Know-how for Horticulture™

Statistical scoping study for the Australian Horticultural Industries

Retail Works Pty Ltd

Project Number: AH00026

AH00026

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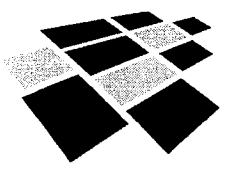

Horticulture Australia

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Executive Summary

The high numbers of producers and sensitivity to sharing information makes data collection difficult. There are approximately 30,000 growers, many with small farms and some growing short span ground crops. These issues will remain an ongoing challenge to credible data collection and the creation of accurate statistics.

There is a high level of suspicion that data provided to the ABS will be used by other government departments against the provider. Unfortunately, it is common for producers to send the ABS inaccurate data. The providers of this data are usually not users of statistical outputs, so they take this action at no apparent cost to themselves. Given these factors, it is not surprising that many commodity groups view the ABS statistical data, as being a corrupted by this practice.

In many commodity groups there is a low level of potential commercial gain associated with accurate statistics. These groups have experienced market price peaks being associated with other factors and this has not encouraged them towards providing higher quality data. In many respects it has discouraged them, as they seek to maintain advantages on other producers into the domestic market.

The price setting practices of the domestic markets, is another factor that doesn't encourage the wider distribution of quality information. This price setting role currently belongs to the besieged wholesale sector, and they are unlikely to welcome a dilution of this key strategic role.

The commodity groups that have the highest confidence in the accuracy of their statistics collect their own data, or capture it through a funnel in the supply chain. The data collection means range from Industry pooling and surveys to the commissioning of ongoing research and collection of daily trading data. All indications are that regional input is required for production data to be accurate. One commodity group is piloting a new technology option involving aerial photography and software combined with improved sampling methods to gather production data and build projection models.

There are wide extremes of use for various the statistical outputs. In general the statistical perspective is more production than market orientated. This orientation has left some gaps in tracking movement across distribution channels and between categories of product.

Some commodity groups, who enjoy high quality data inputs, give every indication of using their statistical outputs for commercial advantage. These more advanced groups use these outputs to project market variables. All commodity groups that responded would welcome higher quality statistical outputs.

Given the extremes between the commodity groups there is potential for best practice transfer between the commodity groups. This applies to both the data collection means and the use of statistical outputs.

The capture and use of supply chain data is agreed by the majority as worth exploring, but requiring validation with some production output data. Stimulating the major retailers to share their data appears to be the key.

Recommendations for future collections include securing supply chain data, stimulating and managing the pooling of data, addressing the gaps in the market place monitoring and the transfer of best practice between commodity groups.

This report concludes with a review process for future statistical collections that is focussed on ensuring the commercial relevance of outputs, cost effective collection and processing plus providing incentives for the pooling of data across commodity groups.

Introduction

This project is about assessing the use of statistics in the Australian Horticultural Industry. It addresses how data is collected and then how the various commodity groups use the information outputs.

To frame the implications of the use of statistics information outputs the project found it necessary to outline the drivers of information use and the influence of the domestic market. The project identified what is collected and how it is used and how it could be used.

This project has adopted an assumption that any collection and analysis of data and the flow on distribution of information outputs needs to have the potential to deliver some economic benefit to be sustainable.

The report concludes with a strategy for future collections and a process for ensuring that what is collected is relevant.

Background

Over recent years, the Horticultural Research and Development Corporation (HRDC, now Horticulture Australia) has identified an increasing range of research and development (R&D) opportunities that have implications for a number of horticultural industries at a strategic level. In response to this need, HRDC in partnership with the horticultural industries established the AusHort R&D program in mid 1998.

The main benefits to horticulture as a result of this multi-industry approach include:

- The conduct of important R&D that would not be undertaken by individual industries;
- Wide benefits to horticulture for minimum investment by individual industries; and
- Industry collaboration through identification of (and addressing) common R&D priorities for horticulture.

The AusHort R&D Committee, which comprises representatives of the major industry groups who are partners in HRDC programs, lead the program. The committee members represent their own and other related horticultural industries. There are currently twenty-three industries represented under the AusHort R&D program umbrella.

Access to accurate horticultural statistics has been an ongoing issue for the industries. Unfortunately, resources are being withdrawn from the Australian Bureau of Statistics (ABS) who conduct statistical censuses every five years for agriculture (including horticulture) with sample surveys in the interim years. ABS will conduct more regular surveys for industries on request, but on a user pays basis. For many industries this is beyond their resources to ensure the regular upkeep of these figures. Other industries have used private consultants to conduct these collections, but this approach is risky as only the ABS has the legislative power to compel completion of the survey forms.

As a first step in addressing this issue, the AusHort R&D Committee have requested that this scoping study be conducted to provide a basis for future decision making.

The approach to this project introduces the following additional background on the horticultural industry collection and use of statistics.

- As supply chain management and e-commerce adoption moves from concept to practice, the level of electronic data increases. In many instances this data is what is required as the basis for Industry statistics. When these practices are combined with the injection of computer infrastructure to support GST and the enabling power of the Internet, captured data this way could provide the most timely and accurate basis for creating statistical outputs of tangible commercial value.

- Stimulating the sharing and pooling of data is the critical catalyst to exploiting the resource of supply chain data. The proposal for this project suggests there are some core issues to be resolved if industry participants are to pool data. Concerns about confidentiality have to be addressed and there has to be a potential benefit for those who share their data. Furthermore as commodity trading conditions still prevail in the domestic markets for several of the horticultural crops, the full visibility of all information will create challenges for some sectors of the supply chain.

- The project proposal suggests that the data collected historically needs to be assessed against a criterion of "creating tangible outputs of commercial value to industry participants". There is no value in collecting data to create statistical outputs that are not used by the Industry. This proposal suggests that this sort of assessment criterion has potential to suggest that less data is collected more frequently, to create outputs more industry participants will use.

- In this information age the useful life of data has been reduced. A 3-5yr timeframe for the frequency of collection is only ever going to show a snapshot of history. To provide the basis to project future variables, and encourage the use of statistics, this proposal suggest that some data needs to be collected on an ongoing rolling basis and published in shorter timeframes.

Project Assumptions

- That industry bodies were able to respond to a request that profiles their current and future statistical requirements. In the course of the project it was found that this capacity varied significantly by commodity group and geographical region. A minority of commodity groups, which could be viewed, as advanced information users, was able to promptly and competently respond. However, other commodity groups, particularly those with no pooled data and or industry development functions, were challenged in responding.

- That any recommendations on the collection and analysis of data and the flow on distribution of information outputs should have the potential to both deliver some economic benefit, as well as address the statistical information gaps in Australian Horticulture.

Other Project Considerations

There is a need to explore what drives the Industry use of information before conclusions can be drawn about current use or new strategies defined for information use.

What drives the use of Statistical Information?

All things considered the drivers of information use will be the links through to delivering value in the form of economic gain or advantage. This will frame the basis for how the Industry values the output as well as the resources and expenditure devoted to collecting and processing data.

For the Australian Horticulture Industries, it is suggested information use has been in 2 broad forms:

1. As a "historical score card" profiling what has been achieved.
2. As the basis for decisions on forward strategy that will "influence selling volumes and price setting." This includes use in strategic planning as well as tactical trading data to guide distribution options.

The scope for the use of information as a historical score card is clear. This is effectively what the ABS Agricultural Surveys provide. However, keeping the score alone doesn't deliver advantages, gains are only likely to be delivered, when historical learnings are translated into forward plans and acted upon.

This more extended use is where there is higher scope to generate commercial advantages. This requires planning and resource alignment, and there are solid precedents of this being in place with the leading commodity groups. However, based on responses this is the exception rather than the norm in Australian Horticulture.

The influence of "Domestic Market Dynamics"

The largest distribution channel for fresh horticultural product is the domestic market. Therefore the behaviour stimulated by this market impacts all of Australian Horticulture. Unfortunately the changing dynamics of this market, combined with the price setting mechanism, present challenges to the wider use of statistical information.

The industry structure has a production sector of 30,000 plus growers, a supply chain through to the domestic market that involves a central market wholesale sector and a concentrated retail sector. These components combine into a commodity market price setting mechanism, and as such, the volume supplied to the domestic market sets the price.

This suggests there are gains from understanding and managing the volume of supply to balance volume and price. This is possible in the commodity groups of product with an element of control in the supply chain, through a processing, ripening or storage phase, but the majority of these crops are still exposed to the price influence of volume supply fluctuations. Crops without some element of control in the supply chain are highly exposed to volume and value fluctuations.

The highest prices are paid when adverse weather effects supply from competing growing regions

The highest prices, often by multiples of 2 & 3 times the prevailing price are experienced when adverse weather impacts competing production regions. This creates situations were growers speculate on production volumes, and hope for adverse weather to effect others, rather than managing supply volumes to increase longer term consumption and financial returns.

The impact of adverse production conditions is not limited too impacts on the same commodity group, as the consumer will trade off the value between different products. For instance, consumers view bananas and apples as alternatives to meet the same "fruit snack" need, and incremental volumes will be effected by their respective selling price. This influence is increasing, as the benefits of R & D are delivered and the seasonal overlap between crops is increased. An example of this trend, is the increasing overlap between mangos and stonefruit, which is highly likely to impact financial returns for these crops.

Furthermore, coordinating the production outputs of large numbers of small producers is difficult. Particularly when they are based in different geographical regions. It is possible with the commodity groups that have lower numbers of growers, an export culture or a processing step in the supply chain that reduced the entities that are dealing with the market. Commodity groups that do not have this sort of step in their supply chain experience the widest extremes of price fluctuations.

The concentration of power in the domestic retail sector is another influence. The 2 leading supermarkets now hold 65-70% of the retail market. This has evolved through more aggressive activity from the supermarkets, which has reduced the number of independent fruit and vegetable retailers between 1992 and 1999 by 56% from 3,670 to 1,611. This concentration has created a situation where a small number of players in the Industry have most of the information. This creates an imbalance in the benefits that will flow from more widespread information sharing and use. Because the larger retailers have less to gain from open information and are potentially less inclined to do so.

This concentration of buying power has been accompanied by the supermarkets "channel skipping" the wholesalers and buying product direct from growers. The flow on from this direct buying has resulted in market share loss for the wholesale sector.

The wholesale sector is unlikely to welcome information visibility that dilutes its role as the price setter

Despite the loss of market share the central market wholesale sector has maintained its strategic leverage as the price setter. Larger proportions of product are being acquired direct at a fixed price, but the balance is still acquired at a price relative to the wholesale market price at the time.

The increased visibility and use of information is highly likely to present a challenge to the central markets wholesaler's price setting role. Particularly if this information is used to deliver tools and methods to project prices for given volumes. This report concludes that while some sectors in the supply chain are likely to welcome this use of information, the central market wholesale sector is unlikely to welcome a dilution of their strategic influence as a price setter. Therefore the wholesale sector that currently owns the price setting role, is more likely to resist than support, more open and widespread use of information.

All indications are that there is potential to create and use better information outputs that can add value. Particularly if the outputs can be used to positively guide volume supplied to the domestic market.

Methodology

The following principles frame the methodology for this project.

1. Use the Industry bodies as representatives of their Industry Information needs.
2. Profile the current use of Industry Statistics in a way that also profile possible uses and therefore gaps.
3. Build the collection process to incorporate the following:
   - Leverage off technology as the least cost means of collection.
   - Links into Industry participant commercial benefits to stimulate data sharing.
   - Collection of existing supply chains data.

There are four stages to completing this project.

Collate all relevant existing material Industry

This involves a literary review of all relevant material. This literary review will create a database, which will show 5 statistical dimensions for each Industry.

- The current data collected.
- The current and optimum frequency of collection.
- The current collection means and potential collection means.
- The current statistical outputs created from this data.
- The current and potential uses for these statistical outputs.

