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**Greenlife
Industry Australia**

ACIL ALLEN

Nursery Industry Statistics 2020-21 to 2024-25 (NY21000)

2021-22 Production Nursery Data Capture Report

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Contents

	Page
Executive Summary	4
Main report	6
1. Background and methodology	6
2. Definitions and report notes	8
3. Number and value of plants sold	9
3.1 Number and value of plants sold by supply chain	9
3.2 Overall sales by state and value of plants sold by plant category	11
3.3 Sales to 'big box' retailers	13
4. Operating and input costs	14
4.1 Water sources	14
4.2 Water usage and costs	15
5. Turnover per hectare and overall production area	16
6. Industry confidence	18
7. Current business phase and future intentions	20
8. Business investment	22
9. Current and expected future impact of risk factors	24
10. Industry workforce	25
10.1 Number of people employed and roles	25
10.2 Wages paid	26
11. Business Emergency & Biosecurity Plans	27
12. Organisation size (based on survey sample)	28
13. Sample demographics	29
Appendix 1: Confidentiality statement	30
Appendix 2: CATI questionnaire	31

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Data and insights provided in this report are based on information provided by survey respondents and subsequent assumptions made. Readers should note there is a margin for error on all data provided and the report authors cannot guarantee the accuracy of information provided or assumptions made.

Acknowledgements

GIA, DTER and ACIL Allen would like to thank all survey respondents for providing data and information for this study. We appreciate the time and effort taken to provide a considerable amount of data and information.

Executive Summary

Background

The 2021-22 Production Nursery Data Capture Report is the sixth annual statistics survey and second wave under the NY21000 Project umbrella funded by Hort Innovation.

The data collected provides timely and reliable insights and industry trends to inform decision making, resource prioritisation, investment evaluation and strategic planning activities among greenlife businesses and the broader industry.

The results also inform development of a business benchmarking tool produced by ACIL Allen and distributed to survey participants and other levy payers on request.

Methodology

To maximise survey participation and minimise potential biases, the 2021-22 survey implemented the methodology used in prior Projects (NY16004 and NY17008).

In total, 266 completed interviews were received, 173 via Computer Assisted Telephone Interviews (CATI), 51 via email and 42 through an online platform. While it was hoped 300 interviews would be completed, high workload, difficulties accessing labour and a busy period of the year meant participation was challenging for some businesses.

It should be noted however, that 266 interviews results in an acceptable margin for error of $\pm 5.5\%$ nationally (where the total sample responds).

Consistent with past Projects, assumptions detailed fully in section 1 of this report were made to enable extrapolation of the data to represent the entire production nursery industry.

Survey results

Number and value of plants sold

Survey results suggest that the total value of production nursery sales has remained similar over the past 2 financial years.

In total, production nurseries sold an estimated 2.3 billion plants in 2021-22, worth a total value of approximately \$3.6 billion (between \$3.4 and \$3.8 billion when sampling error is accounted for).

Approximately one quarter of these plants were sold to other production businesses (valued at approximately \$0.7 billion), resulting in sales to retail, landscape, direct to public, local government, revegetation and primary industry equating to an estimated 1.7 billion plants sold worth a value of \$2.8 billion (between \$2.7 and \$3 billion when accounting for sampling error).

The retail supply chain continues to represent the largest channel, with sales estimated to have increased 4% year on year, to a value of approximately \$1.5 billion in 2021-22 (representing 42% of the value all production sales).

Consistent with past years, sales to wholesale nurseries (22% of total sales value), landscape, building and development (13%) and primary industry (12%) represent the 3 other largest sales channels.

Estimate of the state share of sales

This year, an average was applied to the share of total production nursery sales by state for the past 5 survey waves. These results suggest that sales by Victorian (36%), NSW (24%) and Queensland (23%) businesses

represent more than 80% of total sales value, with WA (8%), SA (6%), Tas (2%) and NT (1%) representing the remaining one fifth.

Sales to 'big box' retailers

Respondent data suggests that sales to 'big box' retailers continue an upwards trend evident since 2017-18.

Last financial year, these sales were estimated to be valued at approximately \$800 million and represented 53% of sales to the retail channel and 22% of total value of production nursery sales (was 21% in 2020-21).

Businesses with turnover exceeding \$2 million continue to be responsible for the vast majority of the value sold by production nurseries to 'big box' retailers (90%, was 88% in 2020-21).

