Evaluate the performance of their wholesaler
Observe short term market trends	Understand supply and demand conditions, informing decisions around when to harvest, store or send produce to market(s)
Compare prices and trends between markets	Decide which market(s) to send produce to
Observe long term market trends	Understand long-term price movements Decide what commodities/varieties to produce Understand how seasonal impacts and competition impacts prices

#### *How does market price reporting differ from price transparency?*

In Australian horticultural markets, price transparency is considered to be the level of evidence which wholesalers provide growers to demonstrate the prices received for their individual consignments, particularly when wholesalers are acting as agents and deducting a commission. Providing price transparency around individual transactions is not the typical role of market price reporting, which instead provides a distilled sample of overall price observations.

However, in the absence of robust price transparency in the Australian horticultural industry, many growers have come to rely on market price reporting as a means of pursuing clarity around the sale price of their individual consignments.

## **2.2 History of market price reporting in Australian horticultural markets**

Up until the early 1990's fruit and vegetable market reporting was undertaken by State Governments, on the basis that independent price information was necessary to help growers determine the fairness of their returns and the preferred destination of their consignments.

During this time only agency based transactions occurred between growers and wholesalers, with fixed commission rates. Wholesalers were required by law to provide growers with detailed sales records which allowed for comparison against reported prices. There was no statutory requirement for wholesalers to disclose selling prices to any third party, including government market reporters.

In the early 1990's, state governments around Australia progressively decided to cease funding market price reporting services, handing over responsibility to private service providers who would operate on a user pays basis. In the Brisbane Markets the company Market Information Services (MIS) was formed with staff consisting of former departmental inspectors. The company won an initial tender to continue providing market price reporting for an initial 3 year period in which the service received some ongoing government subsidisation. Similar arrangements were made in other states, with either private service providers, wholesaler organisations or market authorities taking responsibility for conducting market price reporting.

Later, the owners of the Brisbane based Market Information Services formed a separate company known as Ausmarket Consultants, which would collate information from all contributing state-based market reporting services in order to provide a national report to subscribers.

In addition to Ausmarket Consultants and their contributing organisations, there have been a number of rival service providers who have entered the market with varying degrees of success.

As the industry has progressively shifted from agent to merchant style trading, the role of market price reporting has also changed. Whereas under a traditional agent style transaction a grower could compare and benchmark their sale price with the reported market prices, under a merchant style transaction growers do not have legal access to the downstream sale price of their produce. Therefore, in the absence of actual price information, growers have become entirely reliant on market price reporting combined with advice from their wholesaler in order to appraise supply, demand, quality and price. When growers receive conflicting information from market price reporting and their agents, they naturally question the accuracy of one or both of these sources.

## **2.3 Current National Service Provider: Ausmarket Consultants**

Currently national market price reporting is undertaken predominately by Ausmarket Consultants, with a number of agencies (industry bodies and private service providers) contributing data from each state. These agencies typically also provide market information directly to subscribers, within each state, as outlined in Table 3 below.

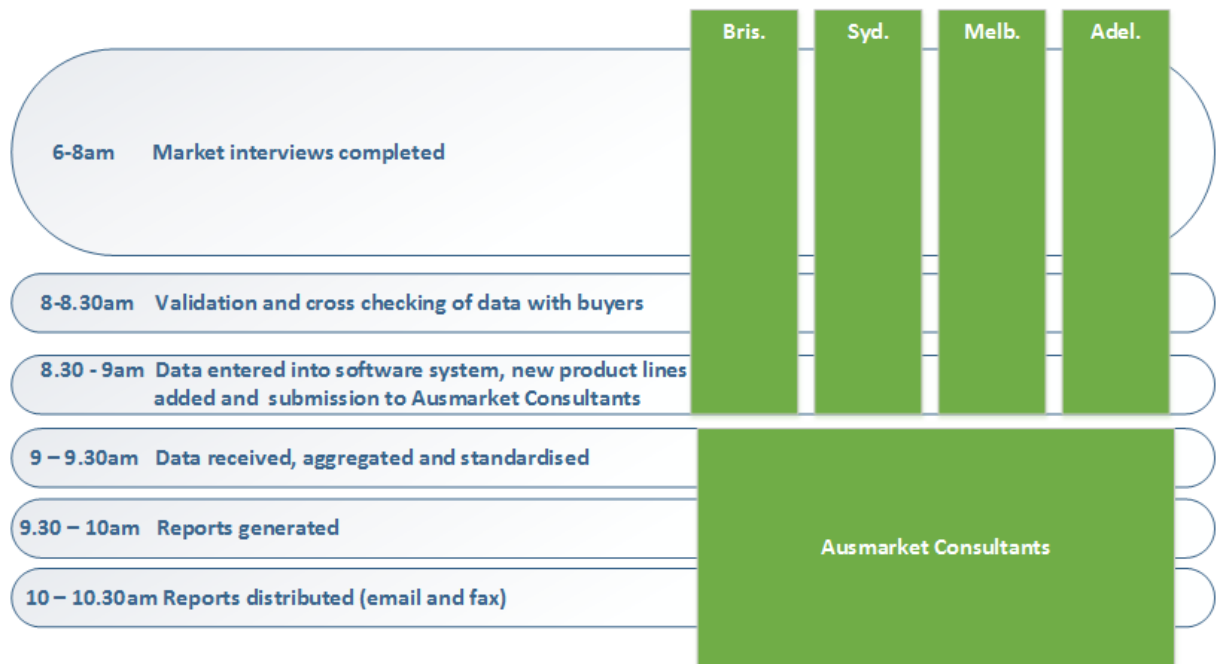
**Table 3 Ausmarket Consultants' Contributing Service Providers**

Market	Service Provider	Webink
Brisbane	<b>Market Information Services</b> is a private service provider operating alongside Ausmarket Consultants in the Brisbane Markets.	<a href="http://www.marketinfo.com.au">www.marketinfo.com.au</a>
Melbourne	Data Fresh operates as a subsidiary business to <b>Fresh State</b> which is a member organisation representing Melbourne wholesalers.	<a href="http://www.freshstate.com.au/services/data-fresh/">http://www.freshstate.com.au/services/data-fresh/</a>
Sydney	<b>Sydney Produce Surveyors Pty Ltd</b> is a private service provider operating in the Sydney Produce Market	<a href="http://www.sydprod.com.au/SMRS/tabid/57/Default.aspx">http://www.sydprod.com.au/SMRS/tabid/57/Default.aspx</a>
Adelaide	Wholesale Price Reporting operated as a subsidiary business of <b>Adelaide Produce Markets Ltd.</b> which is a private company formed by growers, wholesalers and retailers to develop and operate the South Australian Produce Market.	<a href="http://saproducemarket.com.au/subsidiary-businesses/">http://saproducemarket.com.au/subsidiary-businesses/</a>

In addition to supplying data to Ausmarket Consultants for national reporting, all contributing service providers independently sell state-based reports and customised data on request.

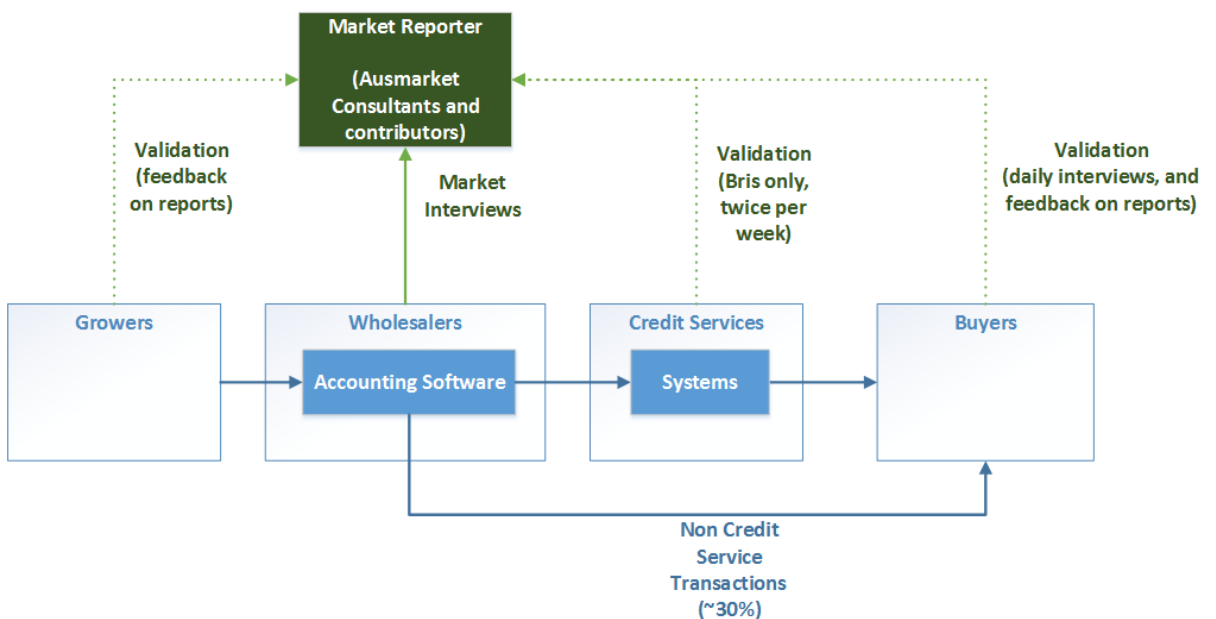
### 2.3.1 Current methodology

Under the current system, price data is collected daily from wholesalers by inspectors on the market floor. Later in the morning, data is vetted to verify outliers, cross checked with buyers and incorporated into reports, which are distributed to subscribers (Figure 1).



**Figure 1 Process and typical timeline for report generation**

Figure 2 below depicts typical flow of data between parties within a market transaction (blue) and how data is captured by the market price reporting system (green). Note that information is primarily obtained through market interviews with wholesalers, with validation through other stakeholders including buyers and growers (including market providers and subscribers). In Brisbane, market reporters also receive a summary of price data from credit services twice weekly, which is used to check and validate the accuracy of reported prices. Note that market reporters do not have direct access to IT systems operated by wholesalers or credit services.




**Figure 2 The current system of market price reporting**

The above method of market price data collection has remained virtually unchanged for many years, despite the emergence of new technologies. Ausmarket Consultants believe this is probably due to the fact that there has been little or no change in the way that trading occurs

within the wholesale markets (primarily through private treaty transactions), and the fact that there has never been a legislative requirement for open and accurate disclosure of selling prices at any point within a transaction (Ausmarket Consultants Website).

### 2.3.2 Service offering

Ausmarket Consultants offers market price reports or historic market data where two or more Markets are involved. Subscribers can choose to receive daily, weekly or monthly reports for particular markets and commodities. Figure 3 below provides a sample of a daily price report provided by Ausmarket Consultants. (Note that those wishing to receive data for a single market, can subscribe via an individual state based market reporter (Table 3).



**Australian Daily Fruit & Vegetable Report**  
 PO Box 229 Brisbane Market QLD 4106 Ph (07) 3379 4576 Fax (07) 3379 4103  
 E: admin@ausmarket.com.au W: ausmarket.com.au

Prices in this report have been sourced from Market Reporting Services throughout Australia. Every effort has been made to ensure that those prices are accurate and Ausmarket Consultants shall not be liable to any party in respect to any loss or damage arising from the reliance on this information. The prices in this Report are provided as a guide only and should not be regarded as a record of every sale from every Market.

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Australian Daily Fruit & Vegetable Report BRS SYD MLB ADL for Friday 26 August 2016 Page No 1

Species/Tonnes/Variety	Market	State	Region	Pack	Price Range	Most Sales	Best	Av Kg	Supply	Deman	C'over	Quality	
APPLES,Fuji,New Season	ADL	S	Hills	DLCtn	24.00 - 34.00			12	Mod	Adeq	Some	Good	
Golden Del.,New Season	ADL	S	Hills	DLCtn	24.00 - 34.00			12	Mod	Adeq	Some	Good	
Granny Smith,New Season	ADL	S	Hills	DLCtn	26.00 - 34.00			12	Mod	Adeq	Some	Good	
Jazz,New Season	ADL	S	Hills	DLCtn	48.00 - 50.00			12	Mod	Adeq	Some	Good	
Pink Lady,New Season	ADL	S	Hills	DLCtn	26.00 - 34.00			12	Mod	Adeq	Some	Good	
Red Delicious,New Season	ADL	S	Hills	DLCtn	24.00 - 30.00			12	Mod	Adeq	Some	Good	
Royal Gala,New Season	ADL	S	Hills	DLCtn	24.00 - 34.00			12	Mod	Adeq	Some	Good	
Ruby Gold,New Season	ADL	T		DLCtn	26.00 - 30.00			12	Mod	Adeq	Some	Good	
Sundowner,New Season	ADL	S	Hills	DLCtn	20.00 - 25.00			12	Light	Adeq	Some	Good	
Fuji	BRS	QVN		AACTn	20.00 - 24.00			18	Light	Adeq		Good	
Fuji	BRS	QVN		DLCtn	20.00 - 40.00	40.00		45.00	12	Mod	Adeq	Good	
Fuji	BRS	T		DLCtn	40.00 - 45.00			12	Mod	Adeq		Good	
Galaxy Gala	BRS	VN		AACTn	24.00 - 35.00			18	Mod	Adeq		Good	
Galaxy Gala	BRS	VN		DLCtn	24.00 - 40.00	40.00		45.00	12	Mod	Adeq	Good	
Golden Del.	BRS	T		DLCtn	40.00			12	Mod	Good		Good	
Golden Del.	BRS	T		DLCtn	40.00			12	Light			Good	
Granny Smith	BRS	Q		DLCtn	20.00 - 28.00			12	Mod	Good		Good	
Granny Smith	BRS	QVNS		AACTn	24.00 - 36.00	32.00		40.00	18	Mod	Good	Good	
Granny Smith	BRS	VNS		DLCtn	20.00 - 36.00	32.00		40.00	12	Mod	Good	Good	
Jazz	BRS	Q		DLCtn	50.00			12	Mod	Good		Good	
Jonagold	BRS	T		DLCtn	26.00 - 30.00			12	Light			Good	
Jonathan	BRS	QNV		DLCtn	20.00			12	Mod	Slow		Good	
Pink Lady	BRS	QVN		AACTn	18.00 - 40.00	40.00		45.00	18	Light	Good	Good	
Pink Lady	BRS	QVN		DLCtn	25.00 - 40.00			45.00	12	Mod	Good	Good	
Red Delicious	BRS	NV		DLCtn	12.00 - 36.00	28.00 - 32.00		40.00	12	Mod	Adeq	Good	
Red Delicious	BRS	Q		DLCtn	20.00 - 22.00			12	Mod	Good		Good	
Red Delicious	BRS	QNV		AACTn	18.00 - 30.00	26.00 - 28.00		34.00	18	Mod	Adeq	Good	
Royal Gala	BRS	QN		DLCtn	20.00 - 36.00			40.00	12	Heavy	Good	Good	
Royal Gala	BRS	QNV		AACTn	26.00 - 36.00			40.00	18	Heavy	Good	Good	
Toffee	BRS	QN						40.00	18	Heavy	Good	Good	
Fuji	MLB	V		SLTray	22.00 - 24.00	24.00		2.2	Mod	Adeq		Good	
Golden Del.	MLB	V		DLCtn	28.00 - 35.00			40.00	12	Mod	Fair	Some	Fair
Golden Del.	MLB	V		DLCtn	30.00 - 35.00			40.00	12	Mod	Fair	Some	Fair
Granny Smith	MLB	V		DLCtn	20.00 - 25.00			30.00	12	Mod	Fair	Some	Fair
Jazz	MLB	V		DLCtn	45.00 - 48.00			50.00	12	Light	Fair	Some	Fair
Pink Lady	MLB	V		DLCtn	24.00 - 30.00			35.00	12	Mod	Fair	Some	Fair
Red Delicious	MLB	V		DLCtn	15.00 - 25.00			30.00	12	Mod	Fair	Some	Fair
Royal Gala,New Season	MLB	V		DLCtn	24.00 - 30.00			35.00	12	Mod	Fair	Some	Fair
Fuji,CA	SYD	N		9KgTray	20.00 - 30.00			5	Light	Good	Some	Good	
Fuji,CA	SYD	NVST		TLCtn	16.00 - 45.00			50.00	13	Mod	Fair	Some	Fair
Golden Del.,CA	SYD	VT		TLCtn	26.00 - 40.00	36.00		13	Light	Fair	Some	Good	
Granny Smith,CA	SYD	NVS		TLCtn	15.00 - 26.00			30.00	13	Mod	Slow	Some	Fair
Jazz,CA	SYD	NV		TLCtn	40.00 - 48.00			13	VLight	Good	Some	Good	
Pink Lady,CA	SYD	NVST		9KgTray	20.00 - 24.00			5	Light	Good	Some	Good	
Pink Lady,CA	SYD	NVST		TLCtn	16.00 - 36.00			13	Mod	Fair	Some	Good	
Red Delicious,CA	SYD	NVT		TLCtn	16.00 - 30.00	24.00 - 26.00		13	Mod	Fair	Some	Good	
Royal Gala,CA	SYD	N		9KgTray	20.00 - 24.00			5	Mod	Good	Some	Good	
Royal Gala,CA	SYD	NVST		TLCtn	18.00 - 34.00			36.00	13	Mod	Good	Some	Good
Sundowner,CA	SYD	NVT		TLCtn	20.00 - 34.00			13	Mod	Fair	Some	Good	
AVOCADOS,Gen,Not	ADL	Q		SLTray	30.00 - 35.00			6	Light	Adeq	Some	Good	
Hass,No1	ADL	Q		18LCtn	35.00 - 45.00			10	Mod	Adeq	Some	Mixed	
Hass,No1	ADL	Q		SLTray	38.00 - 40.00			6	Mod	Adeq	Some	Good	
Hass,No2	ADL	Q		18LCtn	15.00 - 30.00			10	Mod	Adeq	Some	Mixed	
Hass,No2	ADL	Q		SLTray	15.00 - 26.00			6	Mod	Adeq	Some	Mixed	
Reed,No1	ADL	Q		18LCtn	26.00			10	Light	Adeq	Some	Mixed	
Fuerte,No1	BRS	GN		SLTray	20.00 - 24.00			6	Light	Good		Mixed	
Hass	BRS	I	NZ	18LCtn	40.00			10	Light			Good	
Hass	BRS	QN		18LCtn	16.00 - 30.00			10	Mod	Slow		Good	
Hass,Extra	BRS	QN		SLTray	28.00 - 36.00			6	Mod	Good		Good	
Hass,No1	BRS	I	NZ	SLTray	30.00 - 32.00			6	Light			Good	
Hass,No1	BRS	QN		SLTray	18.00 - 26.00			6	Mod	Slow		Good	
Hass,No2	BRS	QN		SLTray	10.00 - 20.00			6	Heavy	Slow		Good	
Reed,No1	BRS	Q		SLTray	16.00 - 22.00			6	Light	Good		Good	