Confirm the profile with Industry representatives

This involves the Industry representatives reviewing, confirming and or amending the profile for their Industry.

Consolidating the responses

This involves consolidating all the responses into one profile, which will serve to summarise the statistical requirements of each Industry. This profile will reflect the data to be collected, the collection means and timeframes and the outputs for each Industry and the total. This is the information required to determine the optimum collection process and define the statistical outputs.

Define collection process and compile the final report

This involves the packaging and communication of the 5.3 results into this final report.

The data collected

A normal range of data on production outputs is being collected. The larger more organised commodity groups like Apples and Bananas are collecting all inputs, including commissioning their own consumer research. Many of the smaller commodity groups are relying on data collected by others and have no involvement in collecting data themselves.

The commodity groups welcomed the opportunity to improve their data collection and make available more accurate outputs. Whilst the means of collecting data will be influenced by size and resources the data collection requirements of the commodity groups are very similar.

Not all commodity groups require all data inputs but it the requirements of all the respondents would be satisfied with this range of inputs. The type of data collected by each commodity group and their view of their data accuracy is summarised in the table below. The detail of what is collected by each individual commodity group can be viewed in Appendix 1.

Data collected & view of data accuracy by Commodity Group

	Data Collected	Almond	Apples & Pears	Avocado	Banana	Cherries	Citrus	Custard Apples	Ginger	Macadamia	Mango	Mushrooms	Nursery	Onions	Passionfruit	Potatoes	Pyrethrum	Strawberries	Stonefruit	Vegetables	Winegrapes
1.0	**What is produced**																				
1.1	Production volumes	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
1.2	Production by varieties	X	X		X		X	X		X		X	X					X	X	X	X
1.3	Production value	X	X		X	X	X		X	X	X	X	X	X		X	X	X	X	X	X
1.4	Varieties & Seasonality			X	X		X			X					X			X	X	X	
2.0	**What are the production assets & resources**																				
2.1	Land area in use		X	X	X	X	X	X	X	X			X	X	X	X	X	X	X	X	X
2.2	Number of Enterprises	X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	X	X
2.3	Production material (Trees, Vines, Plantings)	X	X	X	X	X	X	X	X	X	X		X			X		X	X	X	
2.4	People Employed	X							X	X		X	X	X		X	X	X	X	X	X
3.0	**What form it is sold in**																				
3.1	Whole or part (IE Nut or kernels)	X		X	X	X				X		X	X	X			X			X	X
3.2	Fresh market or processed		X	X	X	X	X	X	X	X	X	X		X	X	X		X	X	X	X
4.0	**Where it is sold**																				
4.1	Domestic market volumes	X		X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	
4.2	Export volume			X	X	X	X		X	X	X	X	X	X			X	X	X	X	
4.3	Export markets volume by Importing country	X	X	X	X	X	X		X	X	X	X		X		X	X	X	X	X	
5.0	**Consumption**																				
5.1	Per capita domestic	X	X	X	X		X			X	X	X		X		X		X	X	X	X
6.0	**Import Replacement**																				
6.1	Competing Imports	X		X			X		X	X	X	X				X		X	X	X	
7.0	**Export Market Profiles**																				
7.1	Competiting export volumes	X	X				X		X	X	X	X				X			X	X	
7.2	Production Supply & Distribution Selected Countries	X	X				X		X	X	X	X				X			X	X	X
7.3	Global production output	X		X			X		X	X	X	X				X			X	X	X
	Overall view of total data accuracy out of 10	9	U	2	8	1	7	6	6	8	7	9	5	U	1	7	10	8	U	3	9
	Groups collecting own data	X			X		X		X	X	X	X	X				X	X			X

(X = Which Commodity Groups collected which data)

Data is collected a number of ways and these are outlines in the table below.

Summary of Data Collected, Frequency and Collection Means			
Data Collected		Optimum Frequency Months	Collection Means
What is produced	Production volumes	6	• ABS surveys (5yr census & 1 yr sample) • Industry Surveys, regional to national • External Research • Mkt reports • Production inputs • Processor data • Aerial photo & software. (Pilot)
	Production by variety/type	12	
	Production value	12	
	Varieties & Seasonality	12	
What are the production assets & resources	Land area in use	12	
	Number of Enterprises	12	
	Production material (Trees, Vines, Plantings)	12	
	People employed	12	
What form is it sold in	Whole or part	12	• Industry surveys • Industry/Mkt reports
	Fresh or processed	6	
Where is it sold	Domestic volumes	Wkly to Mnthly	• Industry surveys • Mkt reports • External Research
	Export volume by variety	Mnthly	• Industry Survey • ABS/HAL
	Export markets volume by importing country	6	• ABS/USDA
Consumption	Per capita consumption	6	• ABS • HAL • External Research
	Consumption occasion	12	
Import replacement	Competing imports	Mnthly	• ABS/USDA
Export Market profiles	Competing export volumes	Mnthly	• ABS/USDA
	Production supply & distribution (selected countries)	12	• ABS/USDA
	Global output	12	• ABS/USDA • Published sources

The details of the data collection means are:

ABS Agricultural Commodity Survey. This has been the main collection means for horticultural production statistics. The collection has been every 5 years and is then supported with supplementary surveys every 12 months. This ABS survey is backed by legislation in requesting data. This is a powerful factor that is not present in any other statistics collection methodology.

This survey and the output it creates are criticised by many commodity groups. The common reasons for the criticisms are:

- It uses inaccurate data as growers don't want to give actual numbers and or the practice of providing deliberately misleading data is common place. The consensus is that this happens, as there is no incentive to provide accurate data.

- The supplementary surveys that are used as the basis to trend data between the major data collections are using old and inaccurate addresses that are not rigorously checked.
- The methodology for projecting production volumes is flawed when incorrect assumptions for tree age, yield, growing area or the planting distances of trees is used.
- Individuals are disadvantaging themselves by providing data, as it will be used to the advantage of others.
- Concerns that the accuracy of this survey has never been fully reconciled, as there is nothing on a similar scale to reconcile against.
- A long and complicated questionnaire, that appears to be designed to capture some information about every agricultural land use, but not cover any of them in enough detail to provide meaningful outputs.
- The timing of the distribution of information outputs, in relation to the period they represent, is too late to allow them to be anything other than a historical record.
- The high level of human resource changes at the ABS has made it more difficult to manage the consistency of the service that they provide.

Regional input into data collection leads to higher confidence in data accuracy

Commodity group regional surveys. This is where commodity groups have organised collection of regional data, which in some instances is then pooled nationally. The Regional Tree Census in the Goulburn Valley and the Annual Vineyard survey are examples of this type of data collection. The means to complete this work range varies from commissioning the ABS, DPI and or state government resources through to using the commodity group regional resources. This method that is guided by regional knowledge, is collected more frequently and is viewed as more accurate.

Commodity group commissioned data collections. Several commodities have organised their own data collection. This includes production, distribution and market consumer data.

Export statistics and Global Market Profiles. Collected from the USDA published figures and or export data collected and published by the ABS. The collection of export data is easier due to the administrative data trail that is created by export and import trading. Collating these data inputs is desk research. HA quota amounts also provide easy and ready input into export statistics. For these reasons the published export and import data is viewed as accurate.

Apparent per capita consumption. This draws on data collected and processed and published by the ABS. It is based on a combination of data collected in the General Census, Household Expenditure and the Agricultural Survey. These inputs serve to create the apparent consumption data outputs.

Home consumption data.

Some commodity groups are using data collected by commercial market researchers. It typically draws on data collected by Nielsen, or other similar service providers, through means like their ongoing "homescan survey".

Some commodity groups are undertaking their own consumer research to assess the merit and or success of marketing campaigns and consumption. This is more common place with the larger more coordinated and resourced commodity groups like Apple & Pears and Mushrooms.

Retail Supermarket Scan sales. The detail of actual sales through supermarket cash registers is now available through brokerage arrangements. Woolworths are selling their scan data through a research their partner Aztec Information Systems. This data is available to Woolworth's suppliers via a web-based delivery for an annual subscription fee. [1]This way of making data available, and its associated cost, is common practice in grocery categories and it now appears to be extending. It is understood that Woolworths and Aztec are in advanced discussions with other primary producer Industry organisations, which is likely to set some precedents for the fresh food categories.

Market Reporting Statistics. Some commodity groups have organised to collect and distribute market trading volumes and prices. This is most appropriately referred to as "tactical trading information" because of the timeframe within which it is captured and used. This information is captured daily at the central market level and then sent to growers who use it to guide their distribution strategy. This information is collected by commercial services in the central market and can be distributed with the aid of a grower organisation. The banana growers with the support of QFVG are an example is this practice. Furthermore the capture and sale of this data has evolved into a mature business. These providors collect data from central market manifests and daily price reports and also use their own sources to validate data accuracy. These services are provided on a subscription basis for categories of product and are understood to be enjoying solid growth.

Processors volumes. In a commodity group that has a common processing step prior to going to market it is possible to capture high quality data. Examples of this are nuts, ginger, pyrethrum and wine grapes.

Key Production inputs. This is effective where there is a concentration of suppliers for a key production ingredient. For instance, Strawberries capture and the production of runners and project total production output on this basis.

Financial benchmarks. Some commodity groups have organised for the Financial Benchmarks to be collated and made available. The Nursery commodity did this through the FMRC Benchmarking team at University of New England. It involved a survey of financial performance. All indications are that this work created some useful outputs but was limited by a low number of participants.

The Horticultural statistics handbook produced by Horticulture Australia is a comprehensive summary of all the production statistics that are collected.

[1] See www.aztec.com.au

There are also numerous research projects that have collected data, some of which could be included in a commodity group statistical profile. For instance every QA project would capture some data distribution channels, similarly every consumer research project will capture some data on purchase occasion and outlet. However, as these inputs aren't viewed as of statistical value they are not extracted and pooled.

Other means of collecting data

Supply Chain data. The majority of commodity groups agree that the data currently captured in the supply chain is the optimum resource. This includes pack house, processor, central market/wholesaler, broker, transporter and retailer. Addressing the concerns about confidentiality is the key to securing this data. Most commodity groups would also seek to collate production data and then seek to reconcile this with supply chain data.

Levy Collection Bodies. If the levies are based on volumes then this data pool could be an accurate feed into statistical data collection. Again the confidentiality concerns have to be addressed.

Carton and packaging manufacturers. It is suggested that the volume of cartons is a valid basis for estimating volumes. This is an approach has been used by some commodity groups to reconcile regional quantities.

Technology based. The Citrus commodity has piloted a combination of aerial photography, which links into new software to calculate tree numbers. The first outputs will be reconciled with full grower surveys, which will serve to confirm the accuracy of the software and reduce the ongoing survey need to on farm changes in tree numbers. This is accompanied by the development of a tighter more standardised sampling procedure on the farm. A challenge to be resolved is the efficient capture and transmission of the sampling data. At present this is manually noted in the field and then data entered at another location before it is centralised for processing. Their plan is to implement this new system in the 3 southern states by 2003.

How Statistics are used

A number of uses were profiled as options to respondents. These uses were confirmed and some additional uses added. This combined list is below and which commodities are applying each use if outlined below.