Production area and turnover per hectare

Applying an average across the past 5 survey results, estimates that Victoria (39%), NSW (26%) and Queensland (22%) wholesale greenlife businesses account for more than 80% of total production area, with the remaining states and territories making up 14%.

Respondent data suggests that production businesses continue to generate a substantial amount of turnover per hectare (approximately \$454,000, slightly, but not statistically significantly down from \$470,000 in 2020-21).

Current and future industry sentiment

Demand for greenlife products continues to result in the vast majority of respondents positive towards the industry's future (84%, was 88% in 2021), however this year, concerns with the potential impact from a global downturn appears to have significantly reduced the proportion that are very positive (30%, down from 48%).

Similarly, there has been a significant 10 point decrease in the proportion of businesses that are currently expanding their enterprise (now 29%) and over the past 12 months, a slight rise in the proportion contracting (11%, up from 5%) or in a steady phase of operation (58%, was 55%).

Over the next 5 years, 4 in 10 businesses nationally anticipate growth, but a similar proportion expect to operate in a steady phase and 9% are planning contraction or exiting the industry (up slightly from 5% in 2021).

Consistent with past result, large businesses are significantly more likely to expect growth than small to medium counterparts, who are increasingly likely to anticipate a steady or contracting phase of operation.

Business investment

Similar to results over the past 3 surveys, approximately 6 in 10 businesses invested in new technology or infrastructure in 2021-22, but this varies significantly from 80% of large businesses to 45% of small.

On par with 2020-21, one third of businesses invested in education and training in 2021-22, but this again varies by business size (46% of large to a much lower 16% of small counterparts).

Employment

Consistent with past years, respondent data suggests the nursery production workforce is between 22,000 and 26,000 people and is equivalent to a FTE of approximately 20,500 (no real change from 2020-21).

On average, business turnover per FTE was on par with 2020-21 (approximately \$175,000), but varies significantly from \$55,000 among small to \$210,000 in large businesses.

Wages paid

Extrapolated survey data suggests that production businesses are contributing a growing amount to the national workforce. This year, wages (including business owners) were estimated to be worth \$1.3 billion (up slightly from \$1.2 billion in 2020-21) at a slightly higher average wage to past years (approximately \$62,500).

Wage costs represent slightly greater than one third of turnover (35%), but varies from 54% in small businesses to 31% in large counterparts.

Water usage and costs

On average, production nurseries access between 1 and 2 water sources, most commonly dams, bores or tanks (74%), mains water (46%) and/or reused water (29%).

In total, 48% of respondents could provide the amount of water used in 2021-22 and on average, 29 megalitres was used, at an average cost of approximately \$22,000 (including maintenance costs).

Business Emergency and Biosecurity Plans

Nationally, less than half of all respondent businesses have a written Biosecurity (46%) and/or Business Emergency Plan (41%). Notably, adoption of each is higher among large and medium businesses than those with turnover less than \$500,000.

Business risk/impacts

Severe weather, labour and biosecurity challenges are each currently impacted more than 6 in 10 production businesses and securing insurance policies 4 in 10.

Of note, labour shortages are impacting 83% of large and 71% of medium sized businesses, compared to a much lower 38% of small counterparts.

Conclusions and recommendations:

- ❖ Demand for greenlife remained strong in 2021-22, resulting in the total value of production nursery sales consistent with 2020-21 and substantially greater than when the survey began capturing this data in 2015-16.
- ❖ As a result, profitability was again widespread in 2021-22, but the dip compared to the previous 2 financial years is notable, suggesting increasing operating costs are impacting some businesses. Similar outcomes are expected this financial year, with most businesses anticipating making an operating profit, but a growing number expect profitability to be lower than the average over the past 5 years.
- ❖ Demand for greenlife products continues to be a key driver of positivity and while confidence in the industry's future remains widespread, there is growing concern that an economic downturn will impact demand and combined with current labour challenges, this may slow industry expansion and investment.
- ❖ However, there remains potential for growth, particularly among large businesses and while many landscape and retail nursery businesses expect to keep status quo with their purchases from wholesale nurseries this financial year, the number expecting to increase plant purchases is significantly greater than those anticipating a reduction.
- ❖ Despite widespread recognition of the challenges associated with biosecurity, there clearly remains scope to encourage ALL production nurseries to implement written Biosecurity Plans.