**Figure 3 Sample of daily market report provided by Ausmarket Consultants**

For each product category observed in the market, the report provides information across a range of fields outlined in Table 4 below.

**Table 4 Ausmarket Consultants' price reporting fields**

Field	Description <sup>2</sup>
Product description/category	Taken from up to 15,000 potential product codes covering crop, variety, grade and size.
Origin	State of production or country of origin. Region of production are also usually shown when it has an influence on prices.
Price Range	Typically covers the highest and lowest prices recorded for saleable produce in the classification shown (excluding any clear outliers).
Most Sales	Price received for the bulk of sales (generally covering around 80% of the produce sold on the day).
Best Price	“Best price” is reported where a price has been achieved which is outside the general price range, usually due to a line being of exceptional quality, limited supply or required to fill a specific order. “Best price” is reported separately so as not to distort the overall price range.
Supply	The level of supplies available in relation to the quantities that would be available under normal conditions.
Demand	The level of market trading compared to what would be expected under normal trading conditions.
Carryover	The amount of produce remaining on hand which would normally have been sold.
Quality	The general quality level for the bulk of product on offer.

### 2.3.3 Pricing

Ausmarket Consultants provides grower subscriptions at a reduced rate to other industry stakeholders, including wholesalers, retailers, banks and media outlets. Table 5 below outlines the grower pricing schedule.

**Table 5 Ausmarket Consultants Pricing Schedule (Growers)**

	3 month subscription	6 month subscription	12 month subscription
2 Markets	\$154	\$264	\$440
3 Markets	\$231	\$369	\$666
4 Markets	\$308	\$528	\$888

<sup>2</sup> Adapted from Ausmarket Consultants' terminology ([http://www.ausmarket.com.au/index.php?page\\_id=2](http://www.ausmarket.com.au/index.php?page_id=2))

Included in the above subscription, growers can select from the following options:

- Up to 5 nominated crops
- One of three reporting options
  - daily reports (Monday and Thursday)
  - daily reports (Tuesday, Wednesday, Friday)
  - weekly summary (Friday)

#### **2.3.4 Software**

When market price reporting was privatised in the early 1990's, Ausmarket Consultants engaged a local software developer to develop a tailor-made software system for inputting market price information and generating reports for subscribers. The system was developed using the Delphi 5 programming language with 32 bit processing capacity.

After developing the software, Ausmarket Consultants sold licences to a number of overseas countries including Russia, Vietnam and Cambodia. The United States Department of Agriculture (USDA) requested a copy of the software, however declined to purchase a licence, instead developing a similar reporting system.

Today, Ausmarket Consultants and their contributing service providers still use this software system. The full program is operated from Ausmarket Consultants Brisbane office, with abridged versions operating in each state.

In late 2016, Ausmarket Consultants commissioned an upgrade of their software systems, which involved migrating the existing program to a 64 bit operating server in a virtual space with some upgrades and additions, to allow for greater functionality, security and efficiency.

#### **2.3.5 Business**

Ausmarket Consultants, and their contributing service providers, rely predominately on paid subscribers for income. Subscription costs vary depending on the level of service required. Subscribers include:

- wholesalers
- market authorities
- retailers (chain stores, green grocers, restaurants)
- government departments
- consultancy firms (Australian and international)
- banks
- media outlets
- growers

Grower subscriptions contribute around 40% of total subscription numbers, but around 10% of revenue due to subsidised rates that are offered.

Market reporting businesses rely heavily on maintaining trust, relationships and independence. Market reporters must have the trust of wholesalers in order to receive accurate prices, while subscribers must also trust the accuracy of the service in order to continue paying. For this reason, market reporters are always interested in addressing any perceptions of inaccuracy or lack of independence (Ausmarket Consultants, pers. comm, 3<sup>rd</sup> Nov 2016).

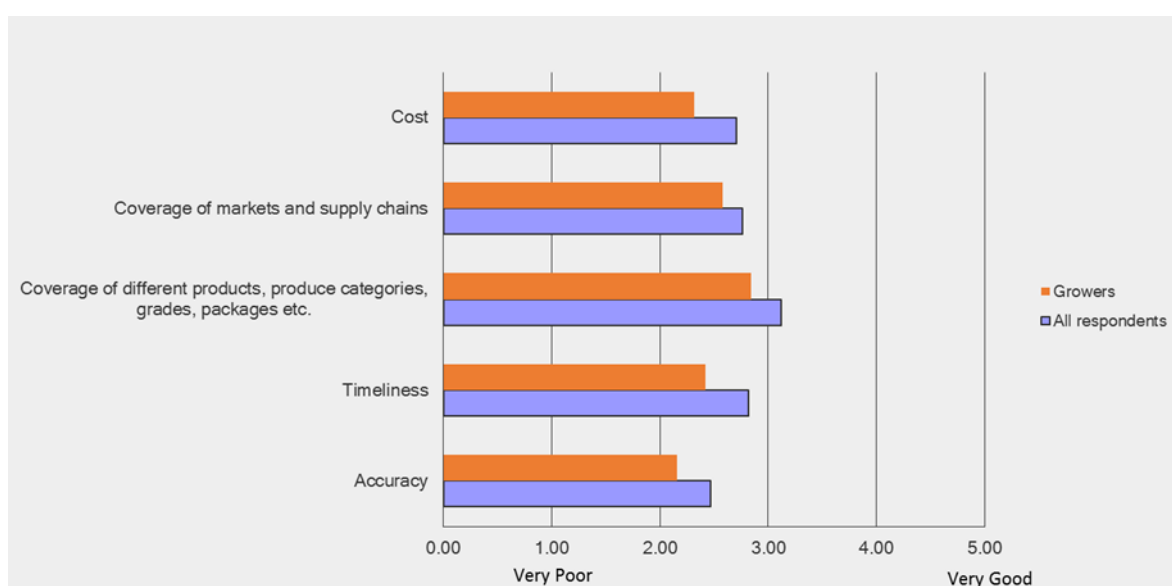
Market reporting service providers often supplement income by also providing other market activities, e.g. independent quality inspections and reporting.

### 2.3.6 Issues with current service provision

Some of the perceived limitations of the current service provision include:

- **Accuracy:** The system relies on wholesalers providing accurate prices to inspectors which can be cross checked with buyers where necessary as well as Credit Service records in some instances.
- **Timeliness:** Reports are normally distributed well before mid-day on the same trading day, however prices are not available in “real-time” to inform producer marketing decisions.
- **Relevance:** Daily reports provide high, low, most sales and best. Weekly and monthly reports are also available. However, many producers are seeking proof of sale prices for their own produce.
- **Cost:** Subscription prices starting at \$3.30 for daily single crop reports for normal subscriptions. Growers are offered a reduced subscription rate, which can bring the cost down to as low as \$1.40 per day for up to five crops in any single Market.
- **Uptake:** The number of growers subscribing to current market price reporting systems is considered low (about 150 to national system, about 60 to each state based system).

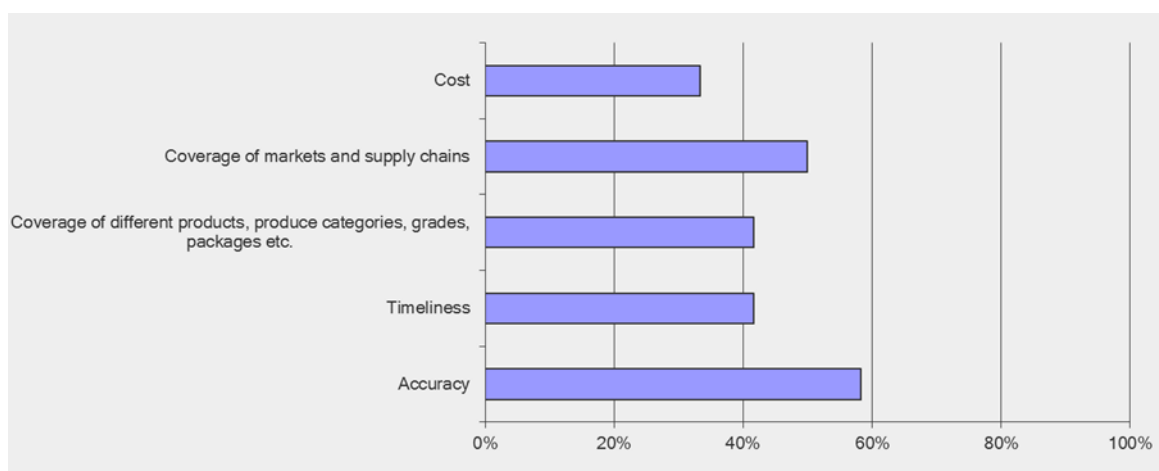
Stakeholder consultation sought feedback from current or previous subscribers on how they rate the service provision against these factors, with the perceived accuracy of data receiving the lowest rating (Figure 4).



**Figure 4 Stakeholder response: How would you rate the current system of horticultural market price reporting in terms of the following factors?**

Similarly, stakeholders who have never subscribed to a market reporting service were asked to list their reasons for not doing so. The results also suggest that perceived inaccuracy of price data is a key impediment.





**Figure 5 Why have you never subscribed to a market information service?**

## 2.4 Other current service providers

### 2.4.1 Market West

In Western Australia, Market West is responsible for market price reporting, however they do not contribute to the national Ausmarket Consultants service.<sup>3</sup>

Market West has moved away from traditional market reporting based on wholesaler interviews. Initially the organisation developed a reporting platform which allowed wholesalers to voluntarily input and update prices. However, Market West is now developing a new price data collection system, which will automatically obtain revenue and volume information directly from the accounting systems used by wholesalers in the Perth Markets, which will then be used to determine price. This methodology will not distinguish between produce of different grades, and may have difficulty computing prices for different pack types.

It should be noted that at Perth Markets it is a requirement of their lease for wholesalers to provide throughput volumes, which is not the case in other states. At the time of consultation wholesalers were generally supportive of providing information via accounting software, as it would streamline the process by removing their requirement to manually provide prices via the IT platform or to market reporters.

Market West also differs from other market reporting organisations, in that it makes price data publically available, free of charge.

Market West  
**Perth Market Daily Pricing Report**  
 Vegetable - Monday, July 25 2016  
 « Previous | Most Recent | Next »

Category:  Date:  /  /

Vegetable									
Product				Price Range		Most Sales		Supply / Demand	
Name	Variety	Origin	Container	Min	Max	Min Most	Max Most	Supply	Demand
ASPARAGUS	GREEN	GASCOYNE	CTN	60.00	75.00	60.00	75.00	LIGHT	ADEQUATE
BEANS	STRINGLESS	WA	KG	14.00	14.00	14.00	14.00	GOOD	GOOD
BRUSSEL SPROUTS	-	WA	KG	5.00	6.00	5.00	6.00	GOOD	GOOD
CABBAGE	GREEN	WA	CRATE	6.00	8.00	6.00	8.00	GOOD	ADEQUATE
CAPSICUM	GREEN	WA	KG	1.00	3.00	2.00	3.00	GOOD	GOOD

**Figure 6 Example of Market West Daily Pricing Report**

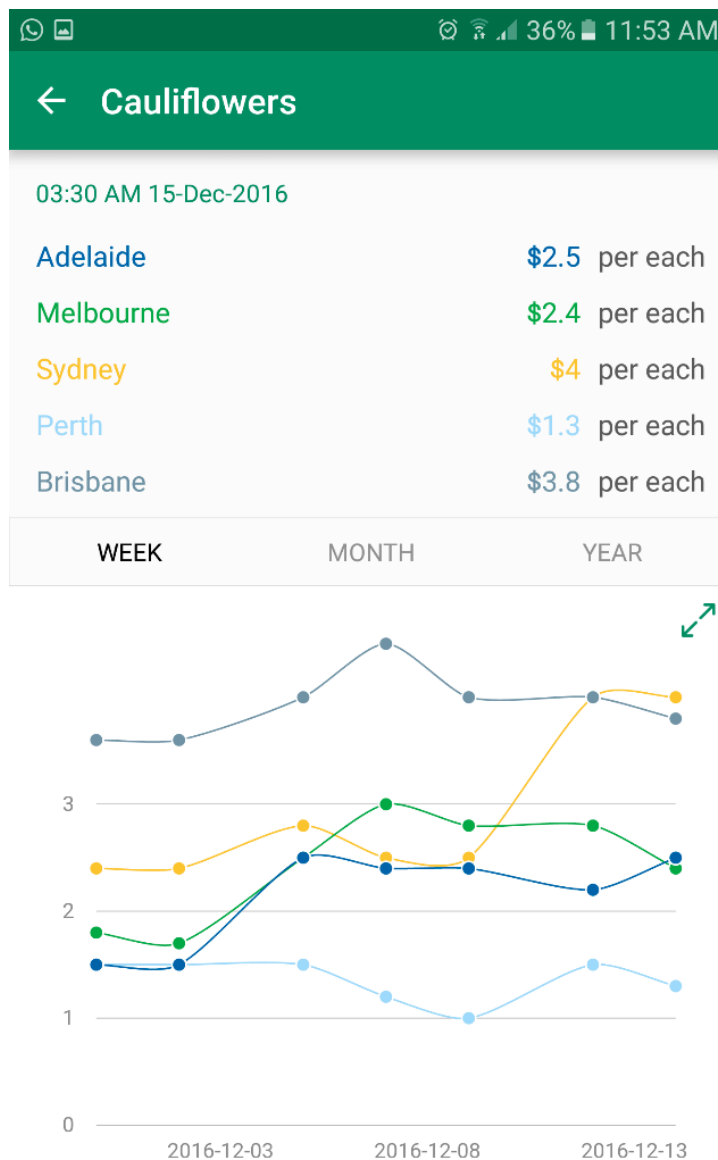
<sup>3</sup> According to Ausmarket Consultants this is due to a lack of rigour around price accuracy and collection methodology.