Outputs Produced and used by Commodity Group

Commodity Group	Outputs Produced									How current outputs are currently used													Identified New Outputs & uses							
	Consumption trends	Export totals	Employment Profile	Total Output Volume	Total by state or region	Total $ Value	Arrivals, Sales Figures	Mkt Conditions. Stock on Hand	Graphs on Supplies & proces against previous yr	Business Planning	Export Planning	Industry Strategic Planning	Market Growth Profile	Marketing Effectiveness	R & D Priorities	Training programs	Industry benchmarks	Market Size & Share	Tactical Distribution	Production forecasting	Infrastructure needs	Setting proposed levy	Market Price Forecasting	Assets Employed	Enterprise Benchmarks	Consumption cross over	Industry Yield/ROI	Production Forecasting	Targeted R &D	Value/Yield forecasting	Market Price Forecasting
Almond	X	X		X	X	X				X	X	X	X		X			X			X							X			
Apples & Pears	X	X		X	X					X	X	X			X		X	X										X			
Avocado	X	X		X	X						X	X													X	X	X	X			
Banana	X			X	X	X	X	X	X	X	X	X	X		X	X	X	X	X						X	X		X	X		
Cherries		X		X	X																				X			X			
Citrus	X	X		X	X	X				X		X			X										X	X		X	X	X	
Custard Apples				X	X																										
Ginger	X	X	X	X		X				X	X	X	X	X											X		X	X			
Macadamia	X	X	X	X	X	X	X			X	X	X	X	X	X					X											
Mango	X	X		X	X	X					X	X	X	X	X			X				X			X	X	X	X	X		
Mushrooms	X	X	X	X	X	X				X	X	X	X	X	X		X	X							X	X	X	X			
Nursery	X	X	X	X	X	X				X	X	X	X	X			X	X							X		X				
Onions	X	X	X	X	X	X																									
Passionfruit		X		X	X	X																			X		X	X	X		
Potatoes	X	X	X	X	X	X						X	X				X	X													
Pyrethrum		X	X	X		X				X	X	X			X												X	X			
Strawberries		X	X	X		X						X	X		X												X	X			
Stonefruit	X	X	X	X	X	X					X	X	X												X		X	X	X	X	X
Vegetables	X	X	X	X	X	X				X	X	X	X	X	X		X	X							X	X	X	X	X		X
Winegrapes	X	X		X	X	X				X	X	X	X	X	X	X							X		X		X		X		

(X = Which Commodity Groups use and or identified which statistical outputs and uses)

The feedback from respondents was that this list of uses was something they agree would add value but was not yet in place. In many commodity groups the above list was well in excess of the current uses for statistical outputs.

The most common use is as a historical scorecard and the extremes of information use are diverse. Some smaller commodity groups, who have low confidence in the available data and no development resources, don't use any statistic outputs. While others have an advanced understanding that includes projecting future volumes and combining consumer research with other inputs.

The use of daily trading information to influence the distribution of product was the tightest use of information. In the commodity groups where this is used the value of this information is viewed as many times the value of a statistics that provide a historical scorecard. Given the wide extremes in the use of statistical or information outputs there is value in understanding what drives these extremes.

Those who are deemed low users of statistics or information outputs have the following common characteristics:

- A fragmented production sector with low barriers to entry.

- Short term crops.
- Low data credibility.
- A heavy influence from the domestic price setting dynamics and high vulnerability to the prevailing commodity trading conditions.
- Minimal supply chain added value in the form of processing, ripening and or storage of the product.
- Low levels of data use in Industry and enterprise business planning.
- Minimal management of volume supplied to the market.
- High volatility in pricing due to adverse weather in other regions.
- Lower export volumes as a proportion of the total crop.

Those who indicate they are higher users of statistics or information outputs have the following common characteristics:

- A more cohesive production sector with some barriers to entry.
- Longer term crops.
- High quality collections of either supply chain or production gate data.
- Concentrations of power at the processor/packer stage in the supply chain that is able to exert an influence on the production sector.
- The use of data from industry level down through to enterprise business planning.
- Levels of managed impact on supply volumes.
- Are exploring or using crop projections methods.
- Above average proportions of exports.

These two sets of characteristics reflect the very different approaches for the use of statistical information outputs. It is more common that these characteristics group together as listed above and it appears that they are somewhat self-fulfilling. In particular that good data leads to information use and those commodity groups with a fragmented structure, low barriers to entry and shorter-term crops will suffer from poor data and have low levels of information use. This provides implications for the type and scope for use of statistical and or information outputs by commodity group.

Statistical Information Gaps

The respondents have nominated some gaps and the balance has been identified when the Australian Horticultural Industry is viewed as a whole.

- *Accurate financial performance benchmark data.* This request has come from commodity groups that have experienced a wave of tax driven investment and are now seeking to credential themselves as viable ongoing concerns that can provide competitive financial returns.

- *Commodity group competition.* Understanding the cross over impact between commodities of product that serve to meet the same consumer need. The consumer shops for fruit snacks and apples are traded off against bananas. The stonefruit crop is in increasing overlap with the rapidly increasing mango crop. These overlaps are highly likely to cause impacts on financial returns yet they are not monitored and included in future production planning and income projections.

- *Processed food competitors.* There are an increasing number of processed foods, often containing processed horticultural ingredients, which are being successfully marketed as alternatives to the fresh

horticultural products. These products have taken substantial share of some consumption occasion off fresh products. This includes:

- The muesli & fruit bar taking share off fresh fruit in the school lunchbox.
- Rice, pasta & bread taking share of potatoes as the carbohydrate component of the main meal.

This movement in share is not monitored or understood for its impact on crop income or in the longer-term consumption habits of the markets being supplied.

- *Food service capturing share of stomach.* The increasing share of stomach being captured by the food service sector provides another layer of complexity to market conditions. This trend has the potential to alter the concentrations of supply chain power in the retail sector, as more volume is distributed through restaurants and prepared food channels. At this stage it is only quantified at a broad level of dollar spend in the food service sector compared to dollar spend in the retail supermarket sector.

Tactical trading data has the potential to replace other statistical collections

- *Tactical trading data.* Some commodity groups have organised timely and accurate tactical trading data. These outputs are valued and used, but this is the exception rather than the norm. If quality feeds of tactical trading data were secured for all distribution channels and made available to the market, this could lead to higher quality planning and projecting. Furthermore as daily data adds up too weekly, monthly and annual totals this data capture has potential to replace several other statistical collections.

- *Making Information Outputs Available:* Being able to obtaining statistical or reports, or information outputs could be improved. The new smoother electronic means of report delivery is efficient for those who have embraced technology. For those who are yet to embraced technology it has made obtaining the final reports more difficult, and is not helping to stimulate more participants to share their data.

Conclusions

The big brother syndrome drives the resistance to sharing data

With the high number of participants in the industry the collection of raw data has and will always be a challenge. One fundamental problem is that there is minimal incentive to provide data and this needs to be addressed if more data is to be available. The commodity groups that have poor data collections all point to the big brother syndrome, and a perception that the data will be used against the provider, as a barrier to sharing data. This resistance is compounded by the dynamics of the domestic market price setting mechanism, which are unlikely to encourage more open information.

There is an underlying culture of suspicion around the sharing data that has to be countered and converted into a view that there are commercial advantages to those who are more informed.

There are wide extremes of information use across the commodity groups. Some groups are mature users of tactical trading data whilst others have minimal use for any form of statistics. A common approach to the data that is collected does seem possible and even with those who don't currently enjoy quality outputs, there is general agreement as to the type of outputs they could use.

The ABS commodity survey data is more criticised than applauded. Even with the backing of legislation, this survey ABS has been unable to establish statistical outputs, which have the confidence of the majority of commodity groups. It could be argued that the ABS role drifted to an obligatory function, with a high number of reluctant participants, that produces outputs that many are sceptical about and few purchase. It is concluded that the problems for this survey are linked to poor foundations with some level of economic value add objective, and weak review processes that have not addressed data accuracy. This situation provides learnings for the way forward, in that data collection and the creation of statistics, that has weak links to providing an economic benefit, is unlikely to survive.

It is assumed that the ABS is moving to a user pay basis. As they currently provide services to regional groups and or commodity groups they should not be written off as a service provider. Particularly if they can still ask for data and be backed by legislation. If they are used they will need to accept they have to invest in delivering improved accuracy. The ABS is now a service provider in amongst a range of other service providers and other data collection means.

However there are some encouraging aspects of information use. Tactical trading data that is captured in the supply chain and distributed quickly enough to guide distribution decisions is highly valued. Clearly there are incentives in place, in the form of commercial advantages, to share this data. If this data is pooled correctly it has the potential to replace the need for some of the manual survey data collection. This is an example of capacity of the supply chain infrastructure to capture data. This approach, that utilises information technology must be a least cost and potentially more accurate alternative to manual data collection.

The large majority of the commodities that enjoy good statistics either have a supply chain advantage in collating data, like a processing step, or manage their own data collection. Similarly it is these commodities that use a wider range of statistical outputs.

For production data to be accurate it has to be collected regionally with local input

Another encouraging practice is the regional surveys of producers, which are viewed as credible. The frequency of collection and therefore turnaround time of outputs gives every indication of stimulating more data sharing. It appears that the regional ownership of the accuracy of data is an effective control mechanism. With this level of ownership the local variations will be correctly captured. This highlights another challenge for the ABS or other researchers, who are highly exposed to capturing inaccurate data, if they do not have sufficient industry knowledge. Local input and ownership of regionally collected production data seems mandatory to ensure accuracy.

These are opportunities for best practice can be transferred. Citrus are exploring production data collection that uses aerial photography and computer software to calculate tree numbers. Mushrooms have combined their pooled production data with consumer research to create high quality outputs that are used. Strawberries use a simple measure of runner production to track volume. There is value in informing some commodities of the activities and methods of other commodities.

Current statistics are more focussed on production than end market

There is some information gaps that need to be filled. The consumer's perspective on alternative products and the trends to Food Service need better monitoring and the results factored into future planning. Overall the sum total is not added up and the movement between categories of product and distribution channels is not profiled. Yet these changes can cause significant impacts for all industry participants. In general the statistical data collection and outputs are production than end market orientated.

There is a role for the coordination and processing of data inputs, where value can be added by one point acquiring inputs that can be used for several commodities. This should be able to secure lower cost better quality inputs compared to the commodity groups all securing their own inputs. There is also strong value in developing a structure for how data is collected and analysed so it can be effectively combined.

The delivery of information outputs needs to lever of the advantages of the new technologies. Even though some parts of the Horticultural Industry are not comfortable with the new information technology, its advantages in speed of delivery, 24 hr access and cost effectiveness compared to paper based alternatives are too strong to ignore. Taking this path will require some awareness and education support, but this investment should show returns in the form of reduced cost and higher use of information outputs with 1-2 years. Furthermore, when the use of technology for distributing outputs is embraced, then the same method can be explored for collecting data and the same timing and cost effectiveness gains can be enjoyed.

The positioning and marketing of any new information outputs is likely to have an impact on their use. At this stage "Statistics" are viewed as a historical record and the "Tactical trading data" extracted from central markets by some commodity groups is not seen as statistics. This is despite that fact that both are information outputs. All indications are that there is some baggage in trying to move what may be seen as "Statistics" into a higher more credible use as an information aid to business. This problem can be addressed in how the information outputs are packaged and marketed.

Recommendations for Future Collections

This process invites changes from the current collection and creation of statistics. It seeks to bring a structure to how data can be pooled and draw on the data collection already in place in the supply chain. It acknowledges that different commodity groups have different information needs. Some checks and balances are introduced to receive inputs from conventional survey based research. Resource allocations for each recommendation are reflected in 1 priority ranking of 1 to 3 and an allocation of working days to complete each task.

1.0 Create a series of profiles that will enable data to be pooled and the quality of the cumulative outputs increased. Resource allocation 30-35 days.
   1.1. Defining the distribution channel options that are possible for horticultural products.
   1.2. Define a horticultural product category structure that will interface with the commodity groups and also allow the mapping of competing non-horticultural products.
   1.3. Defining the consumption occasions for horticultural products.
   1.4. Collate and pool all research data collected in the last 3 years into the framework of 1.1 to 1.3.
   1.5. Define the additional data inputs required to complete the framework of 1.1 to 1.3.