Main report

1. Background and methodology

Background

The 2021-22 Production Nursery Data Capture Report is the second under the NY21000 Project umbrella and sixth annual nursery statistics survey funded by Hort Innovation.

The survey collects point in time and tracking data to provide timely and accurate information to inform industry and business decision making, resource prioritisation, investment evaluation and strategic planning activities. Additionally, results are used to provide participants and Hort Innovation levy payers with an interactive benchmarking data tool to measure business activities against the survey's results.

The 2022 survey captures outcomes from the 2021-22 financial year, including the following metrics:

- the value of production nursery sales by supply chain and plant category
- the value of sales to 'big box' retailers
- operational and input costs
- water sources, usage and costs
- Business Emergency and Biosecurity Plans
- current and future impact of industry challenges
- current future industry sentiment and operational phase
- employment numbers and wage expenditures
- profitability and investment figures
- indoor and outdoor production area

Data collection methodology

The 2021-22 data collection methodology remains consistent with prior Hort Innovation funded nursery statistics projects and ensures reliability of data comparison year on year is maintained.

While it was hoped 300 interviews would be achieved, consistent with the last survey wave, challenges obtaining staff, combined with high demand for product and workloads meant participation in the survey was challenging for many businesses and 266 completed surveys were received.

Positively however, this number ensures an acceptable margin of error on national results and remains significantly higher than Project prior to NY16004 (36 interviews achieved in 2011).

In 2022, the following stages were undertaken to allow appropriate monitoring of progress and to maximise participation:

Stage 1:

- A random sample of Greenlife producers were contacted by experienced members of the interview team.
- Respondent contact details were confirmed via phone and appointments made to call back and complete the survey.

Stage 2:

- To ensure respondents expressing interest in participating were aware of the data required to be extracted and DTER's management of data and confidentiality, production nurseries were emailed a confidentiality statement (Appendix 1), snapshot of the industry (from 2021 survey results) and full copy of the questionnaire (appendix 2).

Stage 3:

- Computer Assisted Telephone Interviews (CATI) are conducted or if preferred, completed surveys returned via email, post or completed online.

The contact database developed in NY16004 and updated by GIA and DTER past years was fed into the CATI program set up by Market Metrics Data Collection (accredited market research call centre used for the project based in Victoria). All interviewers used for the project have considerable experience working on DTER's projects in the agriculture sector and almost all worked on the previous survey. Prior to commencement, interviewers were thoroughly briefed on all aspects of the project by Daniel Watson, a senior consultant at DTER.

Initial contact, appointment setting and interviewing commenced on the 12th October 2022 and concluded on Friday 9th of December 2022.

Consistent with past surveys, a large proportion of respondents rescheduled appointment times, often on multiple occasions. Additionally, some respondents initially agreeing to provide information refused to do so following receipt of the list of data requirements.

In total, 266 interviews were completed, similar to 2021 (269), but lower than in 2020 (292). The sampling margin for error (at the 95% confidence level), where 50% of respondents concur is $\pm 5.5\%$ on national results.

In total, 173 interviews were completed via telephone, 51 received via email and 42 online.

Key anecdotal reasons for refusing to participate included:

- Excessively busy due to high plant demand
- Challenges accessing labour
- Complexity of information required/data required not captured
- Busy time of year (preference for survey to run in winter months)
- Concerns with recent data breaches (e.g. Medibank)

Data weighting and number of Greenlife businesses

Based on past survey waves and the comprehensive number of calls made, it was possible to make assumptions on the number of businesses in each state and subsequently determine weighting figures that could be applied to the interviews achieved so that statistics provided represent the entire greenlife production industry, not only the sub-set of organisations

participating in the study (these estimates are detailed below).

It is important to note that the extrapolation of data makes the assumption that the sample for the project represents 'the universe' of greenlife production organisations.

	national	nsw/act	vic	qld	sa	wa	tas	nt
Number of greenlife businesses estimated	1,651	519	426	412	101	127	53	13
Number of interviews conducted	266	81	76	68	12	20	7	2

Confidence limits

sample base	margin for error (where 50% of respondents concur)
266	±5.5%
200	±6.5%
100	±9.5%
50	±13.7%
30	±17.7%

Handling of 'empty cells' / missing data

The data set includes a number of 'empty cells' or missing data. Typically, this is due to respondents being unaware of the number of plants sold or being unable to extract data according to requested categories and supply chain options and only provide a total value and/or number of plants sold.