## 2.4.2 FarMate

The FarMate app<sup>4</sup> was launched on 26 November 2016. For a subscription price of \$31.90 per month, or \$328.90 per year, growers can access market prices for around 300 horticultural commodities. At present, price data is only provided for premium grade produce.

Prices are presented as the average of bulk prices in major markets. Prices are updated three times each week (Mondays, Wednesdays and Fridays) at the end of all market trading at around 2pm. FarMate purchase price data from a third party who pays wholesalers in major markets to provide data (FarMate, pers. comm 15 Dec 2016).

Users have the ability to view charts of historical prices and monitor prices in different markets (see Figure 7 below).



**Figure 7 Example of the FarMate display**

<sup>4</sup> <http://www.farmate.com.au>

### **2.4.3 Australian Banana Association (ABA) Weekly Reports**

The ABA<sup>5</sup> is a not for profit industry association made up of banana wholesalers, agents, growers, packaging and pallet firms, transporters and retailers all involved with the banana industry.

Amongst other services the ABA provides members and growers with weekly reports around pricing, quality and throughput trends, based on information supplied by member wholesalers. Weekly reports are also broadcast on North Queensland radio stations 4KZ and 4AM.

## **2.5 Past service providers**

### **2.5.1 The Farmshed**

In 2000 The Farmshed Ventures Pty Ltd. established an internet portal providing farmers with real time market prices as well as news, weather and analysis customized to their particular needs. The start-up company attracted investment of around \$50 million from National Australia Bank, Rural Press Limited, JB Were, McKinsey & Company, Wesfarmers Landmark, and Kiwi Co-operatives Dairies Limited.

Within the first 6 months of establishment the site attracted around 13,000 members, with around 2,000 users visiting the site each day.

The site was promoted as a one-stop-shop for Australian farmers across the full range of agricultural industries, servicing the input sector such as fertilisers, fuels and lubricants, and helping farmers market their outputs.

For horticultural market price reporting, the site relied on members voluntarily disclosing price paid or received (crowd sourcing). Consultation suggests this model of price collection and reporting did not succeed because too few stakeholders were disclosing prices, and the accuracy was questionable. The Farm Shed site has since closed.

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<sup>5</sup> <http://freshmark.com.au/the-australian-banana-association/>

## **3. Review of other price reporting systems**

### **3.1 Review of international daily horticultural price reporting**

This section includes a summary of systems used in international produce markets and other sectors, with the most relevant systems highlighted. Table 6 below provides a summary of findings from the review of international market price reporting systems. A more detailed overview of each system is provided in Appendix D.

The review found that most systems internationally rely on obtaining data via in-person, telephone or email consultation with wholesalers, importers, exporters and growers. An exception is the Netherlands system which is able to collect actual data due to the Dutch auction sale method. This system also allows for real-time reporting of prices after auctions are complete.

Most systems report aggregated market price information, including average, minimum and maximum. Exceptions include the Netherlands and US systems, which report information for a selection of individual consignments, as well as the overall trend.

All international systems reviewed provide data to users/subscribers via a web portal and/or app, with most allowing for easy comparison and tracking of prices over time, as compared with the Australian system which relies on pdf. email reports.

International systems included a mixture of user pays (Netherlands, Russia and Ukraine) and government funded (USA, Canada, India, Cambodia) services.

In summary, GHD was unable to identify any international systems which automatically collect actual transactional price data, without the need for 3<sup>rd</sup> party inspectors or surveys. The exception is the Netherlands system which can supply real-time actual prices, due to the Dutch auction sale method.

**Table 6 International comparison of market price reporting systems (1/2)**

	Australia	USA <sup>6</sup>	Canada <sup>7</sup>	Russia and Ukraine <sup>8</sup>
Subscription cost	\$150-400/annum	Free (government service)	Free (government service)	\$780/annum
Collection method	In person, some verification and cross checking	Telephone and in person Some statistical verification (removal of outliers)	Face to face interviews with a sample of wholesalers Some statistical verification (removal of outliers)	Mostly telephone interviews, with growers, traders, importers, exporters and wholesalers.
Timeliness	Daily	Daily	Daily	Daily collection, updated twice weekly
Market coverage	Central markets	Central markets	Central markets	Central markets,
Format	Email reports	Web database	Web database	Email, web database
Information provided	Average, maximum and minimum price Condition	Average, adjusted, parity price Condition, production, yield etc.	Price range, variety, origin, pack weight or count	Average, maximum and minimum price Forecasting

<sup>6</sup> <https://www.marketnews.usda.gov/mnp/fv-home>

<sup>7</sup> [https://infohort.agr.gc.ca/IH5\\_Reports/cognosSubmitter.xhtml?lang=e&report=12&pageMenuId=12](https://infohort.agr.gc.ca/IH5_Reports/cognosSubmitter.xhtml?lang=e&report=12&pageMenuId=12)

<sup>8</sup> <http://www.fruit-inform.com/en>

**Table 7 International comparison of market price reporting systems (2/2)**

	Cambodia <sup>9</sup>	Netherlands <sup>10</sup>	India <sup>11</sup>
Subscription cost	Free (government service)	User pays (€30-35 per month)	Free (government service)
Collection method	In person collection by government officers, as well as voluntary prices submitted by traders via SMS	Price data collected from dutch auction systems	In person No verification
Timeliness	Daily	Daily (real time)	Daily
Market coverage	Central markets	Central markets	Central markets
Format	Web database, SMS price alerts for each trader	Web portal and app	Web database (apps, sms and voice planned)
Information provided	Average prices (observed by government officers) Selling prices by trader	Actual prices for individual lots as well as minimum, average and maximum prices	Maximum, minimum, average, arrivals, dispatch by destination

<sup>9</sup> <https://www.agriculturalmarketinformation.org.kh/>

<sup>10</sup> <http://marktprijzen.gfacticeel.nl/> (note that a second Netherlands service provider - Fruit Sales Prices- also provides market reporting services using a more traditional data collection methods see Appendix D).

<sup>11</sup> <http://agmarknet.gov.in/>

## **3.2 Review of market price reporting in other agricultural commodities**

This section reviews how other Australian agricultural and food commodities approach market price reporting.

### **3.2.1 Data collection methods used for different methods of sale**

The type of market price reporting system adopted by different industries is often reflective of the type of sale method used and the variation in quality and demand. Discussed below are the various sale methods adopted by various agricultural industries and how this determines the approach to market data collection.

#### Auction

Where commodities are sold via auction (e.g. wool, livestock through saleyards and some seafood markets) it is relatively easy to obtain accurate price information which is publically available. In many cases data can be collected electronically via the auction facilitators e.g. Sydney Fish Market, Australian Wool Exchange (AWEX). In other cases officers can be employed to attend auctions and record prices (e.g. National Livestock Market Reporting Service, MLA).

#### Direct sale (prices advertised)

Other commodities, such as dairy and grain, are sold directly to processors or wholesalers through supply agreements or price offers which are publically available (e.g. dairy and grain). These commodities are typically homogenous and therefore can be traded on standard quality specifications. Offered prices are typically not open to negotiation, so therefore can be taken as prices received by producers.

#### Direct sale (prices not advertised)

Others commodities adopt a direct sale method, however without making publically available price offers. Prices are typically determined on a more ad-hoc basis for individual producers, depending on the supply and demand at the time, size and quality of the consignment and relationship with producer (e.g. livestock sold by contract or over the hooks, seafood in some markets). Horticultural produce also falls into this category of agricultural commodities which are sold via a private agreement without a publically available price.

The collection of market price data from these types of sales is very challenging because it is wholly reliant on the voluntary cooperation of buyers or sellers to supply data, which cannot be easily verified.

Some industries (e.g. seafood and livestock) make limited attempts to collect price data from such sales, instead relying on more verifiable data from auction sales or publically available price offers. The seafood industry relies heavily on the auction results from the Sydney Fish Market as a guide to the broader market. While in the livestock industry, MLA officers conduct telephone consultation with various abattoirs seeking price and throughput information, on a weekly basis. These reports are presented alongside more verifiable reports from livestock saleyard auctions.

Unlike the above industries, the horticultural industry does not have a secondary source of verifiable price data (e.g. a public auction).

### 3.2.2 Service providers and funding methods

Market reporting is typically either privately funded on a user pays basis (horticulture, grains) or funded on an industry-wide basis through R&D levies (grower and government contributions). Research and Development Corporations, such as MLA and Australian Pork Limited, have established market reporting services which provide publically available market information.

Table 8 below provides a summary of market price reporting systems operating in other agricultural industries.

**Table 8 Summary of market price reporting in other food or agricultural commodities**

Industry	Sale method	Data collection method	Service Provider	Funding method
Horticulture	Direct sale (prices not advertised)	Consultation	Private (Ausmarket Consultants)	User pays
Livestock	Auction or direct sale (prices not advertised)	Auction attendance and processor consultation	Industry (MLA)	Statutory levy
Wool	Auction	Electronic	Industry (AWEX)	User pays
Pork	Direct sale (prices not advertised)	Survey of both buyers and producers	Industry (APL)	Statutory levy
Grain	Direct sale (prices advertised)	Publically available data	Private	Free/user pays
Seafood	Direct sale (prices not advertised)	Electronic from Dutch auction system	Sydney Fish Market	Free service for registered suppliers



## 4. System options

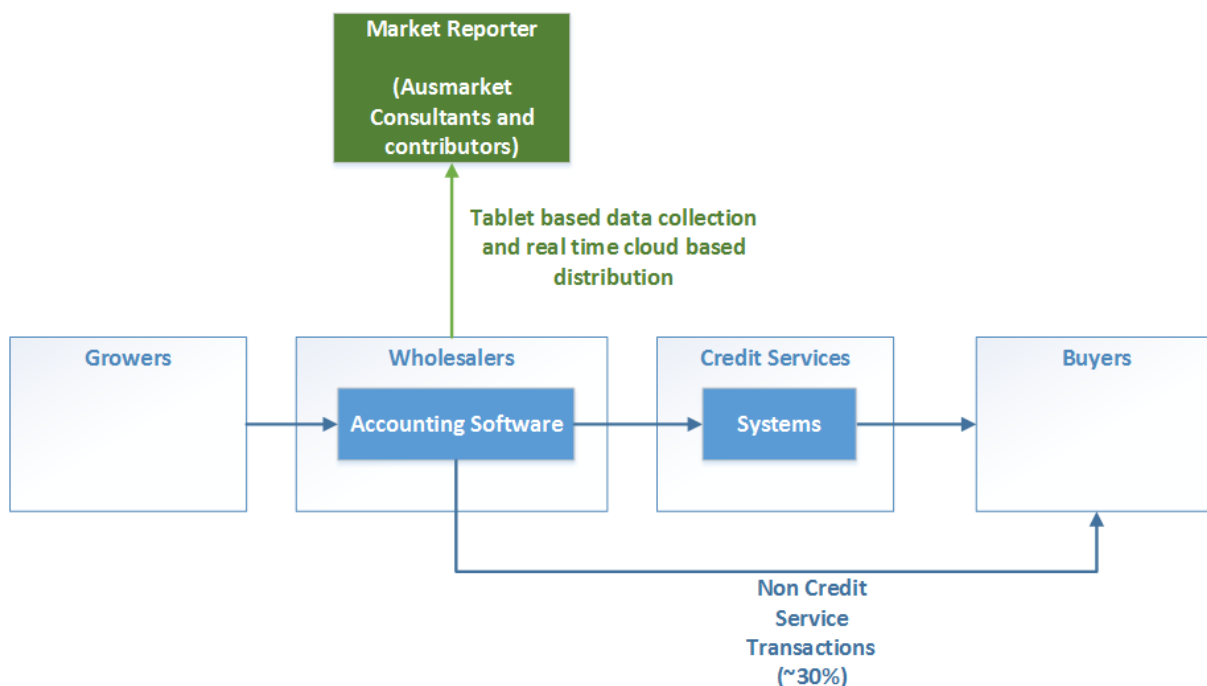
Based on the background information and analysis above, GHD identified five different options for market price reporting for vegetables in addition to the status quo:

1. Third person cloud-based data collection and sharing
2. First person cloud-based data collection and sharing
3. Accessing data from market credit services
4. Accessing data from wholesale accounting software
5. Strengthening current system.

These options are outlined further below.

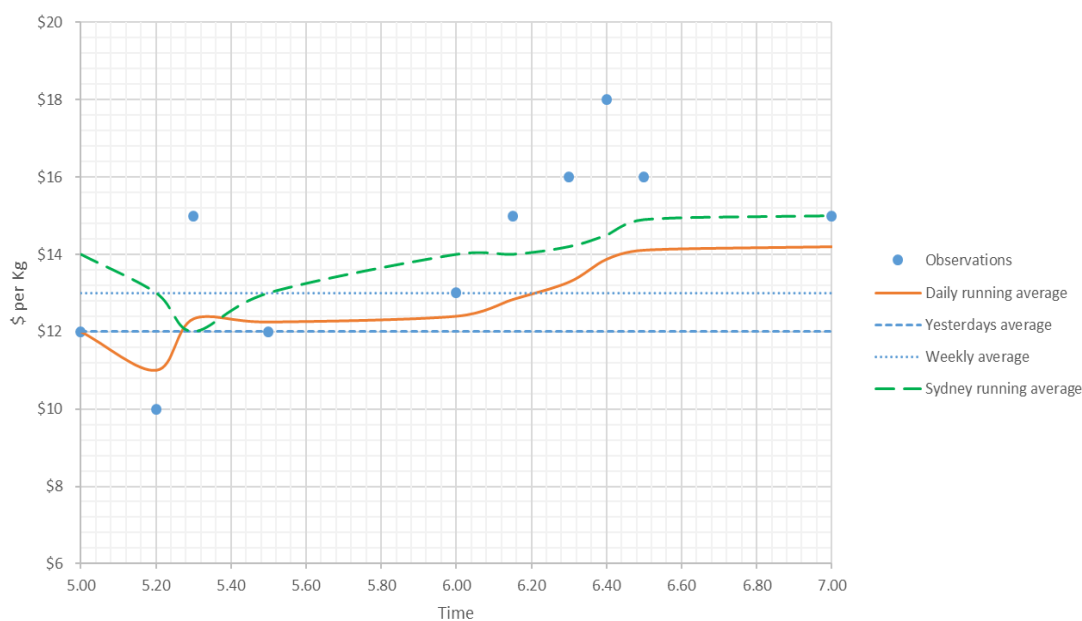
### 4.1 Option 1: Third person cloud based data collection and sharing

This option would involve the development of an electronic platform which would allow inspectors to enter data directly into a tablet or phone application, and be immediately shared with stakeholders after being uploaded to a web-based or cloud application (Figure 8).



**Figure 8 Option 1 Third person cloud based data collection and sharing**

The system would allow users to see anonymous individual observations (from anonymous wholesalers) as well as a running average of prices over the course of the morning, including market highs and lows, averages from previous periods and interstate results (Figure 9).



**Figure 9 Example of possible display**

It should be noted that the above display represents market observations over time rather than transactions and is therefore not a true reflection of market movements.

### **Benefits**

This option would allow for data to be accessed in a more timely manner, rather than waiting for reports to be published. Data would be available in electronic format, allowing for easy charting and comparison over time.