2.0 Identify the supply chain points where the highest quality data can be most efficiently captured. Too include Pack Houses, Processors, Market Reporting Services, Wholesalers, Brokers, Retailers, Levy Collection Units, Transporters and Packaging Suppliers. Resource allocation 45-50 days.
   2.1. Develop a proposition to stimulate the sharing of that data that will deliver benefits to those who will provide data.
   2.2. Put the proposition to owners of those points and secure the data.
   2.3. Invest in stimulating the sharing of supply chain data. Promoting examples of how this has been done with other industries and the benefits it has delivered. Specifically addressing how data confidentiality can be assured.

3.0 Starting with the "Information uses" identified in this report categorise the commodity groups by their statistical information needs. (It is expected that this will define at least 2 tiers) Resource allocation 30-35 days. Resource allocation 10-15 days.
   3.1. Define the common data requirements to meet these needs.
   3.2. Cost and if acceptable, acquire these data inputs on behalf of the commodity groups.

4.0 Support additional data collection that delivers information outputs that have agreed potential to deliver economic value. Resource allocation 10-15 days.
   4.1. Establish clear links through to how information outputs will be used before commissioning data collection and analysis.
   4.2. Require a regional level approval of data collection methodology and analysis prior to proceeding.
   4.3. Introduce at commodity group level the recommended process for evaluating and reviewing ongoing data collection, analysis and distribution of results prior to collection of data.

5.0 Make all industry participants aware of the methods used by other commodity groups and how to obtain current and future research outputs. Resource allocation 15-20 days plus technology costs.

5.1. Distribute this report to the respective commodity groups along with a suggestion for IDO's/Industry Managers/ Association CEO's/Business managers to identify data collection mechanisms and statistical outputs used by other commodities that have potential use in their commodity group.

5.2. Incorporate the "Process for review of Future Collections" as defined in this report into commodity group requests for statistics and future strategic plans that address statistical requirements.

5.3. Set up a web based delivery mechanism for statistical outputs supported with a "1 800 number" help desk option for those who cannot use this technology and want hard copies. Set the pricing for the web-based distribution at 50% of the hard copies.

Process for Review of Future Collections

The process for evaluating and reviewing is guided by the following objectives:

- Ensuring the statistical collection and processing is cost effective and creating Industry relevant outcomes.
- Has clear and agreed potential to provide commercial value.
- Has the support of the commodity group.
- As a process is simple and inviting of ongoing improvements.
- Provides incentives to create and maintain a pool of quality data.

This process is designed for inclusion into the data collection mechanisms, as brief prerequisite prior to providing the outputs, as a survey at industry gatherings or as a simple equation of known facts.

	Assessment Factor	**Assessment Means**	**Target Minimums**
1	A rating out of 10 as to the extent of added value to the commodity group sales growth in $ and profitability.	Included in data collection and or a survey of participants at commodity group conferences.	5
2	The proportion of a commodity group output that is providing data.	Total number contributors divided by total participants.	65%
3	The meaningful inclusion of outputs in Industry Strategic Planning expressed as a rating out of 10.	Survey of commodity group planning forum representatives.	7
4	The percentage of commodity group participants that use the outputs in their business planning.	Included in data collection and or a survey of participants.	50%
5	Industry participant consensus on the accuracy of outputs as a rating out of 10.	Included in data collection and or a survey of participants at commodity group conferences.	7
6	The proportion of Industry data that is collected from existing supply chain activity.	Volume of data collected allocated to supply chain points and or additional research.	50%
7	Planning and consideration for the pooling of data from consumer and or distribution channel research.	The proportion of the data collected that can be pooled.	10%

If the target minimums were not achieved then action plans would be required. All commodity groups are required to update their rating and scores on these assessment criteria every 6 months. Those who fall behind for more than 12 months loose their access to any poled data.

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Appendix 1

This contains the responses for each commodity group.

Almond Commodity Group Statistics Profile

	Data Collected	Current Frequency in years	Optimum Frequency in years	Current Collection Means	Outputs Produced: Consumption trends	Export totals	Employment Profile	Total Output Volume	Total by state or region	Total $ Value				How Outputs are used: Business Planning	Export Planning	Industry Strategic Planning	Market Growth Profile	Marketing Effectiveness	Setting & Measuring R &D Priorities	Identifying Infrastructure needs	Benchmarking R & D Effectiveness		New Outputs & uses: Production Forecasting					
1.0	**What is produced**																											
1.1	Production volumes	1	1	ABS Survey	X	X		X	X	X				X	X	X	X		X	X	X		X					
1.2																												
1.3	Production value	1	1	ABS Survey	X			X	X	X				X	X	X	X	X	X	X	X		X					
1.4																												
2.0	**What are the production assets & resources**																											
2.1																												
2.2	Number of Enterprises	1	1	ABS Survey			X	X	X					X	X	X	X		X	X			X					
2.3	Production material (Trees, Vines, Plantings)	1	1	ABS Survey				X	X					X	X	X	X		X	X			X					
2.4	People Employed	1	1	ABS Survey			X							X		X	X		X	X	X		X					
3.0	**What form it is sold in**																											
3.1	Whole or part (IE Nut or kernels)	1	1	ABS Survey	X	X													X	X								
3.2																X		X										
4.0	**Where it is sold**																											
4.1	Domestic volumes	1	0.5	ABS Survey	X			X	X	X				X			X	X	X	X								
4.2																		X										
4.3	Export markets volume by Importing country	1	0.5	ABS/Export		X		X	X	X			X	X	X	X	X		X	X								
5.0	**Consumption**																											
5.1	Per capita domestic	1	12	Self calculated	X					X				X		X	X	X	X	X								
6.0	**Import Replacement**																											
6.1	Competing Imports	1	12	ABS/USDA	X	X								X	X	X	X	X	X	X								
7.0	**Export Market Profiles**																											
7.1	Competing export volumes	1	1	USDA		X								X	X	X	X		X									
7.2	Production Supply & Distribution Selected Countries	1	1	USDA		X								X	X	X	X		X									
7.3	Global production output	1	1	USDA		X				X				X	X	X	X		X									
	Commodity view of output Level of accuracy out of 10				7	5		9	6	8													4					
	Overall view of total data accuracy out of 10			9																								

(X = Which data is used for which statistical output and use)

Comments

The US Almond stats are deliberately skewed for the global position

This group uses a number of information sources, FAO, industry levy collections (we have high compliance), and some processor figures (but they are getting difficult).

ABS figures are a problem unless a full survey. The sample surveys are very inaccurate. Biggest problem is accurately getting export data, as the exporters do not like to publicise their activities.
ABS collect tree numbers not area cultivated, and this causes errors as planting distances change. Also assume only trees over 6 yrs are productive, when we have reduced this to 3-4 yrs, although not fully productive until 5 or 6.

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Apples & Pears Commodity Group Statistics Profile

	Data Collected	Current Frequency in years	Optimum Frequency in years	Current Collection Means	Outputs Produced: Consumption trends	Export totals		Total Output Volume	Total by state or region	Total $ Value				How Outputs are used: Business Planning	Export Planning	Industry Strategic Planning				Industry benchmarks	Market Size & Share	New Outputs & uses				Production Forecasting			
1.0	**What is produced**																												
1.1	Production volumes (Kgs)	1	0.5	ABS Survey (AAPGA)	X	X		X	X	X				X	X	X					X	X				X			
1.2	Production by varieties	1	1	ABS Survey (AAPGA)	X	X		X	X					X	X	X										X			
1.3	Production value	1	1	ABS Survey (HAL)	X			X	X	X				X	X	X					X	X				X			
1.4																													
2.0	**What are the production assets & resources**																												
2.1	Land area in use			May be introduced										X	X	X										X			
2.2	Number of Enterprises (Onlt those above EVAO $5k)	1	1	ABS Survey				X	X					X	X	X				X						X			
2.3	Production material (Trees, Vines, Plantings)	1	1	ABS Survey (AAGA)				X	X					X	X	X				X						X			
2.4																													
3.0	**What form it is sold in**																												
3.1																													
3.2	Fresh market or processed	1	0.5	ABS Survey (AAPGA)	X			X	X					X		X					X								
4.0	***Where it is sold***																												
4.1														X															
4.2														X															
4.3	Export markets volume by Importing country	1	0.5	ABS/Export (HAL)		X		X	X	X			X	X	X	X													
5.0	**Consumption**																												
5.1	Per capita domestic	1	0.5	ABS (HAL)	X					X				X		X					X								
6.0	**Import Replacement**																												
6.1																													
7.0	**Export Market Profiles**																												
7.1	Competiting export volumes	1	1	USDA		X								X	X	X													
7.2	Production Supply & Distribution Selected Countries	1	1	USDA		X								X	X	X													
7.3																													
	Commodity view of output Level of accuracy out of 10				Unknown																								
	Overall view of total data accuracy out of 10			Unknown																									

Comments **(X = Which data is used for which statistical output and use)**

An investigation would be required to ascertain if supply chain data could provide accurate statistics.
The export planning is only for the Pink Lady variety.
Without being intimately involved in the ABS process we cant identify the accuracy of their data collection, you either trust it or question it.
The use of statistical outputs for enterproise business planning is up to the enterprise.
This commodity group have worked out an arrangement with the ABS to collect their data. They lever off the ABS authority and have tailored what is collected to provide useful outcomes.

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Avocado Commodity Group Statistics Profile

	Data Collected	Current Frequency in years	Optimum Frequency in years	Current Collection Means	Outputs Produced: Consumption trends	Export totals		Total Output Volume	Total by state or region					How Outputs are used: Export Planning	Industry Strategic Planning		Marketing Effectiveness					New Outputs & uses: Enterprise Benchmarks	Consumption cross over	Industry Yield/ROI	Production Forecasting			
1.0	**What is produced**																											
1.1	Production volumes	1	0.5	ABS Survey	X	X		X	X					X	X							X	X		X			
1.2																						X	X		X			
1.3																						X	X	X	X			
1.4	Varieties & Seasonality	5	1	ABS Industry	X	X								X	X		X					X	X		X			
2.0	**What are the production assets & resources**																											
2.1	Land area in use	1	1	ABS Survey				X	X					X	X							X		X	X			
2.2	Number of Enterprises	1	1	ABS Survey			X	X	X					X	X							X		X	X			
2.3	Production material (Trees, Vines, Plantings)	1	1	ABS Survey				X	X					X	X							X		X	X			
2.4																												
3.0	**What form it is sold in**																											
3.1	Whole or part (IE Nut or kernels)	1	1	ABS Survey	X	X																						
3.2	Fresh market or processed	1	0.5	ABS Survey	X			X	X						X		X											
4.0	**Where it is sold**																											
4.1	Domestic volumes	1	0.5	ABS Survey	X			X									X											
4.2	Export volume by variety	1	0.5	ABS/Export		X		X						X	X		X											
4.3	Export markets volume by Importing country	1	0.5	ABS/Export		X		X					X	X	X													
5.0	**Consumption**																											
5.1	Per capita domestic	1	0.5	Neilson data	X					X							X						X					
6.0	**Import Replacement**																											
6.1	Competing Imports	1	0.5	ABS/USDA	X	X								X	X		X											
7.0	**Export Market Profiles**																											
7.1																												
7.2																												
7.3	Global production output	1	1	USDA		X				X				X	X													
	Commodity view of output Level of accuracy out of 10				7	6		3	3																			
	Overall view of total data accuracy out of 10			3																								

Comments

(X = Which data is used for which statistical output and use)

Along the supply chain fruit is often handled several times by wholesalers so thus my ? on question 3.0. Retailers/chains should have good data however they are reluctant to share and only represent a part of the retail sector.
Avocados have in past done a special census using ABS to get a better handle on industry. Data was seen as fairly good however has not been used as much as could have been. Thus industry has not "hurried" to repeat the exercise. To get the range of data we thought we needed at the time was also very expensive so questions were limited.
Avocados are currently looking to conduct a project to get a better understanding of export potential markets and this should provide a base set of data which can then be kept updated, using the sources identified and resources of industry.
Better statistics particularly with respect to crop forecasting and thus marketing needs is seen as VIP however "too difficult" to date to coordinate. Is identified in Strategic plan as critical issue to be addressed in next couple of years.
The challenge remains to convince all in the industry of the benefits of providing accurate data for their own and total industry benefit while we remain a domestic focussed industry where our neighbours are seen as our competitors.