To reliably weight and extrapolate data to represent the entire industry means these 'empty cells' need to be accounted for and the technique (detailed below) utilised in the Hort Innovation Projects NY16004 and NY17008 and the first wave of NY21000 is used again this year. Additionally, extrapolated results are informed through DTER's comprehensive database of de-identified past survey data.

NY16004 identified a considerable range in business sizes and a large variation in business data (for example selling \$1 plants through to \$1,500) therefore it was deemed inappropriate to apply an overall average to each empty cell. Consequently, where respondents were able to provide the number of plants sold or the value of plants

sold, the missing category was applied data based on information available (plant sales value to category, employee numbers, FTE, total turnover etc). For example, an organisation with 20 employees provided the total value of 'perennial, trees & shrubs' and 'bedding and potted colour' sold to retailers and landscapers but could not provide data on the number of plants sold in each category. In this scenario, averages for similar organisations (similar value sold to the category, size of organisation, same clients and products) was used to populate empty cells.

While it is acknowledged that a margin for error exists in the data provided in this report due to sampling, assumptions made and data provided by respondents, the report authors are reasonably confident it provides useful insights into the size of the greenlife production industry as well as attitudinal data. DTER acknowledges this method may be a contributing factor in discrepancies between data collected for this project and historical data collection efforts.

2. Definitions and report notes

Due to very small sample sizes in South Australia, Western Australia, Tasmania, Northern Territory and Australian Capital Territory, as well as the industry's diversity, data is presented nationally and by business size rather than by State and Territory.

While the Australian Bureau of Statistics (ABS) splits Greenlife production businesses into 3 classes (\$200,000 turnover or less; \$200,001 to \$2 million and more than \$2 million), DTER believes a 'micro' business is more appropriately defined as having turnover of \$500,000 or

less. Consequently, business sizes included in this report vary from those presented by ABS in the past.

The majority of data collected for the project is based on the 2021-22 financial year, comparisons made to 2021 data, will be based on the 2020-21 financial year for most variables.

Throughout this report, reference is made to various segments, defined in the table below:

Enterprise phase	Steady, happy	Those whose business is in status due to being at an acceptable stage
	Steady, unable	Those whose business is in status due to being unable to expand
	Expansion	Those whose business is in an expansion phase
	Winding down	Those contracting size of enterprise
business size (turnover)	Small	Turnover less than \$500,000
	Medium	Turnover between \$500,000 and \$2,000,000
	Large	Turnover greater than \$2,000,000
	Don't know (don't know t/o)	Unable to provide turnover value
Perception of industry	Positive	Those feeling very or fairly positive about the future of the nursery industry
	Negative	Those feeling very or fairly negative about the future of the nursery industry
	Neutral	Those feeling neutral or unsure about the future of the nursery industry
*	Small sample size	Sample less than n=30, caution required interpreting data

3. Number and value of plants sold

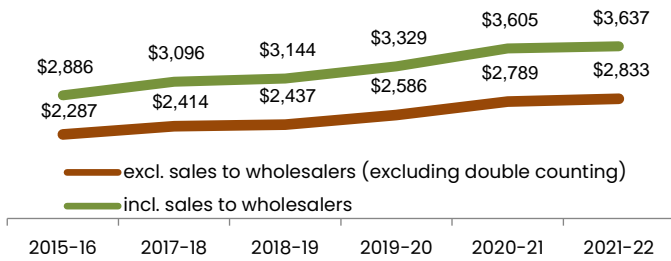
3.1 Number and value of plants sold by supply chain

Questions asked:

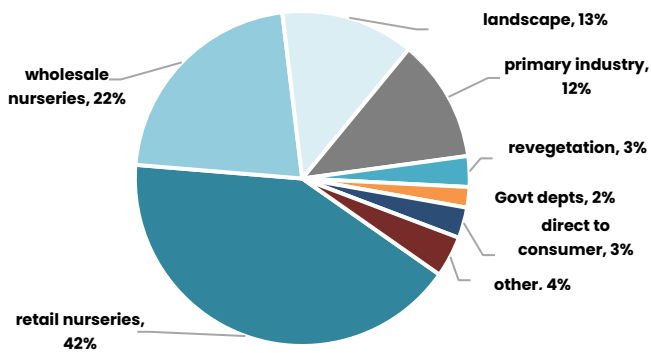
Q7. In the 2021-22 financial year, approximately how many plants did your business sell to ...?