### **Limitations or barriers**

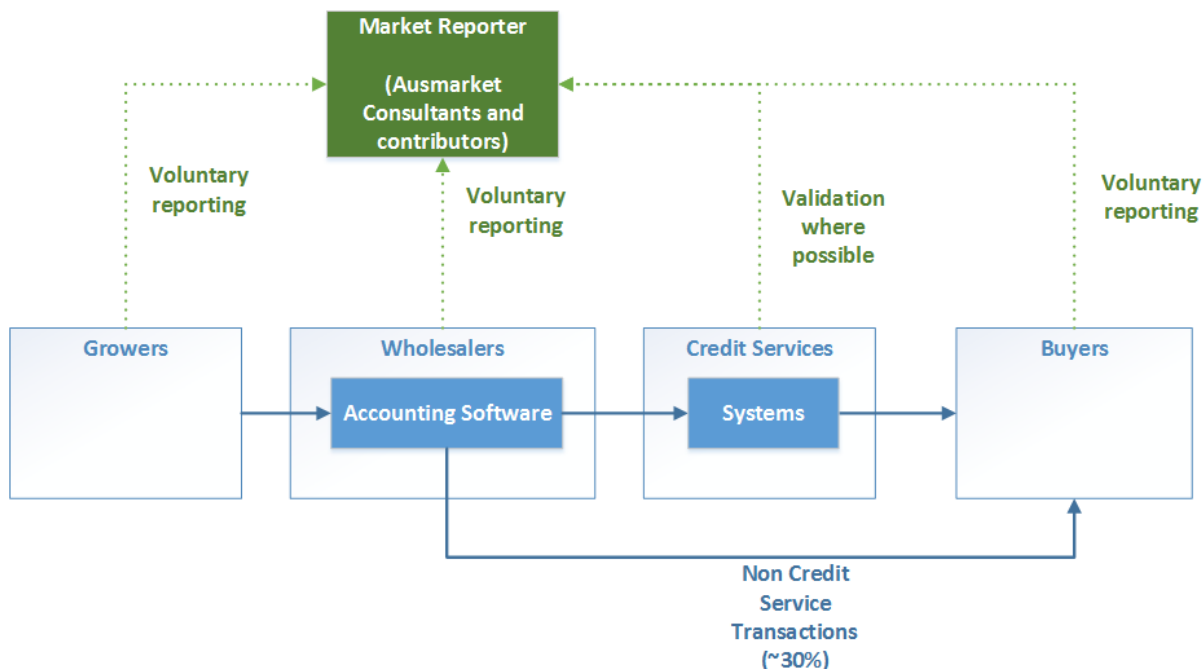
This option still relies on voluntary price reporting, and therefore does not offer improved accuracy compared to the current system. Immediately reporting each market observation does not allow time for validation, cross checking or removal of outliers.

### **Estimated cost**

An entirely new system, including software and hardware, would need to be developed, at an estimated cost of around \$500K.

### 4.3 Option 2: First person cloud-based data collection and sharing

This option is similar to above, however data could be entered by any party (e.g. growers, wholesalers, buyers or other parties). The system, which would be based on the “crowd-sourcing” concept, could reward parties who enter price data by providing credits or points which can be used to access market information or other benefits (Figure 10).



**Figure 10 Option 2 First person cloud based data collection and sharing**

#### *Benefits*

This option could potentially reduce the cost of market price reporting, by removing the need for independent 3<sup>rd</sup> party inspectors. This approach has been used by the Australian Avocado industry, with industry stakeholders voluntarily uploading market volume information to the Infocado platform.<sup>12</sup>

#### *Limitations or barriers*

Removing independent 3<sup>rd</sup> party oversight and validation of price information would likely result in reduced accuracy. Also it may be difficult to encourage stakeholders to independently submit or update prices on a daily basis.

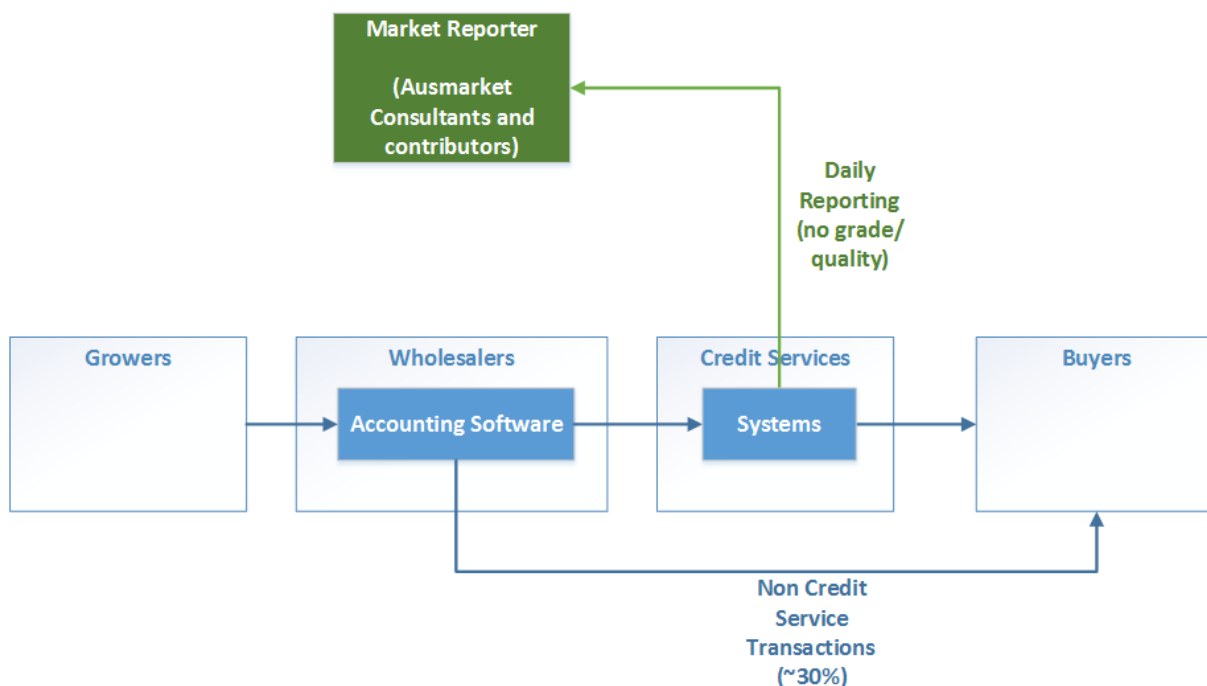
#### *Estimated cost*

An entirely new software system would need to be developed, at an estimated cost of around \$500K.

<sup>12</sup> <http://industry.avocado.org.au/Growers/Infocado.aspx>

## 4.5 Option 3: Accessing data from market credit services

Under this option data would be obtained, where possible, from market credit services and used for market reporting (Figure 11).



**Figure 11 Option 3: Accessing data from market credit services**

Table 9 below lists the various credit service agencies operating in different wholesale markets.

**Table 9 Market Credit Services**

Market	Credit Service	Link
Sydney	Sydney Markets Credit Services Co-Operative Ltd (Associate)	<a href="http://freshmark.com.au/team-member/sydney-markets-credit-services-co-operative-ltd-associate/">http://freshmark.com.au/team-member/sydney-markets-credit-services-co-operative-ltd-associate/</a>
Brisbane	Brismark Credit Services	<a href="http://www.brismark.com.au/services/credit-service/">http://www.brismark.com.au/services/credit-service/</a>
Melbourne	Melbourne Market Credit Services	<a href="http://www.freshstate.com.au/mm-credit-service/">http://www.freshstate.com.au/mm-credit-service/</a>
Perth	Market West Credit Services	<a href="http://www.marketwest.com.au/services/#mwcs">http://www.marketwest.com.au/services/#mwcs</a>
Adelaide	South Australian Produce Market	<a href="http://saproducemarket.com.au/">http://saproducemarket.com.au/</a>

### Benefits

This option would provide access to actual sales data rather than relying on information obtained from market interviews.

### ***Limitations or barriers***

Market credit services do not record information relating to product grade or quality, which have a significant impact on price. It is estimated that around 30% of market transactions occur outside credit services. Data from these transactions would not be available for market price reporting.

To protect the privacy of traders, any information provided by a credit service agency to a market reporting agency would need to ensure that the involved parties cannot be reasonably identified (unless consent is given). Furthermore, credit service agencies could not be compelled to provide price information, without the establishment of new legislation. Appendix C provides further analysis of legal and privacy issues associated with data use.

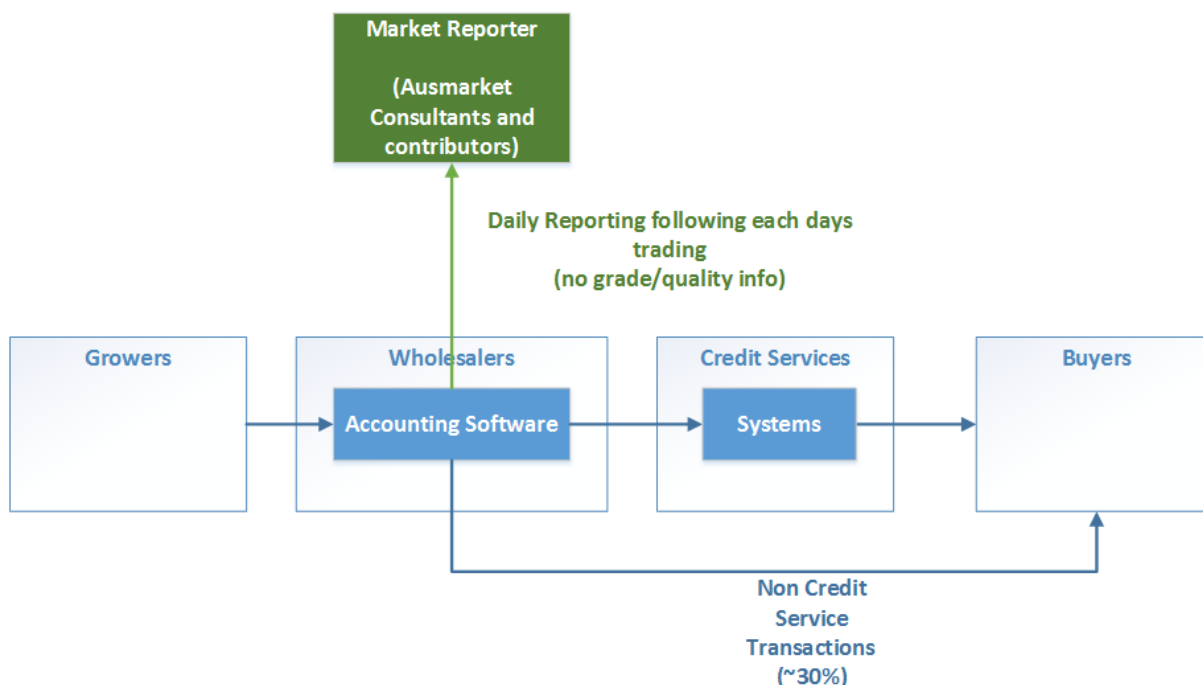
There may also be limitations on how quickly credit service organisations can collect, process and submit market price information. In the Brisbane Wholesale Market, credit service data is provided twice weekly to market reporters, to allow for cross checking and validation. Data is usually around two days old by the time it is received, and the lack of quality or grade information mean that it can only be used as a high level cross check.

### ***Estimated cost***

This option would involve relatively simple data receipt and analysis, and therefore highly specialised software may not be required. Estimate cost ~\$100K.

## 4.6 Option 4: Accessing data from wholesaler accounting software

Under this option, wholesalers would be required to generate and submit daily reports of throughput and sales, via their accounting or enterprise resource planning (ERP) software (Figure 12). This is similar to what is being trialled in the Perth markets (see 2.4.1).



**Figure 12 Option 4: accessing data from wholesaler accounting software**

Market wholesalers typically operate off-the-shelf software tailored for market agents, providing stock control, sales entry, invoicing and management statistics. Some popular brands of software used by wholesalers are listed in Table 10 below.

**Table 10 Common software systems used by wholesalers**

Software	Link
Ironbark	<a href="http://www.ironbark.com.au/">http://www.ironbark.com.au/</a>
Fresh	<a href="https://www.freshcomputers.com.au/">https://www.freshcomputers.com.au/</a>
Navision	<a href="https://www.fenwicksoftware.com.au/">https://www.fenwicksoftware.com.au/</a>

Typically, wholesalers will either enter sales as they occur or at the end of each trading day. Most systems have capacity for users to record information such as grade, carton type, weight, condition etc. Software systems typically have the ability to automatically generated and submit reports.

### Benefits

This option would access verifiable sales data, and remove the need for market interviews.

### Limitations or barriers

As with option 3 above, this option would almost certainly require the introduction of legislation to ensure broad compliance.

Produce grade and quality may not always be captured in accounting entries. When this information is captured, it is often not based on independent third party assessments, as with the current system.

Furthermore, developing a system which is compatible with the range of software packages used by wholesalers could be challenging.

#### *Estimated cost*

This option would involve relatively simple data retrieval and analysis, and therefore highly specialised software may not be required. Estimate cost ~\$100K.

## **4.7 Option 5: Strengthening current system**

There are opportunities to strengthen, rather than replace, the current market reporting system, through increased industry investment and improved oversight.

#### *Increased industry investment*

Under this option Hort Innovation could partner with Ausmarket Consultants to deliver price reporting to all vegetable industry members/levy payers. Ausmarket Consultants currently receive limited revenue from grower subscribers, with most revenue coming from banks, market authorities, larger corporates etc. If Hort Innovation considered that market price data should be available to all vegetable industry members/levy payers, a commercial arrangement or partnership could be formed to provide this service. Note that Hort Innovation is already indirectly purchasing market data from Ausmarket Consultants, via a range of projects including the Horticultural Statistical Handbook and Australian Mango Market Report (discussed in Appendix F).

The above commercial arrangement/partnership would enable Ausmarket Consultants to invest in upgrading their IT systems. New systems could enable improved data analysis e.g. through the development of an app and/or web portal, to replace the current pdf email attachment.

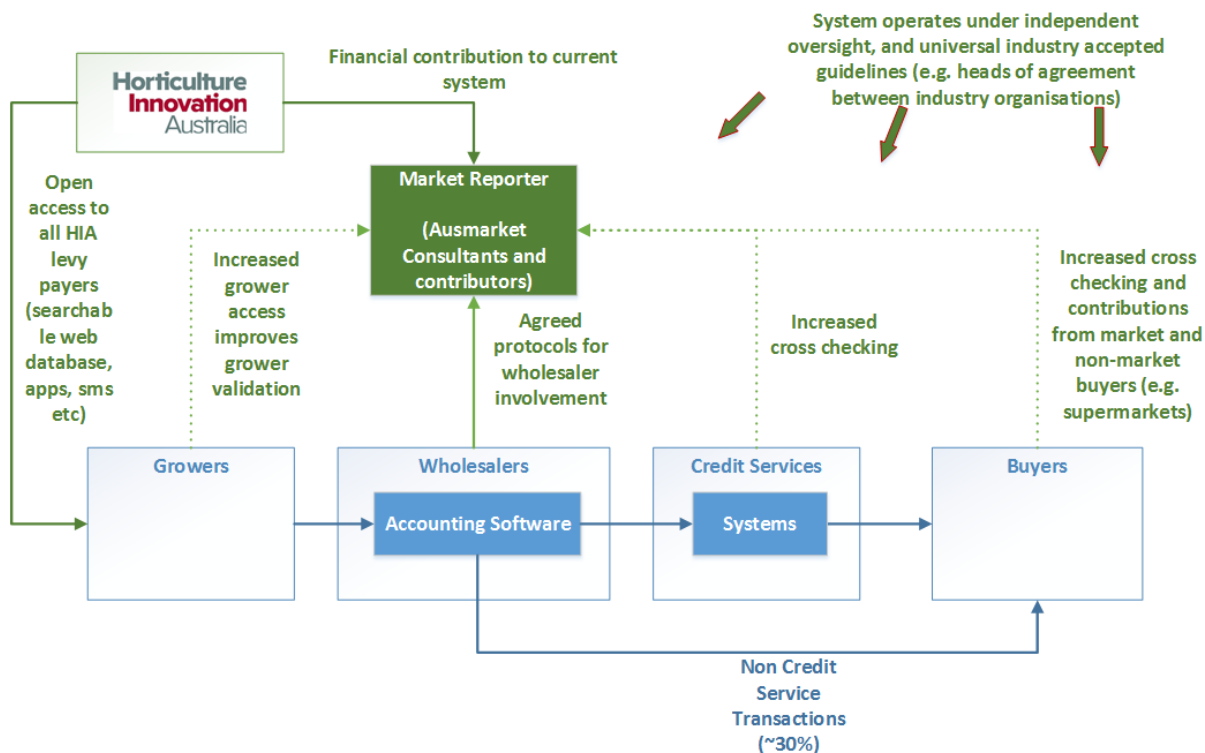
There are potentially a few different implementation options:

1. Hort Innovation based systems and portal: Buy bulk data from Ausmarket Consultants and develop systems within Hort Innovation to analyse and present (e.g. grower portal)
2. Ausmarket Consultants systems and portal: Have Ausmarket Consultants develop the systems and portal, and provide Hort Innovation members with a login.