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Banana Commodity Group Statistics Profile

	Data Collected	Current Frequency in years	Optimum Frequency in years	Current Collection Means	Outputs Produced: Consumption trends			Total Output Volume	Total by state or region	Total $ Value	Arrivals, Sales Figures	Mkt Conditions. Stock on Hand	Graphs on Supplies & proces against previous yr	How Outputs are used: Business Planning	Export Planning	Industry Strategic Planning	Market Growth Profile	Marketing Effectiveness	R & D Prorities	Tactical Distribution			New Outputs & uses: Enterprise Benchmarks	Consumption cross over	Industry Yield/ROI	Production Forecasting	Targeted R &D		
1.0	**What is produced**																											
1.1	Production volumes	Wkly	Wkly	Mkt Reps reports	X			X	X	X	X	X	X	X	X	X	X		X	X			X	X		X	X		
1.2	Production by varieties	1	1	ABS Survey	X			X	X					X	X	X			X				X	X		X	X		
1.3	Production value	1	1	DPI Nth Qld	X			X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X		
1.4	Varieties & Seasonality	1	1	Industry Survey	X					X				X	X	X	X	X	X				X	X		X	X		
2.0	**What are the production assets & resources**																											
2.1	Land area in use	1	1	QDPI, NSW Ag, WA Ag, NT DPIF				X	X					X	X	X	X		X				X		X	X	X		
2.2	Number of Enterprises	1	1	As above				X	X					X	X	X	X		X				X		X	X	X		
2.3	Production material (Trees, Vines, Plantings)	1	1	QDPI				X	X					X	X	X	X		X				X		X	X	X		
2.4																													
3.0	**What form it is sold in**																											
3.1	Whole or part (IE Nut or kernels)	1	1	ABS Survey	X														X								X		
3.2	Fresh market or processed	Wkly	Wkly	Mkt Reps reports	X			X	X		X	X	X	X		X	X	X	X	X							X		
	Market Prices	Wkly	Wkly	Mkt Rep reports				X	X	X	X																		
4.0	**Where it is sold**																											
4.1	Domestic volumes	Wkly	Wkly	Mkt Reps reports	X			X	X	X	X	X	X	X		X	X	X	X	X							X		
4.2	Export volume by variety	1	0.5	ABS/Export				X	X	X				X		X	X	X	X								X		
4.3	Export markets volume by Importing country	1	0.5	ABS/Export				X	X	X			X	X		X	X		X								X		
5.0	**Consumption**																											
5.1	Per capita domestic	1	0.5	ABS/ Own consumer Research	X					X				X		X	X	X	X					X			X		
6.0	**Import Replacement**																											
6.1																													
7.0	**Export Market Profiles**																											
7.1	Competiting export volumes	1	1	FAO										X		X	X		X								X		
7.2	Production Supply & Distribution Selected Countries	1	1	FAO										X		X	X		X								X		
7.3	Global production output	1	1	FAO						X				X		X	X		X								X		
	Commodity view of output Level of accuracy out of 10				9			8	8	8	8	8	10																
	Overall view of total data accuracy out of 10			8																									

(X = Which data is used for which statistical output and use)

Comments

Wholesalers and retailers could assist by giving their data confidentially.

We generally have pretty good stats. Our weekly market reports are the most popular. The biggest issue is their timeliness. Their availability to the users to enable them to be utilised effectively e.g. sending how much fruit to which market. Qld. Fruit & Vegetable Growers provides them in a fax out service so growers can access them quickly.

Growers do look at trends in the annual production and price reports published by the Australian Banana Growers' Council.

In times of quarantine emergency, the issue of where each plantation is can be crucial. The banana industry is fortunate to have the State Depts do a pretty good job on this work.

Consumption figures and our annual consumer research influence our promotion campaign.

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Cherries Commodity Group Statistics Profile

	Data Collected	Current Frequency in years	Optimum Frequency in years	Current Collection Means	Outputs Produced: Export totals	Outputs Produced: Total Output Volume	Outputs Produced: Total by state or region	How Outputs are used	New Outputs & uses: Enterprise Benchmarks	New Outputs & uses: Production Forecasting
1.0	**What is produced**									
1.1	Production volumes	1	0.5	ABS Survey	X	X	X		X	X
1.2										
1.3	Production value	1	1	ABS Survey		X	X		X	X
1.4										
2.0	**What are the production assets & resources**									
2.1	Land area in use	1	1	ABS Survey		X	X		X	X
2.2	Number of Enterprises	1	1	ABS Survey		X	X		X	X
2.3	Production material (Trees, Vines, Plantings)	1	1	ABS Survey		X	X		X	X
2.4										
3.0	**What form it is sold in**									
3.1	Whole or part (IE Nut or kernels)	1	1	ABS Survey	X					X
3.2	Fresh market or processed	1	0.5	ABS Survey		X	X			X
4.0	**Where it is sold**									
4.1										
4.2	Export volume by variety	1	0.5	ABS/Export	X	X	X			
4.3	Export markets volume by Importing country	1	0.5	ABS/Export	X	X	X			
5.0	**Consumption**									
5.1										
6.0	**Import Replacement**									
6.1	Competing Imports	1	0.5	ABS/USDA	X					
7.0	**Export Market Profiles**									
7.1										
7.2										
7.3										
	Commodity view of output Level of accuracy out of 10				1	4	8			
	Overall view of total data accuracy out of 10			1						

Comments **(X = Which data is used for which statistical output and use)**

The cherry industry has few if any statistics and does not have an accurate database of all cherry growers in the country.
Its use of statistics is currently minimal.
Before any statistical collection or use of statistics can be achieved it will be necessary to compile an accurate database of cherry growing enterprises in Australia.

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Citrus Commodity Group Statistics Profile

	Data Collected	Current Frequency in years	Optimum Frequency in years	Current Collection Means	Outputs Produced: Consumption trends	Export totals		Total Output Volume	Total by state or region	Total $ Value				How Outputs are used: Business Planning		Industry Strategic Planning		Marketing Effectiveness	R & D Prorities				New Outputs & uses: Enterprise Benchmarks	Consumption cross over	Industry Yield/ROI	Production Forecasting	Targeted R &D	Market price Forecasting	
1.0	**What is produced**																												
1.1	Production volumes	1	0.5	Industry Survey	X	X		X	X	X				X		X			X				X	X		X	X	X	
1.2	Production by varieties	1	1	Industry Survey	X	X		X	X					X		X			X				X	X		X	X	X	
1.3	Production value	1	1	ABS Survey	X			X	X	X				X		X		X	X				X	X	X	X	X	X	
1.4	Varieties & Seasonality	1	1	Industry Survey	X	X				X				X		X		X	X				X	X		X	X	X	
2.0	**What are the production assets & resources**																												
2.1	Land area in use	1	1	Industry Survey				X	X					X		X			X				X		X	X	X	X	
2.2																X													
2.3	Production material (Trees, Vines, Plantings)	1	1	ABS Survey				X	X					X		X			X				X		X	X	X	X	
2.4																													
3.0	**What form it is sold in**																												
3.1																													
3.2	Fresh market or processed	0.5	0.5	ABS Survey	X			X	X					X		X		X	X								X	X	
4.0	**Where it is sold**																												
4.1	Domestic volumes	1	0.25	Industry Survey	X			X	X	X				X		X		X	X								X	X	
4.2	Export volume by variety	0.25	0.25	ABS/Export		X		X	X	X				X		X		X	X								X		
4.3	Export markets volume by Importing country	0.25	0.25	ABS/Export		X		X	X	X			X	X		X			X								X		
5.0	**Consumption**																												
5.1	Per capita domestic	1	1	ABS/ Research	X					X				X		X		X	X						X		X		
6.0	**Import Replacement**																												
6.1	Competing Imports	0.25	0.25	ABS Survey	X	X								X		X		X	X								X		
7.0	**Export Market Profiles**																												
7.1	Competiting export volumes	1	1	ABS Stats		X								X		X			X								X	X	
7.2	Production Supply & Distribution Selected Countries	1	1	USDA Stats		X								X		X			X								X	X	
7.3	Global production output	1	1	USDA Stats		X				X				X		X			X								X	X	
	Commodity view of output Level of accuracy out of 10	1	1	USDA Stats		X				X				X		X			X								X	X	
	Overall view of total data accuracy out of 10				4	8		8	8	7																			
	Overall Industry view of total data accuracy out of 10			7																									

Comments **(X = Which data is used for which statistical output and use)**

A number of inputs are being collated from various sources into a Citrus Export Market Intelligence System
Also working on a Dometic Market intelligence system
Consumption data needs to be more timely
Market price forecasting based on production forecast would be interesting
Too much focus on production/cost of production rather than whole of market approach
Statistics are only as good as the analysis/interpretation, they need some cmmercial input and economic analysis.
Need to make statistics relevant to individuals
Need to make statistics timely

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Custard Apples Commodity Group Statistics Profile

	Data Collected	Current Frequency in years	Optimum Frequency in years	Current Collection Means	Outputs Produced									How Outputs are used								New Outputs & uses							
								Total Output Volume	Total by state or region																				
1.0	**What is produced**																												
1.1	Production volumes	1	0.5	ABS Survey				X	X																				
1.2	Production by varieties	1	1	ABS Survey				X	X																				
1.3																													
1.4																													
2.0	**What are the production assets & resources**																												
2.1	Land area in use	1	1	ABS Survey				X	X																				
2.2	Number of Enterprises	1	1	ABS Survey				X	X																				
2.3	Production material (Trees, Vines, Plantings)	1	1	ABS Survey				X	X																				
2.4	People Employed	1	1	ABS Survey																									
3.0	**What form it is sold in**																												
3.1																													
3.2	Fresh market or processed	1	0.5	ABS Survey				X	X																				
4.0	**Where it is sold**																												
4.1	Domestic volumes	1	0.5	ABS Survey				X	X																				
4.2																													
4.3																													
5.0	**Consumption**																												
5.1																													
6.0	**Import Replacement**																												
6.1																													
7.0	**Export Market Profiles**																												
7.1																													
7.2																													
7.3																													
	Commodity view of output Level of accuracy out of 10							7	8																				
	Overall view of total data accuracy out of 10			6																									

Comments

(X = Which data is used for which statistical output and use)

This commodity group believes that accurate data could be collected from the supply chain. If the ABS was more accurate it would be the most effective option.
Very few statistics are available for custard apples. The industry is in the process of putting together a database but it is hard getting growers to respond to questions on production and value.
The ABS should improve their database of growers – compulsory returns would produce better figures.