Q8. And what was the total value excluding GST in the plants sold to (from Q7) in 2021-22 ...

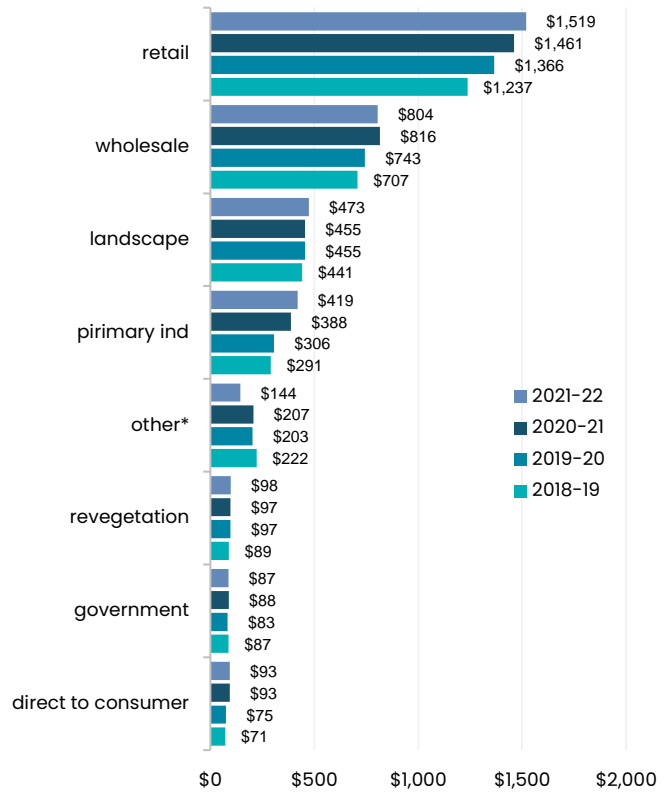
total greenlife sales (\$'000,000) (base: able to answer)



% market share x supply chain



value of plant sales by supply chain (\$'000,000)



Key findings

- Data provided by respondents suggests that overall production nursery sales in the 2021-22 financial year were comparable to the previous financial year.
- It is estimated that approximately 2.3 billion plants were sold at an estimated total value of \$3.6 billion.
- When sales to other production businesses are excluded (ensuring figures are not double counted), industry turnover is estimated to be approximately \$2.8 billion.
- In line with past years, retail (42%, was 41% in 2021-22) and wholesale (22%, was 23%) nurseries represent the largest sales channel, followed by landscape, builders and developers (13%) and primary industry (12%).
- Readers should note 'other' mentions include totals for those people unable to provide breakdowns by category.

Implications

Since 2015-16 production nurseries have seen considerable sales growth and in 2021-22, extrapolated survey data suggests that sales were valued at between \$3.4 and \$3.8 billion or \$2.7 and \$3 billion when sales to wholesalers are excluded to ensure no double counting of plant sales occurs.

supply chain category for plants sold (estimated)**	2021 survey (2020-2021 year)	2022 survey (2021-2022 year)
Production nurseries:		
% selling to sector	61%	59%
Total number of plants	633,562,619	653,470,358
Total value of plants	\$816,150,970	804,012,183
Retail nurseries:		
% selling to sector	64%	68%
Total number of plants	399,313,368	411,815,203
Total value of plants	\$1,461,591,433	1,518,553,285
Revegetation, including forestry:		
% selling to sector	19%	19%
Total number of plants	184,199,072	183,016,039
Total value of plants	\$97,075,197	98,446,271
Local, State and Federal Government Departments:		
% selling to sector	34%	35%
Total number of plants	33,834,926	29,064,683
Total value of plants	\$87,676,964	87,457,445
Landscapers, developers and builders:		
% selling to sector	51%	53%
Total number of plants	98,711,420	94,942,510
Total value of plants	\$455,156,055	472,993,423
Primary industry:		
% selling to sector	22%	22%
Total number of plants	813,616,242	888,306,549
Total value of plants	\$388,121,442	418,584,514
Direct to consumer:		
% selling to sector	32%	34%
Total number of plants	17,243,519	16,512,172
Total value of plants	\$92,866,965	93,172,663
Other (includes those unable to breakdown by category) :⁺		
% selling to sector	8%	8%
Total number of plants	143,207,045	56,651,766
Total value of plants	\$207,000,000	\$143,840,470
Total plants sold (including those sold to wholesalers):		
Total number of plants	2,323,688,210	2,333,779,278
Total value of plants	\$3,605,639,026	\$3,637,060,255
Total plants sold (excluding double counting):		
Total number of plants	1,690,125,591	1,680,308,920
Total value of plants	\$2,789,488,056	\$2,833,048,072