#### *Improved oversight*

The current system could be strengthened by developing industry agreement, across the growing, wholesale and retail sectors, on the role of market price reporting and the importance for the industry. This could be developed via a heads of agreement between industry organisations which could result in the development of uniform industry acceptable guidelines for market price data collection and presentation.

The above opportunities for strengthening the current system are outlined in Figure 13.



**Figure 13 Option 5: Strengthening current system**

**Benefits**

At present market information is only utilised by the small number of growers who are subscribers, and even then growers are unable to easily track and compare price movements over time. Providing growers with universal access to market information could be of significant benefit to help inform marketing decisions.

Strengthening the current system would not require legislative change, nor development of significant new systems.

**Limitations or barriers**

The disadvantage of this option is that it still relies on voluntary, largely unverified price information provided from wholesalers.

**Estimated cost**

The cost for Hort Innovation to obtain universal grower access to market information, would depend largely on commercial negotiations with Ausmarket Consultants. Estimated cost ~\$200-500K annual contribution.



## 5. Evaluation of options

This section provides a high level evaluation of the above options in order to better understand their suitability and identify key issues.

Each option, including the status quo, were evaluated against a range of important criteria, using the following rating system:

1. Very poor
2. Poor
3. Neutral
4. Good
5. Very good

The results are provided in Table 11 below with 'very poor' or 'poor' ratings highlighted in red.

The results suggest that Option 5 (Strengthening current system) is the most suitable, with Options 1 to 4 all scoring lower than the current Status Quo, with key issues including data accuracy, timeliness and need for legislative change.

**Table 11 Evaluation of options (1/2)**

	Status quo	Option 1: Third person cloud-based data collection and sharing	Option 2: First person cloud-based data collection and sharing
Data accuracy	3 Based on survey feedback	2 Same collection method as status quo however with no validation step	1 Unverifiable data, no independent assessment of grade or quality
Timeliness	4 Available mid-morning	5 Immediately available	5 Immediately available once date is entered
Data usability	2 Limited ability to monitor trends, search and compare	4 Opportunity to improve data usability	4 Opportunity to improve data usability
Technical feasibility	5 Already developed	3 New system required	3 New system required
Likely wholesaler participation/coverage	4 Most wholesalers currently participate	3 Some wholesalers may object to providing prices which will be made immediately and individually available	1 Likely difficulties in encouraging participation
Legal feasibility	5 Already operating, no legislation required	5 No change in legislation required	5 No change in legislation required
Cost	4 Existing system is labour intensive however limited new investment would be required	3 Existing labour intensity, however would require an entirely new system	4 Reduced labour intensity, however increased costs to develop new system
<b>TOTAL</b>	<b>27</b>	<b>25</b>	<b>23</b>

**Table 12 Evaluation of options (2/2)**

	Option 3: Accessing data from credit services	Option 4: Accessing data from accounting software	Option 5: Strengthening current system
Accuracy	3 Verifiable data however may not record grade, packaging etc	3 Verifiable data however may not record grade, packaging etc	4 Some opportunity to improve accuracy through increased usage and validation
Timeliness	2 Likely to be a delay in receiving data (afternoon or next day)	2 Likely to be a delay in receiving data (afternoon or next day)	4 Available mid-morning
Data usability	4 Opportunity to improve data usability	4 Opportunity to improve data usability	4 Opportunity to improve data usability
Technical feasibility	4 Data receipt and analysis	3 Potential compatibility challenges	4 Relatively simple
Likely wholesaler participation/coverage	4 About 70% of market transactions recorded by credit services	5 Assuming all market wholesalers compelled to participate	4 Similar to status quo
Legal feasibility	1 New legislation required	1 New legislation required	5 Already operating, no legislation required
Cost	4 Reduced labour intensity, however increased costs to develop new system	4 Reduced labour intensity, however increased costs to develop new system	3 Additional investment required to develop data portal and tools
<b>TOTAL</b>	<b>22</b>	<b>22</b>	<b>28</b>

## 6. Findings

This section provides a summary of key findings from this study.

### *Data accuracy*

The perceived inaccuracy of data was a key issue for many stakeholders. Many growers clearly distrust the prices which wholesalers are reporting, and some cited anecdotal evidence of perceived inaccuracy in market reports.

Generally, growers believed wholesalers were reporting lower prices to hide profits. Counter to this, some wholesalers and market reporters believed some growers regularly over-estimate the quality and therefore value of their produce.

### *Data access and price*

Many growers resent having to pay for market information, particularly if they also question the accuracy of price data, and believe they should be afforded better price transparency via the Horticultural Code.

Many wholesalers also resent having to pay subscriptions for market reports, when they are each day asked to freely provide prices to market reporters.

### *Confusion around market information versus price transparency*

Consultation found that many stakeholders do not make a clear distinction between the provision of market information, which provides insights around market trends and movement, versus price transparency whereby involved parties are able to know prices received for particular products.

Many growers have long campaigned for price transparency measures, allowing them to know exactly what their produce sold for, however this is not the typical function of market information services, which instead aims to provide an indicator of overall market trends.

Consistent with the terms of reference, this study has focussed on ways to improve market information, rather than achieving ultimate price transparency. This issue is more appropriately addressed through the provisions contained within the Horticultural Code, and is outside the scope of this feasibility study. Indeed, none of the identified options are capable of achieving ultimate price transparency, as all would involve aggregation of data and/or the removal of identifying personal information, so as to protect privacy and ensure wholesaler participation.

While a robust and well utilised market reporting system can indirectly contribute to price transparency, by providing a meaningful guide from which growers can benchmark individual returns, it should not be considered as the primary motivation for implementing the system.

### ***Potential harm from destabilising current system***

Wholesale market price reporting in Australia has been privatised and is now being delivered by a range of private service providers. While the current service, delivered by Ausmarket Consultants and their contributing service providers, has been operating successfully for over 20 years, it remains somewhat fragile due to:

- Limited profitability
- Reliance on a small group of specialised market inspectors, working in a sometimes difficult market environment
- Aging software
- The ongoing challenge to demonstrate the integrity and accuracy of the system.

While exploring opportunities for improved services, industry should be mindful not to discredit and weaken the current system, which only survives through the support and co-operation of wholesalers (voluntarily providing prices) and subscribers (paying for the service). If stakeholders lose confidence in the current system, it may not survive into the future and this would leave the industry with no national market price reporting system and be a poor outcome for industry, including growers.

### ***No clearly viable opportunity to automatically obtain price data***

Most international market price reporting systems rely on obtaining data via in-person, telephone or email consultation with wholesalers, importers, exporters and growers. GHD did not identify any international systems which automatically collect actual sales data, with the exception of the Netherlands system which is able to collect actual data via to the Dutch auction sale method. This system also allows for real-time reporting of prices after auctions are complete.

GHD explored potential options for obtaining data automatically via either wholesaler accounting software or credit services. In both cases stakeholder consultation found that wholesalers or credit service agencies are unlikely to voluntarily share data. Therefore data could only be obtained in this way, if some form of new regulation were introduced.

### ***The WA experiment***

In Western Australia, Market West is developing a new price data collection system, which will automatically obtain price information directly from the accounting systems used by wholesalers in the Perth Markets. It should be noted that at Perth Markets it is a lease requirement for wholesalers to provide throughput information, which is not the case in other states.

It remains to be seen if this system will be successful in delivering rigorous, accurate and timely market price information. However, if so it may path the way for other markets to consider this option.

### ***Opportunities to improve data usability***

At present there is no way for Australian growers (including subscribers to Ausmarket Consultants) to access, and readily chart and analyse price data from different categories/markets over different time periods (weeks, months, years).

This type of analysis can readily be undertaken for other Australian agricultural commodities, and is key for helping producers understand market trends and cycles, and to benchmark their own business performance and profitability.

Subscribers to Ausmarket Consultants receive emailed pdf reports, whereas all international market information systems reviewed provide data to users/subscribers via a web portal and/or app, with most allowing for easy comparison and tracking of prices over time.

### ***Opportunity to develop national consistency in reporting***

There is a need for nationally consistent product categories and data collection protocols to help streamline price data collection. A significant amount of time is currently spent converting different state based reports into a nationally consistent report.

### ***Opportunity for broader industry engagement and input***

All industry sectors have a strong interest in receiving accurate and reliable market information. Ausmarket Consultants and their contributing service providers have close relationships with the wholesale and retail sectors, due to their regular market floor engagement, however there is much less direct engagement and dialogue with the growing sector.

Providing a forum for all interested sectors to have input into market price reporting could help resolve issues and ensure the service meets stakeholder expectations.

### ***Opportunity for industry investment in current system***

Given the relatively small number of growers (including vegetable growers) currently subscribed to market reporting services, there is an opportunity for industry-wide investment in the current system, to make data available to all growers.

The 20 year historical database of daily prices maintained by Ausmarket Consultants is a valuable resource which could be utilised more to understand long-term trends, market cycles, and impacts when production from different regions reach markets. While many growers question the accuracy of data, when industry levy funds have been used to provide market information to growers, including the Horticultural Statistical Handbook and Australian Mango Market Report (discussed in Appendix F), the outputs have generally been valued by growers.

Stakeholder consultation suggests there is limited support for a wholly levy funded market reporting system, however most stakeholders support a combination of user pays and levy funding. Many other Research and Development Corporations offer market price reporting services, which are typically well utilised and valued by levy payers.

## 6.1 Recommendations

Given the above findings it is recommended that Hort Innovation seeks to strengthen the current system of market price reporting, through collaboration with key stakeholders. In acknowledging the fact that many growers question the accuracy of market information, a trial exercise conducted over 12 months would be an appropriate way for Hort Innovation and growers to gauge the value of strengthening the current system through collaboration, without committing to any ongoing arrangements. The trial could include a number of different components, outlined below.

- Hort Innovation should establish a small steering committee of vegetable producers with an interest in market reporting. The committee would include one grower representing each of the largest 4-6 vegetable crops, as well as a representative from Ausmarket Consultants. There may also be scope for including a wholesaler (or representative) on the committee, to provide input from the perspective of the wholesaling sector.
- The steering committee would be tasked with developing a weekly market report which would best suit growers needs. Reports may include tailored analysis around price trends (short and long term), comparisons across different markets, quality, supply and commentary about prevailing market conditions driving market prices. Reports should be formatted with capability to be accessed from a number of platforms, e.g. mobile, desktop, email etc. to improve engagement.
- Hort Innovation purchase data from Ausmarket Consultants over a 12 month period to produce separate weekly market reports for 4-6 vegetable commodities in line with the format agreed to by the steering committee. Reports will be published on the Hort Innovation website and also made available to other relevant industry bodies, and circulated to vegetable growers.
- During the trial growers will be encouraged to report any perceived inaccuracies directly to Ausmarket Consultants and/or the Steering Committee. Each reporting event will be followed up by Ausmarket Consultants through discussions with growers and wholesalers. Where appropriate findings will be published in the following week's report.
- In order to understand and appraise the data collection methodology and systems used by Ausmarket Consultants, the Steering Committee should spend one morning with market inspectors in the Brisbane Markets, including meeting with the wholesaling sector.
- At the conclusion of the 12 month trial, the success of the initiative should be evaluated in a number of ways:
  - Uptake: Track the number of times the reports are downloaded in total and by unique users
  - Value and usefulness: Randomly select a group of 10-20 growers of each commodity who will be asked to review the weekly reports and assess the value and benefit for their business
  - Perceived accuracy: Track the number of reported inaccuracies (and outcomes from follow-up)
  - Steering committee feedback: The committee's view on the success of the trial and the suitability of data collection and reporting.

Depending on the results of the trial, industry may wish to pursue a number of different options, including: discontinuing, continuing or expanding the service e.g. by adding additional commodities or through the development of searchable web databases, apps etc. The results of the trial may also encourage industry to pursue improvements to the current system including through improved data validation, development of standard protocols for data collection and development of agreements with other industry sectors on the role of market reporting.

If at the end of the trial, the current market reporting system is found to be deficient, industry may wish to continue to explore alternative options.



# Appendix A Stakeholder Survey

## Q1 Stakeholder details

Name

Organisation

Stakeholder category (circle appropriate)

- Grower
- Grower organisation
- Wholesaler
- Wholesaler organisation
- Retailer
- Market Authority
- Data service provider (Go to Q5)
- Market Credit Agency (Go to Q5)

## Q2 Are you currently subscribed to a market information service? (circle appropriate)

Yes, I receive national reports via Ausmarket Consultants (Go to Q3)

Yes, I receive state based reports (Go to Q3)

Not a current subscriber, but have been in the past (Go to Q3)

Never been a subscriber (Go to Q4)

## Q3 How would you rate the current system of horticulture market price reporting in terms of the following factors? (Go to Q5)

Factor	Very poor	Poor	Neutral	Good	Very good
Accuracy					
Timeliness					
Coverage of different products, produce categories, grades, packages etc.					
Coverage of markets and supply chains					
Cost					
Overall					

**Q4 Why have you never subscribed to a market information service?**

- Accuracy
- Timeliness
- Coverage of different products, produce categories, grades, packages etc
- Coverage of markets and supply chains
- Cost
- Other (Comment)

**Q5 What do you like most about the current market price reporting system?**

**Q6 What don't you like about the current market price reporting system? Or how could it be improved?**

**Q7 Please score (from 1 – 5) the suitability of the following six potential price reporting options and explain the reasons for your response. Note that each of the options were described in the table above.**

	Very un-suitable	Un-suitable	Neutral	Suitable	Very suitable
<b>1. Real-time data collection and sharing</b>					

**Comments**

	Very un-suitable	Un-suitable	Neutral	Suitable	Very suitable
<b>2. First person data collection and sharing</b>					

**Comments**

	Very un-suitable	Un-suitable	Neutral	Suitable	Very suitable
<b>3. Accessing data from market credit services</b>					

**Comments**

	Very un-suitable	Un-suitable	Neutral	Suitable	Very suitable
<b>4. Accessing data from wholesaler accounting software</b>					

**Comments**

	Very un-suitable	Un-suitable	Neutral	Suitable	Very suitable
<b>5. Surveying buyers or growers instead of wholesalers</b>					

**Comments**

	Very un-suitable	Un-suitable	Neutral	Suitable	Very suitable
<b>6. Status quo</b>					

**Comments**

	Very un-suitable	Un-suitable	Neutral	Suitable	Very suitable
<b>7. Status quo</b>					

**Comments**

**Q8 Are there any additional options you can think of?**

**Q9 Describe your ideal market price reporting system?**

**Q10 What do you believe is the most appropriate means of funding market reporting services in the horticultural industry?**

User pays (access limited to subscribers)

Industry levy funded (available to all)