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Ginger Commodity Group Statistics Profile

	Data Collected	Current Frequency in years	Optimum Frequency in years	Current Collection Means	Outputs Produced: Consumption trends	Export totals	Employment Profile	Total Output Volume		Total $ Value				How Outputs are used: Business Planning	Export Planning	Industry Strategic Planning	Market Growth Profile	Marketing Effectiveness					New Outputs & uses: Industry benchmarks			Industry Yield/ROI	Production Forecasting		Market price Forecasting	
1.0	**What is produced**																													
1.1	Production volumes	1	1	Processor	X	X		X		X				X	X	X	X						X				X		X	
1.2																														
1.3	Production value	1	1	Processor	X			X		X				X	X	X	X	X					X			X	X		X	
1.4																														
2.0	**What are the production assets & resources**																													
2.1	Land area in use	1	1	Processor				X						X	X	X	X									X	X		X	
2.2	Number of Enterprises	1	1	Processor			X	X						X	X	X	X						X			X	X		X	
2.3	Production material (Trees, Vines, Plantings)	1	1	Processor				X						X	X	X	X						X			X	X		X	
2.4	People Employed	1	1	Processor			X							X		X	X									X	X		X	
3.0	**What form it is sold in**																													
3.1																														
3.2	Fresh market or processed	1	1	Processor	X			X						X		X	X	X											X	
4.0	**Where it is sold**																													
4.1	Domestic volumes	1	1	Processor	X			X		X				X		X	X	X											X	
4.2	Export volume by variety	1	1	Processor		X		X		X				X	X	X	X	X												
4.3	Export markets volume by Importing country	1	1	Processor		X		X		X			X	X	X	X	X													
5.0	***Consumption***																													
5.1																														
6.0	**Import Replacement**																													
6.1	Competing Imports	1	1	ABS/USDA	X	X								X	X	X	X	X												
7.0	**Export Market Profiles**																													
7.1	Competiting export volumes	1	1	USDA		X								X	X	X	X												X	
7.2	Production Supply & Distribution Selected Countries	1	1	USDA		X								X	X	X	X												X	
7.3	Global production output	1	1	USDA		X				X				X	X	X	X												X	
	Commodity view of output Level of accuracy out of 10					8	9	9		9																				
	Overall view of total data accuracy out of 10			6																										

Comments **(X = Which data is used for which statistical output and use)**

This Industry has a concentrated producer base and one major processor in Buderim Ginger.
There are 25 producers all of whom are in QLD, 350 acres in production and 250 people employed.
The ginger Industry is based on a quota system between Farmers and Buderim Ginger. The domestic raw market is unregulated and depends on supply and demand.
This highly concentrated distribution channel enables data to be captured. It appears this data is put to use via production planning that sets quotos by grower.
This concentration appears to have limited the scope for wider use of statistical information.

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Mango Commodity Group Statistics Profile

	Data Collected	Current Frequency in years	Optimum Frequency in years	Current Collection Means	Outputs Produced: Consumption trends	Export totals		Total Output Volume	Total by state or region	Total $ Value				How Outputs are used: Business Planning	Export Planning	Industry Strategic Planning	Market Growth Profile	Marketing Effectiveness	R & D Prorities	Market Size & Share	Setting proposed levy		New Outputs & uses: Enterprise Benchmarks	Consumption cross over	Industry Yield/ROI	Production Forecasting	Targeted R &D		
1.0	**What is produced**																												
1.1	Production volumes	1	0.5	ABS/NT/QDPI data	X	X		X	X	X				X	X	X	X		X	X	X			X	X		X	X		
1.2																														
1.3	Production value	1	1	ABS Survey	X			X	X	X				X	X	X	X	X	X	X	X			X	X	X	X	X		
1.4																														
2.0	**What are the production assets & resources**																												
2.1																														
2.2	Number of Enterprises	1	1	Industry Data base				X	X					X	X	X	X		X		X			X		X	X	X		
2.3	Production material (Trees, Vines, Plantings)	1	1	NT/QDPI /ABS survey				X	X					X	X	X	X		X		X			X		X	X	X		
2.4																														
3.0	**What form it is sold in**																												
3.1																														
3.2	Fresh market or processed	1	0.5	ABS/ QDPI data	X			X	X					X		X	X	X	X	X	X						X			
4.0	**Where it is sold**																												
4.1	Domestic volumes	1	0.5	ABS Survey	X			X	X	X				X		X	X	X	X		X						X			
4.2	Export volume by variety	1	0.5	ABS/Export/HAL		X		X	X	X				X	X	X	X	X	X		X						X			
4.3	Export markets volume by Importing country	1	0.5	ABS/Export/HAL		X		X	X	X			X	X	X	X	X		X		X						X			
5.0	**Consumption**																												
5.1	Per capita domestic	1	0.5	AC Nielson/HAL	X					X				X		X	X	X	X	X				X			X			
6.0	**Import Replacement**																												
6.1	Competing Imports	1	0.5	ABS/HAL/USDA	X	X								X	X	X	X	X	X								X			
7.0	***Export Market Profiles***																												
7.1	Competiting export volumes	1	1	USDA		X								X	X	X	X		X								X			
7.2	Production Supply & Distribution Selected Countries	1	1	USDA		X								X	X	X	X		X								X			
7.3	Global production output	1	1	USDA		X				X				X	X	X	X		X								X			
	Export Markets for Australian Mangoes			NT office of Reds Dvlmnt																										
	Commodity view of output Level of accuracy out of 10				9	9		7	7	7										7										
	Overall view of total data accuracy out of 10			7																										

Comments

This commodity group believes it is possible to collect data via the computer infrsatruture in the supply chain.
We have relied heavily on the officers of QHI to compile industry stats, this may not always be available.
The NTDPI have recently undertaken a major survey of production resources.

(X = Which data is used for which statistical output and use)

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Macadamias Commodity Group Statistics Profile

	Data Collected	Current Frequency in years	Optimum Frequency in years	Current Collection Means	Outputs Produced: Consumption trends	Export totals	Employment Profile	Total Output Volume	Total by state or region	Total $ Value				How Outputs are used: Business Planning	Export Planning	Industry Strategic Planning	Market Growth Profile	Marketing Effectiveness	R & D Prorities	Production Forecasting			New Outputs & uses: Enterprise Benchmarks		Industry Yield/ROI					
1.0	**What is produced**																													
1.1	Production volumes	Mnthy	Mnthy	Industry System	X	X		X	X	X				X	X	X	X		X	X			X							
1.2	Production by varieties	1	1	Industry System	X	X		X	X					X	X	X			X	X			X							
1.3	Production value	1	1	Industry System	X			X	X	X				X	X	X	X	X	X	X			X		X					
1.4	Varieties & Seasonality	1	1	Industry System	X	X				X				X	X	X	X	X	X	X			X							
2.0	**What are the production assets & resources**																													
2.1	Land area in use	1	1	Industry System				X	X					X	X	X	X		X	X			X		X					
2.2	Number of Enterprises	1	1	Industry System			X	X	X					X	X	X	X		X	X			X		X					
2.3	Production material (Trees, Vines, Plantings)	1	1	Industry System				X	X					X	X	X	X		X	X			X		X					
2.4	People Employed	1	1	Industry System			X							X		X	X		X	X			X		X					
3.0	**What form it is sold in**																													
3.1	Whole or part (IE Nut or kernels)	1	1	Industry System	X	X										X			X											
3.2	Fresh market or processed	1	0.5	Industry System	X			X	X					X		X	X	X	X											
4.0	**Where it is sold**																													
4.1	Domestic volumes (Plus Retail profile)	1	0.5	Industry System	X			X	X	X				X			X	X	X											
4.2	Export volume by variety	Mnthy	Mnthy	Industry System		X		X	X	X				X	X	X	X	X	X											
4.3	Export markets volume by Importing country	1	0.5	Industry System		X		X	X	X			X	X	X	X	X		X											
5.0	**Consumption**																													
5.1	Per capita domestic	1	0.5	Industry System /HAL	X					X				X		X	X	X	X											
6.0	**Import Replacement**																													
6.1	Competing Imports	Mnthy	Mnthy	ABS/USDA	X	X								X	X	X	X	X	X											
7.0	**Export Market Profiles**																													
7.1	Competiting export volumes	Mnthy	Mnthy	ABS/ USDA		X								X	X	X	X		X											
7.2	Production Supply & Distribution Selected Countries	1	1	ABS/ USDA		X								X	X	X	X		X											
7.3	Global production output	1	1	ABS/ USDA		X				X				X	X	X	X		X											
	Commodity view of output Level of accuracy out of 10				8	8	8	8	8	8																				
	Overall view of total data accuracy out of 10	8		8																										

Comments

70% of this crop is exported and therefore sold via channels that enable easier data collection
There are 10-12 processors in the supply chain. This provides a capture point for data . These processors are currently pooling Industry data.
Evolved Industry system of collecting data 2 years a go. This system draws on monthly data input from export sales.

This commodity group beleives it would be useful if the investment community could see higher quality benchmark data and that this sort of information has potential to impact the growers cost of capital.
ABS is not seen as a user friendly source of data if you are not technically capable and it should be easier. As a minimum the ABS should make it clear what reports it has available.
Believes that ABARE could do the data collection and processing job as they do with the Grazing Industry Survey.
Currently has a forecasting tool in place that captures all variables and projects to a 10-15% accuracy

(X = Which data is used for which statistical output and use)

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Mushrooms Commodity Group Statistics Profile

	Data Collected	Current Frequency in years	Optimum Frequency in years	Current Collection Means	Outputs Produced: Consumption trends	Export totals	Employment Profile	Total Output Volume	Total by state or region	Total $ Value				How Outputs are used: Business Planning	Export Planning	Industry Strategic Planning	Market Growth Profile	Marketing Effectiveness	R & D Prorities		Industry benchmarks	Market Size & Share	New Outputs & uses: Enterprise Benchmarks	Consumption cross over	Industry Yield/ROI	Production Forecasting			
1.0	**What is produced**																												
1.1	Production volumes	1	1	AMGA	X	X		X	X	X				X	X	X	X		X		X	X	X	X		X			
1.2	Production by varieties	1	1	AMGA	X	X		X	X					X	X	X			X				X	X		X			
1.3	Production value	1	1	AMGA	X			X	X	X				X	X	X	X	X	X		X	X	X	X	X	X			
1.4																													
2.0	**What are the production assets & resources**																												
2.1																													
2.2	Number of Enterprises	1	1	AMGA			X	X	X					X	X	X	X		X		X		X		X	X			
2.3																X													
2.4	People Employed	1	1	AMGA			X							X		X	X		X				X		X	X			
3.0	**What form it is sold in**																												
3.1	Whole or part (IE Nut or kernels)	1	1	AMGA	X	X										X			X										
3.2	Fresh market or processed	1	0.5	AMGA	X			X	X					X		X	X	X	X			X							
4.0	**Where it is sold**																												
4.1	Domestic volumes	1	0.5	AMGA	X			X	X	X				X			X	X	X										
4.2	Export volume by variety	1	0.5	ABS/Export		X		X	X	X				X	X	X	X	X	X										
4.3	Export markets volume by Importing country	1	0.5	ABS/Export		X		X	X	X			X	X	X	X	X		X										
5.0	**Consumption**																												
5.1	*Per capita domestic*	1	0.5	AMGA	X					X				X		X	X	X	X			X		X					
6.0	**Import Replacement**																												
6.1	Competing Imports	1	0.5	ABS Stats	X	X								X	X	X	X	X	X										
7.0	**Export Market Profiles**																												
7.1																													
7.2	Production Supply & Distribution Selected Countries	1	1	Intnt Stats		X								X	X	X	X		X										
7.3	Global production output	1	1	ISMS stats		X				X				X	X	X	X		X										
	Commodity view of output Level of accuracy out of 10				9	5	8	9	9	9											8	9							
	Overall view of total data accuracy out of 10			9																									

Comments

This comodity group does not believe the supply chain could provide accurate data.
The current system adequate but could be improved by crossreferencing with retail and wholesale data.