Due to small sample sizes by category, only national data is provided.
NOTE: Data is for the 2021-22 year and not necessarily representative of sales in every year.

⁺Significance testing not conducted, small sample size

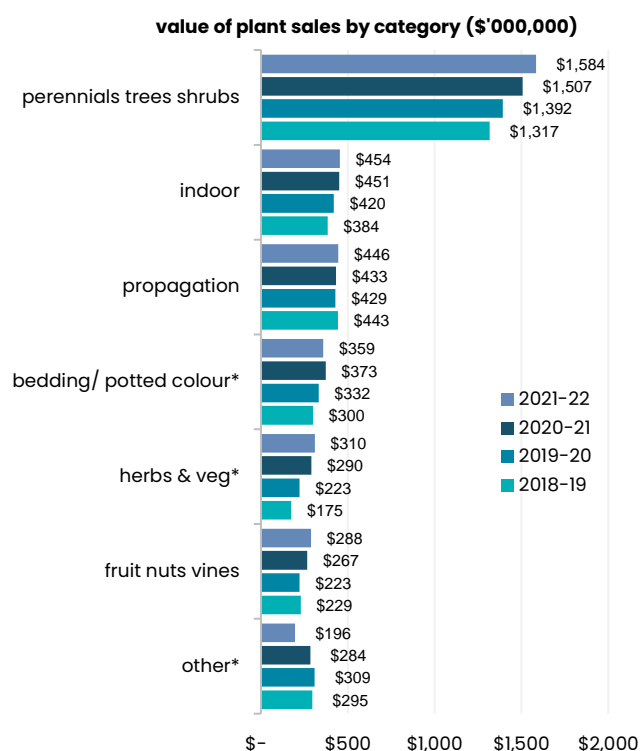
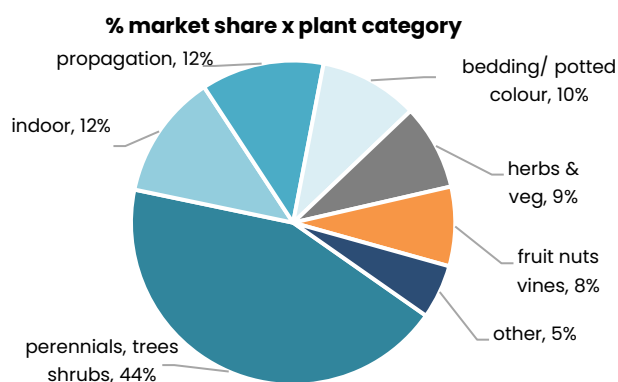
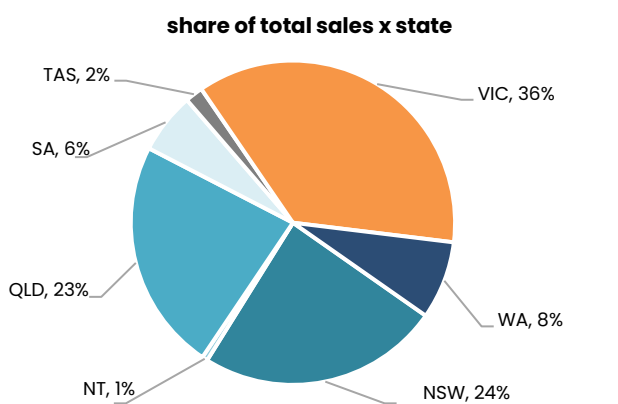
**significance testing not conducted on the number of plants sold due estimated figures provided by some respondents

3.2 Overall sales by state and value of plants sold by plant category

Questions asked:

Q9. During the 2021-22 financial year, approximately how many plants did you sell in the following categories?