A combination of the above

Other funding models

**Comments**

**Q11 Do you have any further comments or feedback regarding this issue?**

**Q12 Would you be interested in providing further information via a follow-up telephone interview?**

Yes please

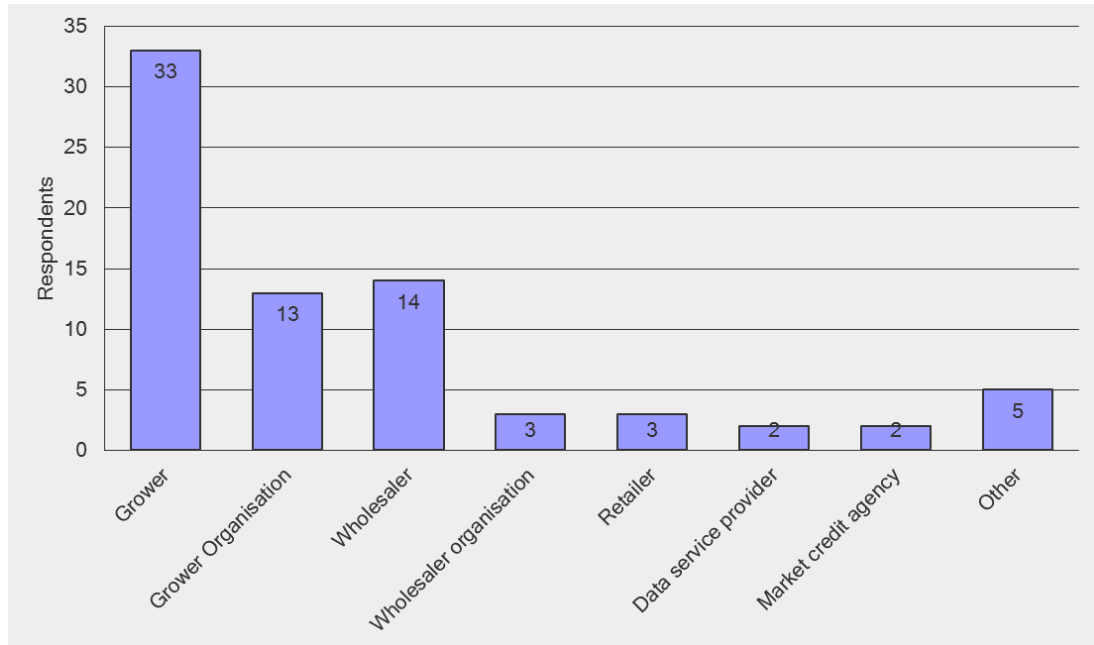
- Please provide a contact telephone number (mobile preferred)
- \_\_\_\_\_

No thanks

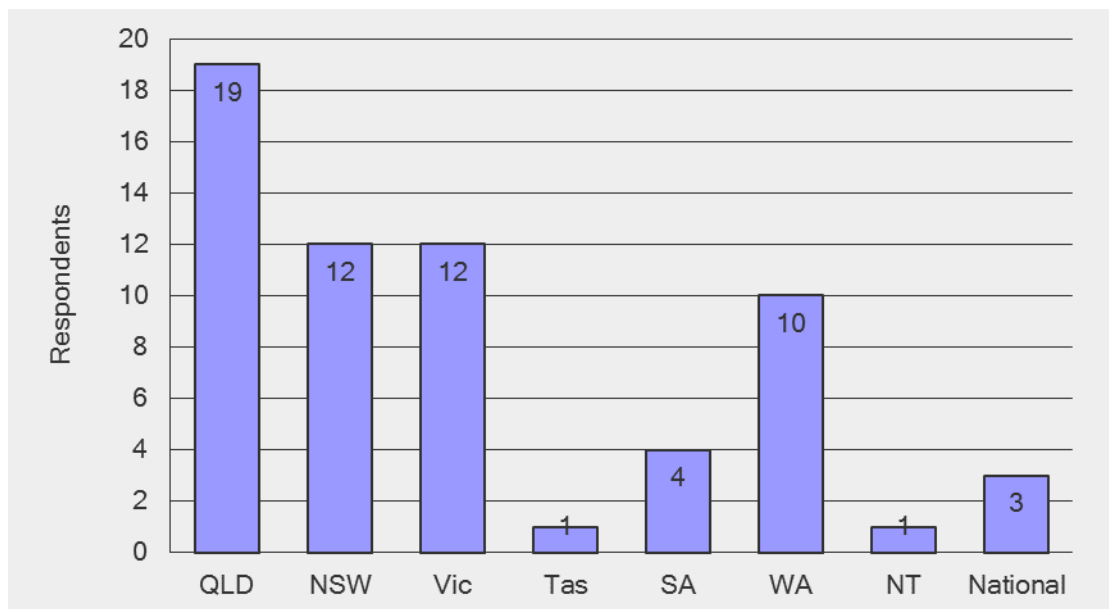
**GHD and Horticulture Innovation Australia thank you for taking the time to provide feedback on this issue.**

## Appendix B Stakeholder Consultation Summary

GHD received 59 responses via the online stakeholder survey, telephone and in-person interviews. Figure 14 below shows the breakdown of responses by stakeholder category while Figure 15 shows responses by location (note that stakeholders were given the option to select multiple options).

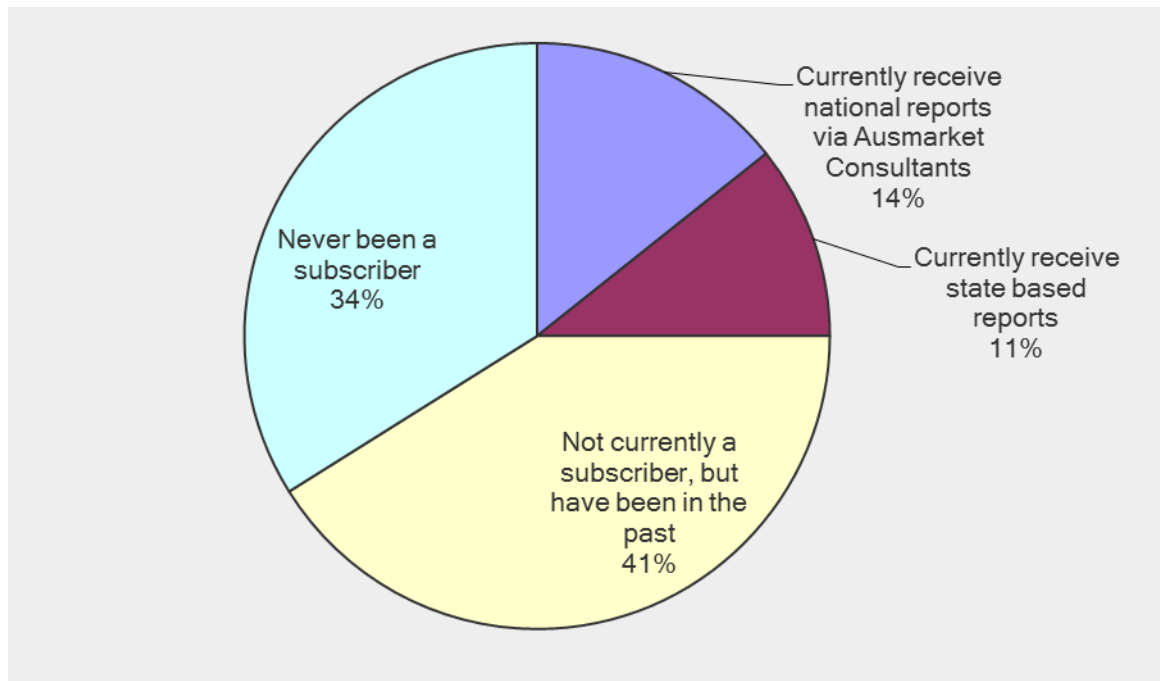


**Figure 14** Respondents by stakeholder category



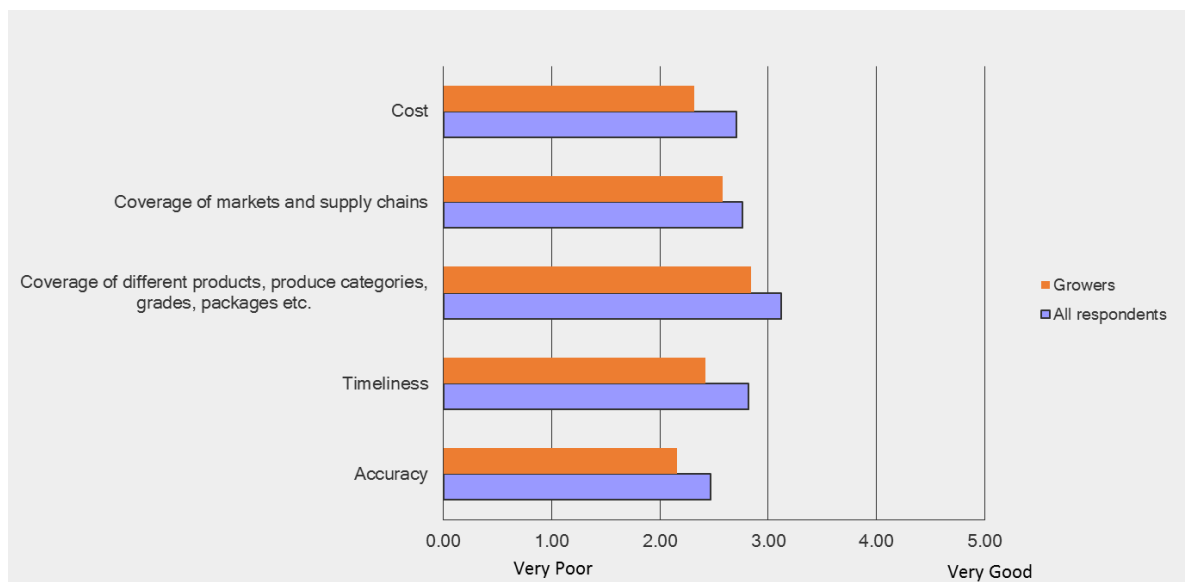
**Figure 15** Respondents by location

Figure 16 shows that the majority of stakeholders (66%) were current subscribers to market reporting services, or had been in the past.



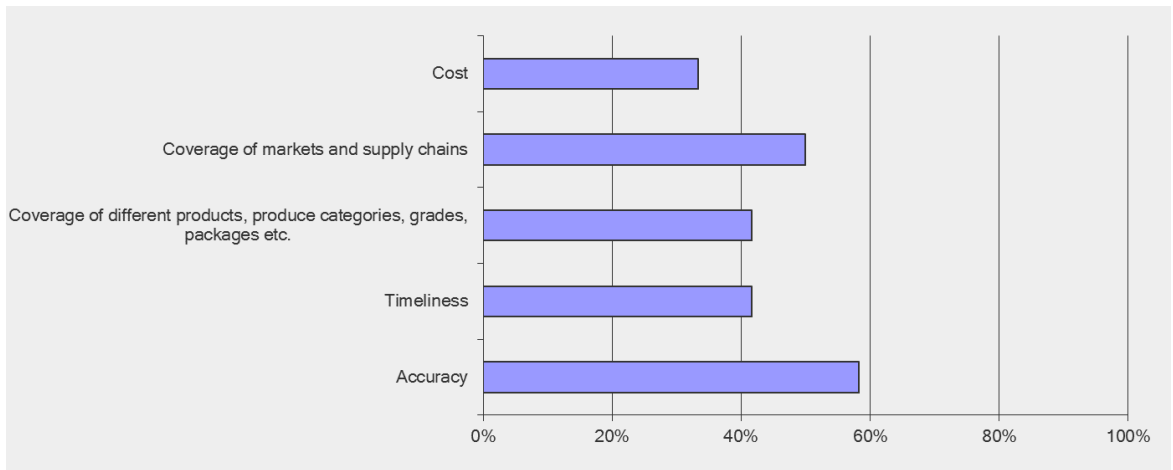
**Figure 16 Subscription status**

Figure 17 shows how current or previous subscribers rated the current system or market price reporting, in terms of a range of factors. The results indicate lower levels of satisfaction from growers compared to other stakeholders.



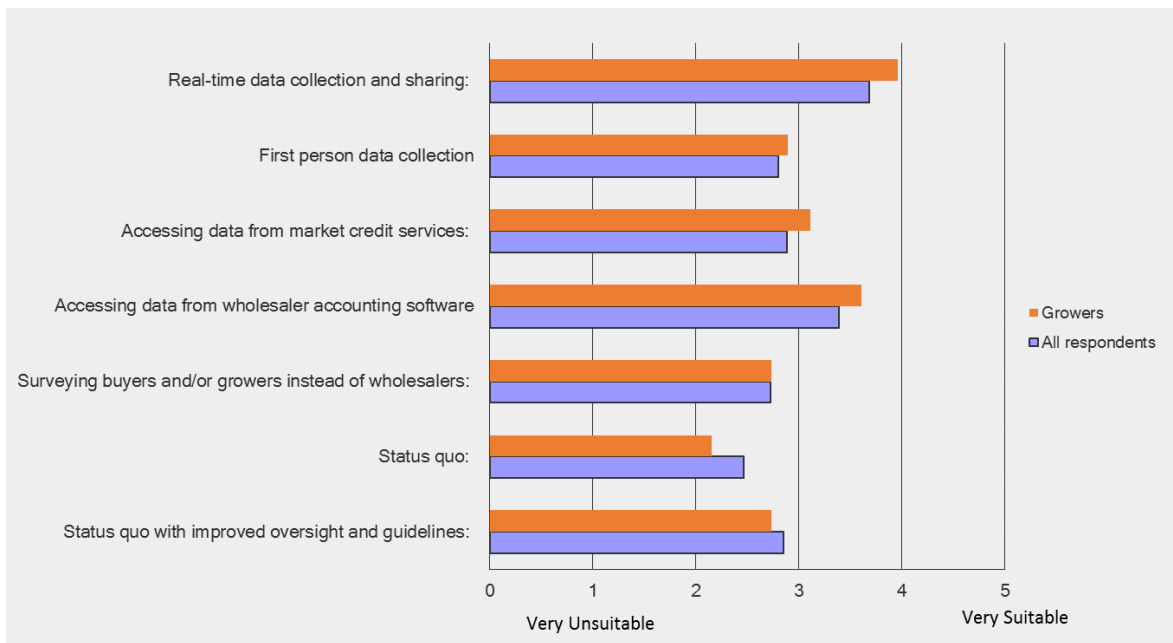
**Figure 17 How would you rate the current system of horticulture market price reporting in terms of the following factors?**

Figure 18 shows the reasons provided by non-subscribers for not using the current service. The results suggest that perceived inaccuracy of data is a primary concern.



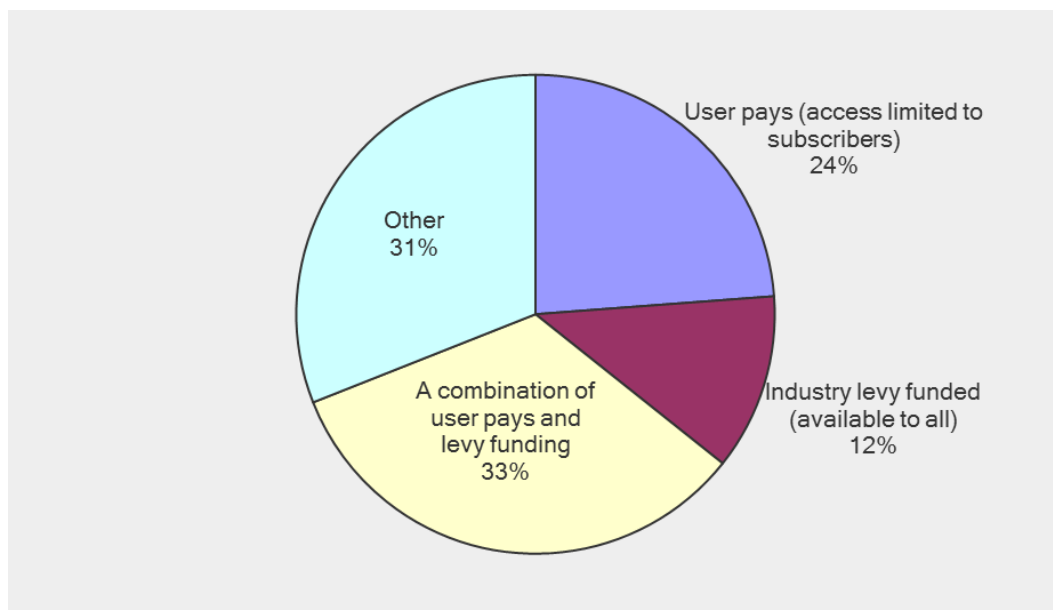
**Figure 18 Why have you never subscribed to a market information service?**

Figure 19 shows how stakeholders rated the suitability of various price reporting options outlined in the survey. The results show that growers in particular favoured options involving real time collection and sharing of data, or obtaining data directly from credit service agencies or wholesaler accounting software.