(X = Which data is used for which statistical output and use)

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Nursery Commodity Group Statistics Profile

	Data Collected	Current Frequency in years	Optimum Frequency in years	Current Collection Means	Outputs Produced: Consumption trends	Export totals	Employment Profile	Total Output Volume	Total by state or region	Total $ Value				How Outputs are used: Business Planning	Export Planning	Industry Strategic Planning	Market Growth Profile	Marketing Effectiveness	R & D Priorities	Industry benchmarks	Market Size & Share		New Outputs & uses: Enterprise Benchmarks		Industry Yield/ROI					
1.0	**What is produced**																												
1.1	Production volumes	1	0.5	ABS/ Mkt Monitor	X	X		X	X	X				X	X	X	X		X		X	X		X						
1.2	Production by category	1	0.5	ABS/ Mkt Monitor	X	X		X	X					X	X	X			X					X						
1.3	Production value	1	0.5	ABS/ Mkt Monitor	X			X	X	X				X	X	X	X	X	X		X	X		X		X				
1.4	Varieties & Seasonality	1	0.5	Industry	X	X				X				X	X	X	X	X	X					X						
2.0	**What are the production assets & resources**																												
2.1	Land area in use	1	1	ABS Survey				X	X					X	X	X	X		X					X		X				
2.2	Number of Enterprises	1	1	ABS Survey			X	X	X					X	X	X	X		X		X			X		X				
2.3	Production material (Trees, Vines, Plantings)	1	1	ABS Survey				X	X					X	X	X	X		X		X			X		X				
2.4	*People Employed*	1	1	ABS Survey			X							X		X	X		X					X		X				
3.0	**What form it is sold in**																												
3.1	Finished plant or plant for growing on	0.5	0.5	Mkt Monitor	X			X	X	X							X												
3.2																													
	Category of product	0.5	0.5	Mkt Monitor	X			X	X	X							X												
4.0	**Where it is sold**																												
4.1	Domestic volumes	1	0.5	ABS Survey	X			X	X	X				X			X	X	X										
4.2	Export volume by variety	1	0.5	ABS/Export		X		X	X	X				X	X	X	X	X	X										
4.3	Export markets volume by importing country	1	0.5	ABS/Export		X		X	X	X			X	X	X	X	X		X										
	Distrubution channel	0.5	0.5	Mkt Monitor																									
5.0	**Consumption**																												
5.1	Per capita domestic	1	0.5	ABS/ Research	X					X				X		X	X	X	X			X							
	House hold consumption	1	1																										
	Segment consumption	1	1	Industry																									
6.0	**Import Replacement**																												
6.1	Competing Imports	1	0.5	ABS/USDA	X	X								X	X	X	X	X	X										
7.0	**Export Market Profiles**																												
7.1																													
7.2																													
7.3																													
	Industry view of output Level of accuracy out of 10				7	8	3	7	8	7										3	8								
	Overall Industry view of total data accuracy out of 10			5																									

Comments **(X = Which data is used for which statistical output and use)**

The Nursery industry has commissioned a market monitor that will draw off supply chain data. This monitor will profile the growth and movement between categories of product and across distribution channels.

Nursery Industry also has a demographical retail catchment tool in place that can tell a retailer the make of their catchment, by segment and the potential spent of these segments. Supporting this database is a profile of the needs and wants of each segment which are updated via Project NY 98052. This service is available on a user pay basis and has received good support.

ABS data collection methods did not inspire confidence in their results. Particularly in the way that products were categorised for the HES also the way that data was collected from growers and retailers. This is not surprising given the high number of growers and the tendency for growers to enter the industry for lifestyle reasons. These factors were always going to create high potential for statistical errors.

Project NY 00046 "Nursery Industry Collection Project" was commissioned in March 2001, to define a methodology to track market growth and movement, and benchmark market size.
NY 00046 profiled market sizes that were reconciled with supply chain data, but indicated the ABS statistics were not accurate.
NY 00046 has know been extended into The Garden Market Monitor Project NY 01013, which will provide a 6 monthly monitor on the garden market using supply chain data and the structure defined in NY 00046. This project is scheduled to run for 2 years.

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Onions Commodity Group Statistics Profile

	Data Collected	Current Frequency in years	Optimum Frequency in years	Current Collection Means	Outputs Produced: Consumption trends	Export totals	Employment Profile	Total Output Volume	Total by state or region	Total $ Value				How Outputs are used: Unknown									New Outputs & uses: None suggested								
1.0	**What is produced**																														
1.1	Production volumes	1	0.5	ABS Survey	X	X		X	X	X																					
1.2																															
1.3	Production value	1	1	ABS Survey	X			X	X	X																					
1.4																															
2.0	**What are the production assets & resources**																														
2.1	Land area in use	1	1	ABS & Industry Survey				X	X																						
2.2																															
2.3																															
2.4	People Employed	1	1	ABS Survey			X																								
3.0	**What form it is sold in**																														
3.1	Whole or part (IE Nut or kernels)	1	1	ABS Survey	X	X																									
3.2	Fresh market or processed	1	0.5	ABS Survey	X			X	X																						
4.0	**Where it is sold**																														
4.1	Domestic volumes	1	0.5	ABS Survey	X			X	X	X																					
4.2	Export volume by variety	1	0.5	ABS/Export		X		X	X	X																					
4.3	Export markets volume by Importing country	1	0.5	ABS/Export		X		X	X	X																					
5.0	**Consumption**																														
5.1	Per capita domestic	1	0.5	ABS/ Research	X					X																					
6.0	**Import Replacement**																														
6.1																															
7.0	**Export Market Profiles**																														
7.1																															
7.2																															
7.3																															
	Commodity view of output Level of accuracy out of 10				Unknown																										
	Overall view of total data accuracy out of 10			Unknown																											

Comments

The ways that data is used was not known

The ABS collection of volumes and value are understood to be 2 different surveys

(X = Which data is used for which statistical output and use)

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Passionfruit Commodity Group Statistics Profile

	Data Collected	Current Frequency in years	Optimum Frequency in years	Current Collection Means	Outputs Produced: Export totals	Total Output Volume	Total by state or region	Total $ Value	How Outputs are used	New Outputs & uses: Enterprise Benchmarks	Industry Yield/ROI	Production Forecasting	Targeted R &D
1.0	**What is produced**												
1.1	Production volumes	1	0.5	Industry	X	X	X	X		X		X	X
1.2				ABS Survey									
1.3	Production value	1	1	ABS Survey	X	X	X	X		X	X	X	X
1.4													
2.0	**What are the production assets & resources**												
2.1	Land area in use	5	1	ABS Survey		X	X			X	X	X	X
2.2	Number of Enterprises	1	1	ABS Survey		X	X			X	X	X	X
2.3													
2.4													
3.0	**What form it is sold in**												
3.1													
3.2	Fresh market or processed	1	0.5	Estimated		X	X						X
4.0	**Where it is sold**												
4.1	Domestic volumes	1	0.5	Industry Estimates		X	X	X					X
4.2													
4.3													
5.0	**Consumption**												
5.1													
6.0	**Import Replacement**												
6.1													
7.0	**Export Market Profiles**												
7.1													
7.2													
7.3													
	Commodity view of output Level of accuracy out of 10					5	5	5					
	Overall view of total data accuracy out of 10			3									

Comments **(X = Which data is used for which statistical output and use)**

This commodity group suffers from inaccurate or no valid statistics. The data collected by ABS is seen as inaccurate and there is no owner of the data at the ABS.
It is suggested that the problems are linked to this crop being a second crop for most of the estimated 79 growers and the provision of data is not seen as important
With such low numbers of growers the ABS error rates are too high.
This commodity group would welcome collection and processing of data by another body.
Nest indications are that 90% of the crop is sold through the domestic fresh market and 10%, which is generally second grade product, is sold to processing

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Potatoes Commodity Group Statistics Profile

	Data Collected	Current Frequency in years	Optimum Frequency in years	Current Collection Means	Outputs Produced: Consumption trends	Export totals	Employment Profile	Total Output Volume	Total by state or region	Total $ Value				How Outputs are used:		Industry Strategic Planning	Market Growth Profile				Industry benchmarks	Market Size & Share	New Outputs & uses							
1.0	**What is produced**																													
1.1	Production volumes	1	0.5	ABS Survey	X	X		X	X	X						X	X				X	X								
1.2																														
1.3	*Production value*	1	1	ABS Survey	X			X	X	X						X	X				X	X								
1.4																														
2.0	**What are the production assets & resources**																													
2.1	Land area in use	1	1	ABS Survey				X	X							X	X													
2.2	Number of Enterprises	1	1	ABS Survey			X	X	X							X	X				X									
2.3	Production material (Trees, Vines, Plantings)	1	1	ABS Survey				X	X							X	X				X									
2.4	People Employed	1	1	ABS Survey			X									X	X													
3.0	**What form it is sold in**																													
3.1																														
3.2	Fresh market or processed	1	0.5	ABS Survey	X			X	X							X	X					X								
4.0	**Where it is sold**																													
4.1	Domestic volumes	1	0.5	ABS Survey	X			X	X	X						X	X													
4.2																														
4.3	Export markets volume by Importing country	1	0.5	ABS/Export		X		X	X	X			X			X	X													
5.0	**Consumption**																													
5.1	Per capita domestic	1	0.5	ABS/ Research	X					X						X	X					X								
6.0	**Import Replacement**																													
6.1	Competing Imports	1	0.5	ABS/USDA	X	X										X	X													
7.0	**Export Market Profiles**																													
7.1	Competiting export volumes	1	1	USDA		X										X	X													
7.2	Production Supply & Distribution Selected Countries	1	1	USDA		X										X	X													
7.3	Global production output	1	1	USDA		X				X						X	X													
	Commodity view of output Level of accuracy out of 10				7	10	5	7	5	7											4	7								
	Overall view of total data accuracy out of 10			7																										

(X = Which data is used for which statistical output and use)

Comments

Production volue derived from production volumes.

Accurate Fresh and processed consumption and production statistics could be purchased from the supermarket chains.

Although growers and packers are required to supply the ABS with statistics information, for free, when it comes to obtaining up tpo date statistics on potatoe production they face difficulties in obtaining the information and they have to pay for it. This discourages growers, advisors and research agencies from using industry statistics.

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Pyrethrum Commodity Group Statistics Profile

	Data Collected	Current Frequency in years	Optimum Frequency in years	Current Collection Means	Outputs Produced: Export totals	Employment Profile	Total Output Volume	Total $ Value	How Outputs are used: Business Planning	Export Planning	Industry Strategic Planning	R & D Prorities	New Outputs & uses
1.0	**What is produced**												
1.1	Production volumes	1	0.5	ABS Survey	X		X	X	X	X	X	X	
1.2													
1.3	Production value	1	1	ABS Survey			X	X	X	X	X	X	
1.4													
2.0	**What are the production assets & resources**												
2.1	Land area in use	1	1	ABS Survey			X		X	X	X	X	
2.2	Number of Enterprises	1	1	ABS Survey		X	X		X	X	X	X	
2.3													
2.4	People Employed	1	1	ABS Survey		X			X		X	X	
3.0	**What form it is sold in**												
3.1	Whole or part (IE Nut or kernels)	1	1	ABS Survey	X						X	X	
3.2													
4.0	**Where it is sold**												
4.1	Domestic volumes	1	1	ABS Survey			X	X	X		X	X	
4.2	Export volume by variety	1	1	ABS/Export	X		X	X	X	X	X	X	
4.3	Export markets volume by Importing country	1	1	ABS/Export	X		X	X	X	X	X	X	
5.0	**Consumption**												
5.1													
6.0	***Import Replacement***												
6.1													
7.0	**Export Market Profiles**												
7.1													
7.2													
7.3													
	Commodity view of output Level of accuracy out of 10				8	5	8						
	Overall view of total data accuracy out of 10			10									

Comments

This commodity group benefit from the data collected by the primary processor Botanical Resources
The data is viewed as very accurate.

(X = Which data is used for which statistical output and use)

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Strawberries Commodity Group Statistics Profile

	Data Collected	Current Frequency in years	Optimum Frequency in years	Current Collection Means	Outputs Produced: Export totals	Employment Profile	Total Output Volume	Total $ Value	How Outputs are used: Industry Strategic Planning	Market Growth Profile	R & D Prorities	New Outputs & uses: Industry ROI	Production Forecasting
1.0	**What is produced**												
1.1	Production volumes	1	0.5	Runner Sales (RS)	X		X	X	X	X	X		X
1.2	Production by varieties	1	1	RS	X		X		X		X		X
1.3	Production value	1	1	RS + Calc of yield x price			X	X	X	X	X	X	X
1.4	Varieties & Seasonality	1	1	RS provides by variety	X			X	X	X	X		X
2.0	**What are the production assets & resources**												
2.1	Land area in use	1	1	R S + Grower Survey			X		X	X	X	X	X
2.2	Number of Enterprises	1	1	R S + Grower Survey		X	X		X	X	X	X	X
2.3	Production material (Trees, Vines, Plantings)	1	1	ABS Survey			X		X	X	X	X	X
2.4	People Employed	1	1	Grower survey + Calc		X			X	X	X	X	X
3.0	**What form it is sold in**												
3.1													
3.2	Fresh market or processed	1	0.5	ABS Survey			X		X	X	X		
4.0	**Where it is sold**												
4.1	*Domestic volumes*	1	0.5	*Runner Sales + Calc*			X	X		X	X		
4.2	Export volume by variety	1	0.5	ABS/Export	X		X	X	X	X	X		
4.3	Export markets volume by Importing country	1	0.5	ABS/Export	X		X	X	X	X	X		
5.0	**Consumption**												
5.1	Per capita domestic	1	0.5	ABS + RS				X	X	X	X		
6.0	**Import Replacement**												
6.1	Competing Imports	1	0.5	ABS/USDA	X				X	X	X		
7.0	**Export Market Profiles**												
7.1													
7.2													
7.3	Global production output	1	1	Published Intntl Sources	X			X	X	X	X		
	Commodity view of output Level of accuracy out of 10				10	7	9	9					
	Overall view of total data accuracy out of 10			8									

Comments

(X = Which data is used for which statistical output and use)

Our approach works because 88% of runners are produced by a single organisation and a further 10% by only three others. We have no faith in the ABS production figures which are 2-3 times understated for strawberry. Growers seem reluctant to accurately provide information to federal government bodies, such as ABS, which they feel may be supplied to the tax department.
I could conceive of a system based on direct supply data from the chains plus throughput data from the central markets or transporters. The problem will be in ensuring these figures are honestly and accurately reported. There would have to be incentives for the contributors to participate.
This response is from the point of view of the QDPI's Strawberry Industry Development Officer. Responses from industry representatives could vary especially in questions 5-8. To some extent, many growers would be unaware of how and why we collect this data.

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Stone Fruit Commodity Group Statistics Profile (X = Which data is used for which statistical output and use)

	Data Collected	Current Frequency in years	Optimum Frequency in years	Current Collection Means	Outputs Produced: Consumption trends	Export totals	Employment Profile	Total Output Volume	Total by state or region	Total $ Value				How Outputs are used: Export Planning	Industry Strategic Planning	Market Growth Profile						New Outputs & uses: Enterprise Benchmarks		Industry Yield/ROI		Production Forecasting		Market price Forecasting	
1.0	**What is produced**																												
1.1	Production volumes	1	0.5	ABS Survey/HAL	X	X		X	X	X				X	X	X				X	X		X			X		X	
1.2	Production by types	1	1	ABS Survey/HAL	X	X		X	X					X	X								X			X		X	
1.3	Production value	1	1	ABS Survey/HAL	X			X	X	X				X	X	X				X	X		X		X	X		X	
1.4	Varieties & Seasonality (Last in 1996)	1	2	Industry/ABS	X	X				X				X	X	X							X			X		X	
2.0	**What are the production assets & resources**																												
2.1	Land area in use	1	1	ABS Survey/Regional Census				X	X					X	X	X							X		X	X		X	
2.2	Number of Enterprises	1	1	ABS Survey/Regional Census			X	X	X					X	X	X				X			X		X	X		X	
2.3	Production material (Trees, Vines, Plantings)	1	1	ABS Survey/Regional Census				X	X					X	X	X				X			X		X	X		X	
2.4	People Employed	1	1	ABS Survey			X								X	X							X		X	X		X	
3.0	**What form it is sold in**																												
3.1																													
3.2	Fresh market or processed	1	0.5	ABS Survey	X			X	X							X					X							X	
4.0	**Where it is sold**																												
4.1	Domestic volumes	1	0.5	ABS Survey/HAL	X			X	X	X						X												X	
4.2	Export volume by variety	1	0.5	ABS/Export/HAL		X		X	X	X				X	X	X													
4.3	Export markets volume by Importing country	1	0.5	ABS/Export/HAL Quota Mngmt		X		X	X	X			X	X	X	X													
5.0	**Consumption**																												
5.1	Per capita domestic	1	0.5	ABS/ Research	X					X					X	X					X			X					
6.0	**Import Replacement**																												
6.1	Commodity view of output Level of accuracy out of 10	1	0.5	ABS/USDA	X	X								X	X	X													
7.0	**Overall view of total data accuracy out of 10**																												
7.1	Competiting export volumes	1	1	USDA		X								X	X	X												X	
7.2	Production Supply & Distribution Selected Countries	1	1	USDA		X								X	X	X												X	
7.3	Global production output	1	1	USDA		X				X				X	X	X												X	
	Industry view of output Level of accuracy out of 10				8	9	7	8	6	8																			
	Overall Industry view of total data accuracy out of 10			Unknown																									

(X = Which data is used for which statistical output and use)

Comments

This commodity group believes that accurate data could be collected from the supply chain.

We have previously discussed this matter with Levies & Revenue Service – if levy payers / and collections points all used the ABN number, not only could we cross reference levy collections but we could also collect accurate production statistics -

We have also tried to get the cooperation of carton manufacturers and transport companies to provide this data. The use of ABN numbers could be the key.

Perhaps data can be collected at a local level by trusted and respected individuals, such as with the Goulburn Valley tree census, and the data compiled centrally. Perhaps Industry Development Officers can be involved in this exercise.

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Vegetable Commodity Group Statistics Profile

	Data Collected	Current Frequency in years	Optimum Frequency in years	Current Collection Means	Outputs Produced: Consumption trends	Export totals	Employment Profile	Total Output Volume	Total by state or region	Total $ Value				How Outputs are used: Business Planning	Export Planning	Industry Strategic Planning	Market Growth Profile	Marketing Effectiveness	R & D Prorities		Industry benchmarks	Market Size & Share		New Outputs & uses: Enterprise Benchmarks	Consumption cross over	Industry Yield/ROI	Production Forecasting	Targeted R &D	Market price Forecasting	
1.0	**What is produced**																													
1.1	Production volumes	1	0.5	ABS Survey	X	X		X	X	X				X	X	X	X		X		X	X		X	X		X	X	X	
1.2	Production by varieties	1	1	ABS Survey	X	X		X	X					X	X	X			X					X	X		X	X	X	
1.3	Production value	1	1	ABS Survey	X			X	X	X				X	X	X	X	X	X		X	X		X	X	X	X	X	X	
1.4	Varieties & Seasonality	1	1	Industry	X	X				X				X	X	X	X	X	X					X	X		X	X	X	
2.0	**What are the production assets & resources**																													
2.1	Land area in use	1	1	ABS Survey				X	X					X	X	X	X		X					X		X	X	X	X	
2.2	Number of Enterprises	1	1	ABS Survey			X	X	X					X	X	X	X		X		X			X		X	X	X	X	
2.3	Production material (Trees, Vines, Plantings)	1	1	ABS Survey				X	X					X	X	X	X		X		X			X		X	X	X	X	
2.4	People Employed	1	1	ABS Survey			X							X		X	X		X					X		X	X	X	X	
3.0	**What form it is sold in**																													
3.1	Whole or part (IE Nut or kernels)	1	1	ABS Survey	X	X										X			X									X		
3.2	Fresh market or processed	1	0.5	ABS Survey	X			X	X					X		X	X	X	X			X						X	X	
4.0	**Where it is sold**																													
4.1	Domestic volumes	1	0.5	ABS Survey	X			X	X	X				X			X	X	X									X	X	
4.2	Export volume by variety	1	0.5	ABS/Export		X		X	X	X				X	X	X	X	X	X									X		
4.3	Export markets volume by Importing country	1	0.5	ABS/Export		X		X	X	X			X	X	X	X	X		X									X		
5.0	**Consumption**																													
5.1	Per capita domestic	1	0.5	ABS/ Research	X					X				X		X	X	X	X			X			X			X		
6.0	**Import Replacement**																													
6.1	Competing Imports	1	0.5	ABS/USDA	X	X								X	X	X	X	X	X									X		
7.0	**Export Market Profiles**																													
7.1	Competiting export volumes	1	1	USDA		X								X	X	X	X		X									X	X	
7.2	Production Supply & Distribution Selected Countries	1	1	USDA		X								X	X	X	X		X									X	X	
7.3	Global production output	1	1	USDA		X				X				X	X	X	X		X									X	X	
	Commodity view of output Level of accuracy out of 10				5	8	7	4	8	8											5	7								
	Overall view of total data accuracy out of 10			3																										

Comments

Sometimes data not accurate

Some growers do not always give the correct yields they produce.

State organisations are a resource that can collect data.

(X = Which data is used for which statistical output and use)

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Winegrapes Commodity Group Statistics Profile

	Data Collected	Current Frequency in years	Optimum Frequency in years	Current Collection Means	Outputs Produced: Consumption trends	Export totals		Total Output Volume	Total by state or region	Total $ Value				How Outputs are used: Business Planning	Export Planning	Industry Strategic Planning	Market Growth Profile	Marketing Effectiveness	R & D Priorities	Production Forecasting	Market price Forecasting		New Outputs & uses: Enterprise Benchmarks		Industry Yield/ROI		Targeted R &D		
1.0	**What is produced**																												
1.1	Production volumes	1	0.5	ABS Survey	X	X		X	X	X				X	X	X	X		X	X	X	X		X	X			X		
1.2	Production by varieties	1	1	ABS Survey	X	X		X	X					X	X	X			X	X	X			X	X			X		
1.3	Production value	1	1	ABS Survey	X			X	X	X				X	X	X	X	X	X	X	X	X		X	X	X		X		
1.4																														
2.0	**What are the production assets & resources**																												
2.1	Land area in use	1	1	ABS Survey				X	X					X	X	X	X		X	X	X			X		X		X		
2.2	Number of Enterprises	1	1	ABS Survey			X	X	X					X	X	X	X		X	X	X			X		X		X		
2.3																														
2.4	People Employed	1	1	ABS Survey			X							X		X	X		X	X	X			X		X		X		
3.0	**What form it is sold in**																												
3.1	Whole or part (IE Nut or kernels)	1	1	ABS Survey	X	X										X			X									X		
3.2	Fresh market or processed	1	0.5	ABS Survey	X			X	X					X		X	X	X	X		X	X						X		
4.0	**Where it is sold**																												
4.1																														
4.2																														
4.3																														
5.0	**Consumption**																												
5.1	Per capita domestic	1	0.5	ABS/ Research	X					X				X		X	X	X	X			X			X			X		
6.0	**Import Replacement**																												
6.1																														
7.0	**Export Market Profiles**																												
7.1																														
7.2	Production Supply & Distribution Selected Countries	1	1	USDA		X								X	X	X	X		X		X						X		
7.3	Global production output	1	1	USDA		X				X				X	X	X	X		X								X	X	
	Commodity view of output Level of accuracy out of 10					9		9	9	8																			
	Overall view of total data accuracy out of 10			9																									

Comments

ABS Vineyard census is our annual census and is maintained as such by Industry funding.

Winegrape utilisation and price survey is regionally owned but co-ordinated at the National level with the aid of some subsidies from R & D funding

(X = Which data is used for which statistical output and use)

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