**Figure 19 Please score (from 1 – 5) the suitability of the following potential price reporting options**

Figure 20 presents stakeholder views on the most appropriate funding model for market reporting services. The results suggest that 45% of stakeholders would support some form of levy investment into market reporting.



**Figure 20 What do you believe is the most appropriate means of funding market reporting services in the horticultural industry?**

### 6.1.1 Response summary

Listed below is a summary of the stakeholder response to survey questions

#### *What do you like about the current system of price reporting?*

- Data granularity and quality
- Timeliness of reports, helps with marketing decisions (where to send produce)
- Access to interstate market information
- It has a comprehensive list and breakdown on prices and different qualities of produce
- Product coverage
- Affordable
- A good reflection of market trends

#### *What don't you like about the current system of price reporting?*

- Inaccuracy (not based on actual data, easily manipulated)
- Price range is too wide, makes data meaningless
- Format (Can't download and use data to compare and view trends)
- Format (important information gets lost amongst irrelevant information in reports)
- Cost



### ***Describe your ideal market price reporting system?***

- Live market updates just like the ASX available to all suppliers / retailers at the same time
- Difficult to improve on current model, additional cost would not outweigh the benefits.
- Every sale tracked in real time with actual data
- Based on credit services data
- Current system, but with independent inspectors having the power to view sales dockets
- I would like to see whom my fruit is sold to, at what cost and on what date. I then would like to see a complete breakdown of my cost, and an emailed report within 48 hours of the sale of my fruit
- Data available via an online web platform and app
- Providing wholesalers with indication of incoming volumes
- Secure login for growers to access information on the sale of their produce
- It would inform producers of where the product is short, where it is oversupplied, when supply dynamics are likely to change, what the relative price strength or weakness is for different market segments
- The agents would email a daily report of sale to their growers with all costs showing on the report and also the final return
- Cloud based system, agents enter information

### ***What do you believe is the most appropriate means of funding market reporting services in the horticultural industry?***

- Wholesalers and growers should both contribute to system
- The service should be restricted to those stakeholders using central markets
- Basic information could be publically available (levy funded) with packaged data or analysis available on a user pays basis.
- Provision of data to growers via levy would be a good spend if the producer had some bargaining power returned in the transaction process (e.g. even up the playing field)
- There may be funding opportunities via the Horticultural Code Review.

# Appendix C Legal and privacy issues around data use

This section provides a summary of the legal and privacy issues surrounding the accessing and sharing of price data.

## *Privacy Act 1988*

The following information has been compiled following personal communication with the Office of the Australian Information Commissioner 18 November 2016.

*The Privacy Act 1988 (Privacy Act)* regulates how personal information is handled. The Privacy Act defines personal information as: *information or an opinion about an identified individual, or an individual who is reasonably identifiable*

Under The Privacy Act, organisations can share information, so long as identifying personal information is removed (e.g. names, addresses, phone numbers etc). Once identifying information is removed, information is no longer considered to be personal information, and is no longer regulated under the Privacy Act.

For an organisation to share information without removing personal details, voluntary consent must be obtained from the individuals.

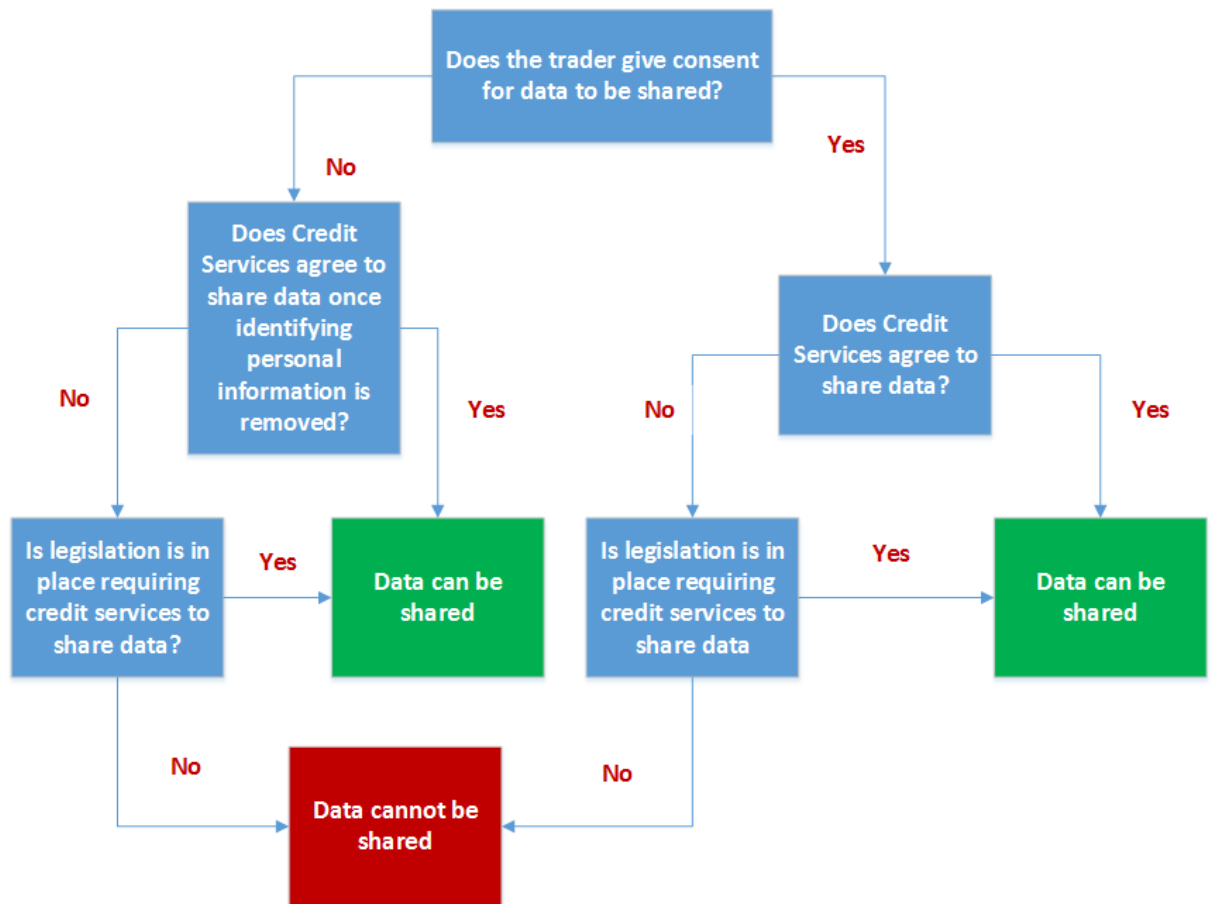
The Privacy Act includes a number of exemptions, where personal information can be shared, including if *'the use or disclosure of the information is required or authorised by or under an Australian law or a court/tribunal order'* (Schedule 1: (6.2b)).

In summary a Credit Service agency could disclose information under the following circumstances:

- If consent is given by wholesalers and retailers to share their personal information; or
- If the provision of information is required by Australian law; or
- If all personal information is removed, so that individuals are not 'reasonably identifiable' (note that some aggregation of data may also be required to ensure traders cannot be identified); or

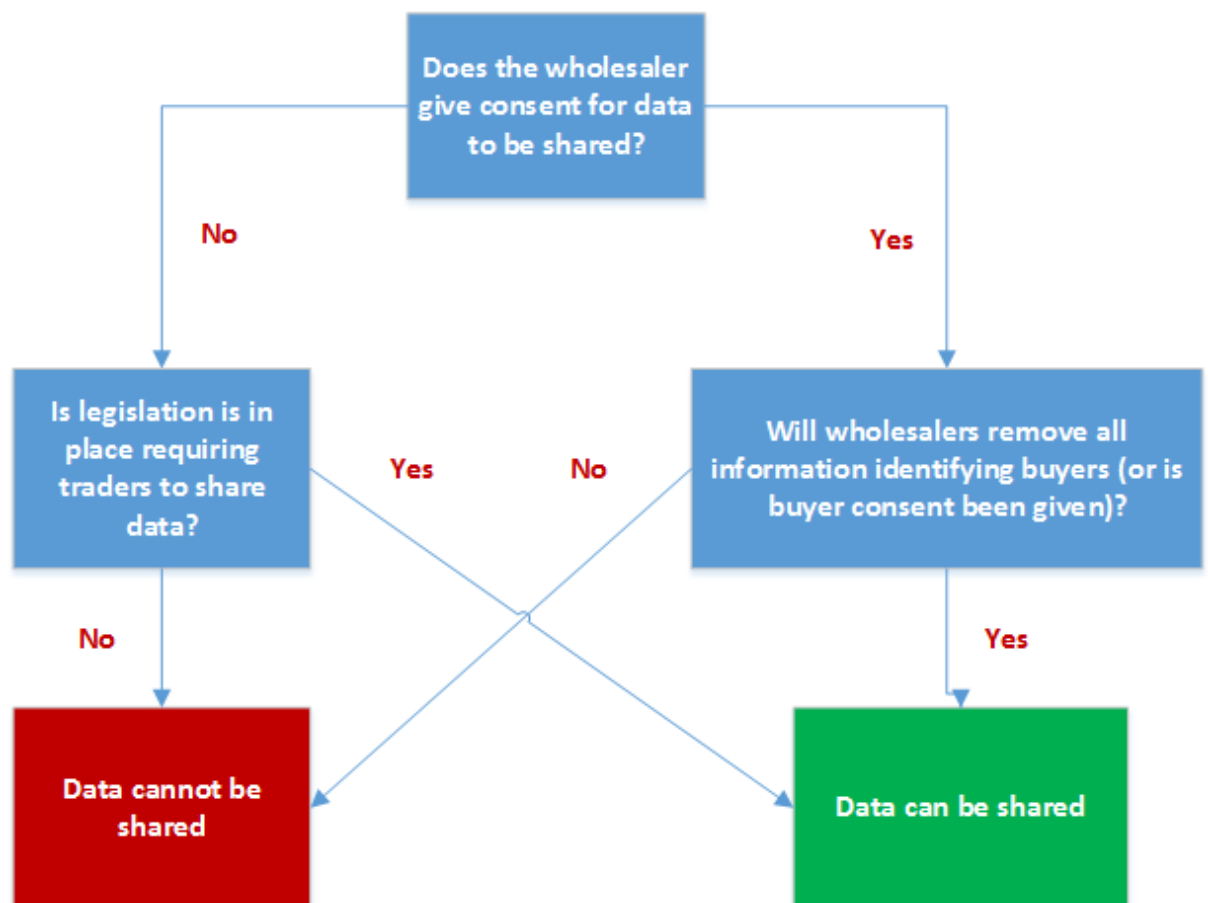
Since personal identifying information is not required for the purpose of market reporting, the final option is likely to be the most logical. This approach is being used in the Brisbane Markets where Credit Services provide a twice weekly aggregated summary of data, with all personal information removed.

Figure 21 below summarises the legal framework and decision process for obtaining data from Credit Services.



**Figure 21 Legal framework for Credit Services data provision**

The provisions of the Privacy Act would also apply in the case of wholesalers reporting data from accounting software (option 4). Wholesalers could only provide information if information identifying buyers is removed (or their consent is obtained). Alternatively, the Privacy Act provisions could be exempt if the provision of information is required by Australian Law.



**Figure 22** Legal framework for wholesaler data provision

#### *Legislation for Data Provision*

While Wholesalers and Credit Services are able to provide aggregated and anonymous data under the Privacy Act, they are not compelled to do so. Mandating data provision would likely require some form of legislation.

Such legislation is likely to raise a number of issues with legislators. For example, a possible law could state that *'all Credit Service providers operating in central fruit and vegetable markets must make data available for the purpose of market reporting'*. Such a law would raise the following issues:

- How will Credit Service providers and central fruit and vegetable markets be defined?
  - Not defined elsewhere so legislation would need to either describe their function or alternatively licence them.
- What is the justification for introducing legislation targeting only Credit Service providers and their users?
  - What about non-Credit Service transactions?
  - What about central markets without Credit Services?
  - What about outside market transactions?
  - Will legislation discourage the use of Credit Services? If so is this a desired outcome?
- Does this set a precedent for other industries?

# Appendix D International market information collection models

## 6.2 USA

The US Department of Agriculture (USDA), operates the Agricultural Market Service (AMS) Specialty Crops Market News, which collects and disseminates information current supplies, demand, and prices of over 400 fresh fruit, vegetable, nut, ornamental, and other specialty crops<sup>13</sup>.

Market information is gathered through confidential telephone and face-to-face interviews carried out by market reporters employed jointly by the U.S. Department of Agriculture and State agencies.

PHILADELPHIA : CAULIFLOWER Market : ABOUT STEADY.											
Location : PHILADELPHIA Commodity : CAULIFLOWER Package: cartons film wrapped Variety: WHITE											
Date	Low-High Price	Mostly Low-High Price	Origin	Origin District	Item Size	Environment	Color	Unit of Sale	Quality	Condition	Storage
10/27/2016	12.00 - 16.00	12.00 - 14.00	CALIFORNIA		9s						
10/27/2016	13.00 - 16.00	15.00 - 16.00	CALIFORNIA		12s						
10/27/2016	3.00 - 3.00		CALIFORNIA		12s					ORD COND	

**Figure 23 Sample of US market reporting**

## 6.1 Canada

The Canadian Government undertakes daily price reporting of domestic and imported commodities, in the Toronto and Montreal markets<sup>14</sup>. Information is supplied by a select surveyed group of wholesalers, with quoted prices representing the wholesalers 'asking price' to the retail level for a commodity and does not represent any arrangements or deals. The information provides for commodities, varieties, origins, pack weight or count and price range.

Data is made openly available via a searchable web portal, providing daily, weekly, monthly and annual summaries.

<sup>13</sup> <https://www.marketnews.usda.gov/mnp/fv-home>

<sup>14</sup>

[https://infohort.agr.gc.ca/IH5\\_Reports/cognosSubmitter.xhtml?lang=e&report=12&pageMenuId=12](https://infohort.agr.gc.ca/IH5_Reports/cognosSubmitter.xhtml?lang=e&report=12&pageMenuId=12)

**Wholesale-Toronto**  
**Week Ending: 2016/09/02**

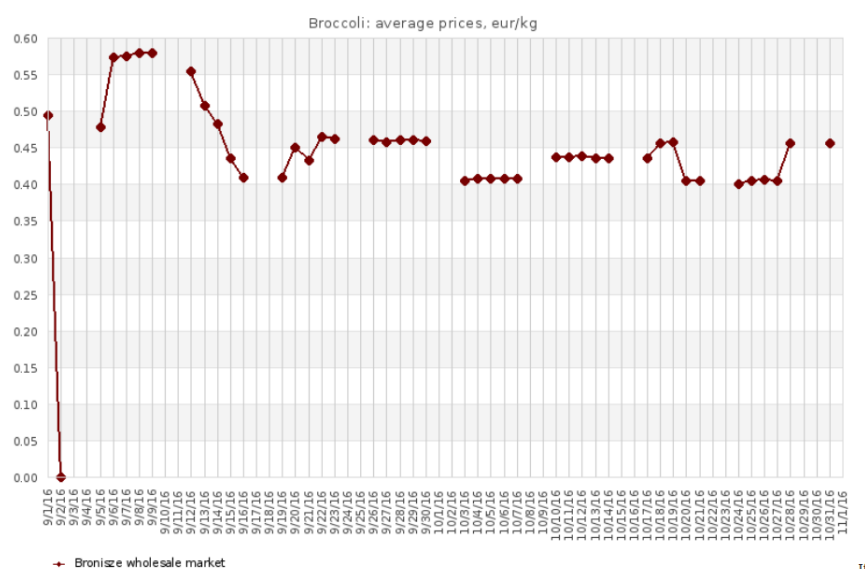
Commodity	Variety	Origin	Unit Quantity	Grade	Monday		Tuesday		Wednesday		Thursday	
					Low	High	Low	High	Low	High	Low	High
Asparagus	Green	Mexico	Ctn 11 Lbs Lge	N/A	\$49.00	\$49.00	\$49.00	\$49.00	\$49.00	\$49.00	\$49.00	\$49.00
		Peru	Ctn 11 Lbs Lge	N/A	\$43.25	\$43.25	\$43.25	\$43.25	\$43.25	\$43.25	\$43.25	\$43.25
			Ctn 11 Lbs Bchd	N/A	\$39.00	\$47.00	\$39.00	\$47.00	\$39.00	\$47.00	\$39.00	\$47.00

**Figure 24 Sample of Canadian market reporting**

### 6.2 Russian Federation and Ukraine

Fruit-Form is a private service provider which collects daily fruit and vegetable prices from markets across Russia and the Ukraine.<sup>15</sup>

Daily price data is available for free in chart format (Figure 25) however access to data in tabular format is only available to subscribers. Subscribers also receive weekly emailed reports with broader analysis around throughput volumes, exports and forecasting.



**Figure 25 Sample of Russian market reporting**

Price data is collected via telephone interviews in the majority of cases, with consultation including growers, traders, importers, exporters, wholesalers as well as supermarket chains. Prices are cross checked against different stakeholders to ensure accuracy

### 6.3 Cambodia

The Cambodian Government manages an advanced system of market price reporting, which is unique from other systems around the world, in that it relies on data collected from both government departmental staff, as well as market traders sending through prices via SMS<sup>16</sup>.

<sup>15</sup> <http://www.fruit-inform.com/en/products>

<sup>16</sup> <http://www.agriculturalmarketinformation.org.kh/en/price-and-production-data/price-data/commodity-price-by-market>

Users can review and compare price information from these two sources (Figure 26). Users can send an SMS requesting selling prices by market and commodity, with an SMS reply providing selling prices from all participating traders.



**Figure 26** Sample of Cambodian market reporting

## 6.4 Netherlands

In the Netherlands market price reporting is provided by two private service providers.

### *Groenten & Fruit*

Groenten & Fruit<sup>17</sup> collect and report data directly from the electronic Dutch auction systems used in many central markets in the Netherlands. Subscribers can access actual data for individual lots and/or market averages, via a searchable web database or app.

### *Fruit Sales Prices*

In the Netherlands market prices are collected and published via a private company, Fruit Sales Prices<sup>18</sup>. This service has been operating since 1974 originally in the Rotterdam and Antwerp markets. Today data is obtained directly from exporters and other contacts, with daily reports provided to subscribers. Revenue is also obtained from advertising on the website and reports.

<sup>17</sup> <http://marktprijzen.gfactueel.nl/>

<sup>18</sup> [www.fruitsalesprices.com](http://www.fruitsalesprices.com)

# fruitsalesprices.com - week 33 - 2015

website: [www.fruitsalesprices.com](http://www.fruitsalesprices.com) e-mail: [info@tricop.nl](mailto:info@tricop.nl)

All prices are in Euro's



Apples		Lemons	
			
<b>New-Zealand Royal Gala</b> 18 kg.	110- 15,00-17,50 120- 14,00-16,50 135- 13,00-16,00	<b>Argentine Eureka</b> 18 kg.	64- 27,50 72- 27,50-28,50 80- 27,50-30,00 88- 28,00-32,00 100- 29,00-34,00 113- 29,50-34,00 125- 30,00-34,00 138- 30,00-34,00 150- 30,00-31,00
80- 27,00 90- 28,00	<b>Chilean Royal Gala</b> 18 kg. 100- 27,00		
<b>New-Zealand Red Delicious</b> 18 kg.	<b>Chilean Fuji</b> 18 kg. 100- 15,50-18,50 110- 18,50 120- 18,00 135- 17,50		
125- 23,50	<b>Chilean Royal Gala</b> 18 kg. 165- 14,00		
<b>New-Zealand Pink Lady</b> 18 kg.	<b>Chilean Braeburn</b> 18 kg. 70- 15,00-18,50 80- 15,00-17,00 90- 15,00-18,50		
80- 29,00 90- 31,00 100- 31,00-33,50 110- 30,00-32,50 120- 28,00	<b>New-Zealand Pink Lady</b> 12,5 kg. 100- 19,50 110- 19,50 120- 14,50-15,50 135- 14,00		
63- 25,50 70- 24,50 78- 23,50			

Figure 27 Sample of Netherlands market reporting

## 6.5 India

The Indian Ministry of Agriculture launched the ICT based Central Sector Scheme of Agricultural Marketing Information Network (AGMARKNET), in March, 2000, which provides price information for a wider range of agricultural and horticultural markets via the Agmarknet portal<sup>19</sup>.

Price information includes maximum, minimum and model prices of varieties, total arrivals and dispatches with destination.

The portal is run by the Directorate of Marketing & Inspection (DMI) with the technical assistance from a private consultant. Computers were provided to all markets, with connections to the DMI headquarters. Market officials collect and enter data in the prescribed format, using the customized application software "Agmark". The data is received by DMI headquarters before being immediately uploaded to the portal.

As of March 2015 the portal covered 3245 markets across the county, with 2200 markets reporting regularly. They system covers about 2000 varieties across 300 commodities.

A range of organisations and systems are linked to the portal including CODEX, FAO, APEDA, Trade Online, Commodities Exchanges like NCDEX, NMCE, and other related marketing organizations/Institutions.

The establishment of the system cost the Indian Government Rs.4000 crores (AUD\$787M).

### The next phase of development

The Indian Government plans to further develop the system by:

- Introducing a mobile/tablet based data collection system and app, to facilitate faster data collection;

<sup>19</sup> <http://agmarknet.gov.in/>



- Provision of incentives for officials to collect and upload price data for more than 20 days per month. Market officials will also be provided free training in how to use the hardware and software;
- Development of a more user-friendly map based interface;
- Development of alternative ways to disseminate tailored information to farmers via SMS/voicemail/apps. These services will be developed via strategic alliances with corporate bodies and telecommunication companies;
- Instillation of electronic display boards / price tickers at every networked market for display of minimum and maximum price and arrivals of important commodities; and
- Providing information to farmers on a broader range of topics, including best practice, promotion of direct contract selling, responding to market signals, regulations etc.

# Appendix E Market price reporting in other primary industries

## Livestock

The National Livestock Reporting Service (NLRS) independently collects market data from the key auction and direct markets, in addition to slaughter statistics and skin prices. Market information is collected primarily via 28 livestock market officers (LMOs) who attend 62 physical markets across Australia. Being an open cry auction system, LMOs are able to collect actual sale prices. Accuracy is also assured via the following:

- **Accreditation** - All LMOs are nationally accredited livestock assessors, and required to meet a consistent standard of accuracy in the assessment of liveweight, carcase weight, dressing percentage, fat scoring and muscle scoring;
- **Market coverage** - To ensure that a valid data sample is collected at each sale, LMOs must record at least 70% of the total stock offered for sale;
- **Automation of data collection** - Automated data capture devices and a sophisticated database are used to improve the efficiency and optimise the accuracy of the data collected; and
- **Auditing of all data and reports** - All data and reports are stringently cross-checked in the field and by head office prior to publication.

The NLRS is funded primarily from grower levies, sublimated by some external fee for service income. Meat and Livestock Australia allocated \$2.5 million to NLRS in 2015-16 (MLA AOP).

### History

The NLRS was formed in 1997 after a number of state governments agreed to form a national body for livestock market reporting, with a common language, description and report format. Funding contributions were provided from state governments (often through state based grower levies) and industry bodies.


In 2001 it became clear that the initial ad-hock funding model had become unsustainable. An independent review concluded that the NLRS should continue at a national level, as the service was found to be delivering economic value to the industry as a whole, by lessening transaction costs and by increasing market efficiency. The review found that the service was unlikely to be viable if converted to a fully commercial operation, and that this outcome may result in perceptions of bias and lack of independence. As a result, the NLRS was converted to a separate industry entity, funded by Meat & Livestock Australia.

## Wool

The Australian Wool Industry relies overwhelmingly on market information supplied by Australian Wool Exchange (AWEX), a statutory company which administers wool marketing arrangements. AWEX collects and analyses price and quality data from wool auctions and provides detailed information to subscribed stakeholders through a range of mediums (website, email, fax, voice messages, SMS).

The current AWED product and pricing schedule is provided in Figure 28 below. Note that it costs growers \$110 to become a member of AWEX and \$77 to renew annual membership. Market information subscriptions start at \$146 per annum for a weekly email national summary.

In addition to the above detailed subscription services, AWEX produces a benchmark Eastern Market Indicator (EMI) which is freely available to all.

2016/17 AWEX Subscriptions Price Schedule (GST Incl.)							
(+61 2) 9428 6130 www.awex.com.au subscriptions@awex.com.au							
		Delivery Method					
		✓ = available * = included in packages					
		Online	Email	Fax (+10%)	RollFax (charged per min.)	Voice Report (charged per min.)	SMS
<b>Online Packages</b>		<b>MEMBER</b>	<b>NON MEMBER</b>				
AWEX Online Platinum (Trader pack)		\$5,412	\$6,765	✓			
<i>Additional Licences</i>		\$297	\$371	✓			
AWEX Online Gold (National reports)		\$2,816	\$3,520	✓			
<i>Additional Licences</i>		\$297	\$371	✓			
AWEX Online Bronze (Farm pack)		\$418	\$523	✓			
AWEX Online Education Pack (Trainer pack)		P.O.A.	P.O.A.	✓			
<b>Pre Sale Reports</b>							
Four Week Forecast	- Supplier	Free	Free	✓			
	- Non Supplier	\$559	\$699	✓			
Pre-sale selection reports				✓			
Similar Lots Report		P.O.A.	N.A.	✓			
<b>National Summaries</b>							
National Daily Wool Market Report		\$1,227	\$1,533	✓	✓	✓	✓
Weekly Wool Market Report		\$803	\$1,004	✓	✓	✓	✓
Superfine Wool Report (Weekly)		\$611	\$763	✓	✓		
Wool Exports Snapshot (Monthly)		\$319	\$399	✓			
Woolshed Weekly		\$146	\$183	✓			
Buyers List - Weekly/Season to Date		\$242	\$303	✓			
<b>Regional Reports</b>							
Early Market Report		\$374	\$468	✓	✓	✓	✓
Regional Market Summary (Final)		\$677	\$846	✓	✓	✓	✓
SMS - Early and Final Regional Market Report		\$352	\$440	✓			✓
Premium & Discount Report		\$979	\$1,224	✓	✓		
Fremantle Wool Report (West only)		\$765	\$956	✓			
Point of Micron Report		\$561	\$701	✓			
Mean Reporting Quotes Report		\$742	\$927	✓			
Buyers List - Daily		\$226	\$282	✓			
Buyers List - Weekly/Season to Date		\$226	\$282	✓			
<b>e2</b>							
LPB Via Web Service	12 months	\$4,450	\$5,562	✓			
Auction Lot Viewing	3 Regions	\$2,365	\$2,956	✓			
	2 Regions	\$1,997	\$2,496	✓			
	1 Region	\$1,727	\$2,159	✓			
<b>Other</b>							
AWEX Indicators - Spreadsheet Extracts		\$468	\$584	✓			
Annual Wool Statistics Yearbook (hard copy)		\$330	\$413	✓			
Sale Roster Data File per region (Weekly)		\$249	\$311	✓			
Replication Fee		P.O.A.	P.O.A.				
Catalogue Data Extracts		P.O.A.	P.O.A.	✓			
Customised Reports		P.O.A.	P.O.A.	✓			
Seller Passed In Report (Similar lots)		Free	N.A.	✓			

AWEX Products and Services are supplied in accordance with AWEX's Terms & Conditions, including those relating to re-use and re-publication. See the AWEX website for the full terms.

**Figure 28 AWEX market information product and price schedule**

## Grain

The grain industry relies on a series of publically available indicator prices which are monitored by a number of agencies, principally ABARES. Some of these indicators include:

- Australian feed wheat indicator price (General purpose, Sydney)
- Australian feed barley indicator price (Sydney)
- Australian canola indicator price (Portland, Victoria)
- Australian grain sorghum indicator price (Sydney)

## Pork

Australian Pork Limited produces weekly market reports which are freely available. Prices are obtained on a weekly basis from both buyers and producers.<sup>20</sup> The reporting service required some investment to establish, however is now requires very limited resources to operate (Pers. Comm. APL 24 Jan 2017).

## Seafood

Like fruit and vegetables, Australian seafood is marketed through various supply chains for domestic and export markets. A proportion of seafood passes through established market places in capital cities, while other product is sold directly to wholesalers, processors, exporters and retailers outside of these market places.

In addition to market floor negotiation, some established seafood market places operate an auction selling system (e.g. Sydney and Perth).

The Australian Seafood industry has no nationally coordinated approach to market price reporting. Prices are made available in a multitude of locations, however there is no service provider compiling price data on a daily or weekly basis.

### *Sydney Fish Market*

Registered suppliers to the Sydney Fish Market (which uses a Dutch auction system) are able to monitor auction prices online in real time (updated every 15 minutes), and receive a price summary email each day.

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<sup>20</sup> <http://australianpork.com.au/facts-figures/market-reporting/>

# Appendix F Learnings from the Australian Mango Report

For a number of years, the Australian Mango Industry Association (AMIA) have been using levy funds to provide mango growers with market reporting, via AusMarket Consultants, under the “Data collection to facilitate supply chain transparency” project (MG12007).

The mango market reporting service provided by Ausmarket Consultants provides the Australian mango industry with daily prices and throughput (in the markets in which this is available) in early September and this reporting extends through to late March/early April each year. The start and finish dates are influenced by the seasonality of mango harvest.

The service provides a valuable resource for mango growers and associated businesses throughout the supply chain. The service provides a number of services for industry. These include:

- Price reporting on a daily basis throughout the season for each capital city market (Brisbane, Sydney, Melbourne, Adelaide) and Perth on a weekly basis
- Price reporting on each variety in the market, with a high, low and average price
- Daily throughput for some markets

## Grower feedback

Wholesale price reports: This project has been focussed on the collection and collation of price data from the wholesale markets. AMIA regularly seeks feedback from growers, either individually or at meetings and workshops on the value of the daily wholesale reporting system.

The feedback from growers is generally positive, with the daily wholesale market reports providing them with a valuable guide to market prices in the 5 major wholesale markets in Australia.

The daily wholesale market reports are funded through Mango Industry R&D Levies, with matching funding from the Federal Government, and managed by HIA.



## Australian Mango Report

Compiled by Ausmarket Consultants. Ph (07) 3379 4576 Fax (07) 3379 4103

Ausmarket shall not be liable to any party in respect to any loss or damage arising from the reliance on this information. The information contained in this Market Report is provided as a guide only and should not be regarded as a record of every sale from every Market.

Daily Mango prices for Wednesday 14 December 2016

Species/Variety/Tonnes	Market	StateRegion	Pack	Price Range		Most Sales		Best	Avg Kg	Supply	Demand	Carrover	Quality
				Low	High	Low	High						
MANGOES, Calypso	ADL	Y	Darwin	18L Ctn	20.00 -	24.00			10	Mod	Adeq	Some	Mixed
Calypso, No1	ADL	Y	Darwin	SL Tray	18.00 -	22.00			7	Mod	Adeq	Some	Good
Kensington Pride, No1, ExLarge <14	ADL	Y	Katherine	SL Tray	20.00 -	25.00			7	Mod	Adeq	Some	Good
Kensington Pride, No1, Large 14-16	ADL	Y	Katherine	SL Tray	24.00 -	28.00			7	Mod	Adeq	Some	Good
Kensington Pride, No1, Medium 18-20	ADL	Y	Katherine	SL Tray	28.00 -	30.00			7	Mod	Adeq	Some	Good
R2E2, No1	ADL	Q		SL Tray	20.00 -	22.00		24.00	8	Mod	Adeq	Some	Good
Calypso, No1 76.66T	BRS	Y		Mod 6	30.00 -	45.00			11	Light			Good

Figure 29 Sample of the Australian Mango Report

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OfficeAddressLine2

T: OfficeTelephone F: OfficeFax E: OfficeEmail

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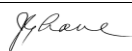
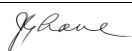
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		Name	Signature	Name	Signature	Date
1	S Hoban	J Lane		J Lane		31/01/17
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