Q10. And what was the total value excluding GST of (from Q9) sold?



Key findings

- Using data based on the average across the past 5 surveys, it is estimated that Victorian production businesses represent 36% of total industry sales, New South Wales 24%, Queensland 23%, with the other states and territories making up the remaining 16%.
- Over the past 12 months, there has been no statistically significant variation in the proportion of respondents selling each plant category and the total value of plants sold in each.
- Since 2015-16, sales of most plant categories have trended upwards.
- In total, the top 21% of businesses are responsible for 76% (up from 72% in 2020-21) of production nursery turnover.
- Allocating sales to plant categories and providing an accurate number of plants sold (due to selling trays etc.) continues to be a challenge for many businesses.
- Readers should note 'other' mentions include totals for those people unable to provide breakdowns by category.

Implications

Survey results suggest that Victorian, NSW and Queensland production businesses represent more than 80% of the total value of wholesale greenlife industry sales.

Demand for plants has resulted in sales of most plant categories trending upwards since 2015-16, ornamentals remain the largest category and while more granular categories may be desired, additional burden for respondents is a barrier.

client category for plants sold (estimated)**	2021 survey (2020-2021 year)	2022 survey (2021-2022 year)
Propagation plants:		
% selling propagation plants	32%	29%
Total number of plants	661,074,851	615,174,544
Total value of plants	\$432,547,066	445,746,686
Herbs and vegetables:⁺		
% selling herbs and vegetables	19%	13%
Total number of plants	933,826,608	1,049,437,569
Total value of plants	\$290,407,382	\$309,684,949
Fruit trees, nut trees, vines:		
% selling fruit trees, nut trees, vines	25%	24%
Total number of plants	29,024,440	29,854,809
Total value of plants	\$267,057,744	\$288,332,362.31
Bedding and potted colour:⁺		
% selling bedding, potted colour	19%	15%
Total number of plants	185,624,807	182,244,983
Total value of plants	\$373,130,869	\$358,910,005
Indoor plants:		
% selling indoor plants	27%	24%
Total number of plants	87,869,526	92,248,004
Total value of plants	\$451,327,609	\$454,209,714.92
Perennials, trees and shrubs:		
% selling perennials, trees, shrubs	62%	68%
Total number of plants	326,291,640	335,533,017
Total value of plants	\$1,507,396,442	1,583,955,555
Other (includes those unable to breakdown by category):⁺		
% selling other	12%	6%
Total number of plants	99,976,337	29,286,352
Total value of plants	\$283,771,913	\$196,220,983
Total plants sold (including those sold to wholesalers):		
Total number of plants	\$2,323,688,210	2,333,779,278
Total value of plants	\$3,605,639,026	\$3,637,060,255
Total plants sold (excluding double counting):		
Total number of plants	1,690,125,591	1,680,308,920
Total value of plants	\$2,789,488,056	\$2,833,048,072

Due to small sample sizes by category, only national data is provided.

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NOTE: Data is for the 2021-22 year and not necessarily representative of sales in every year

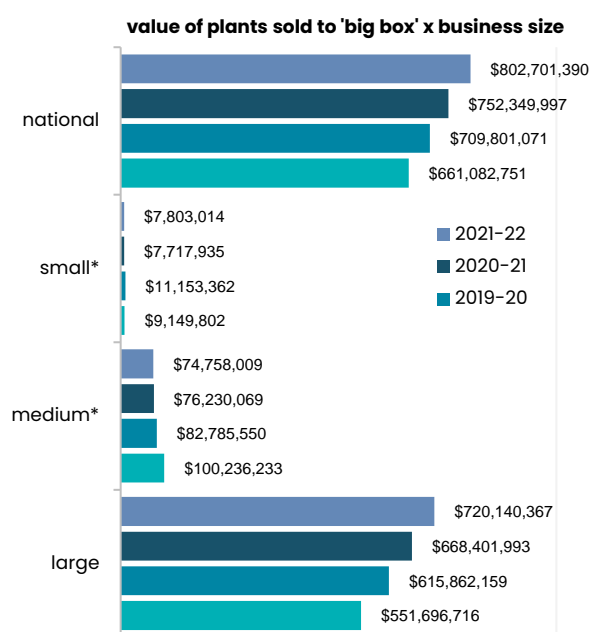
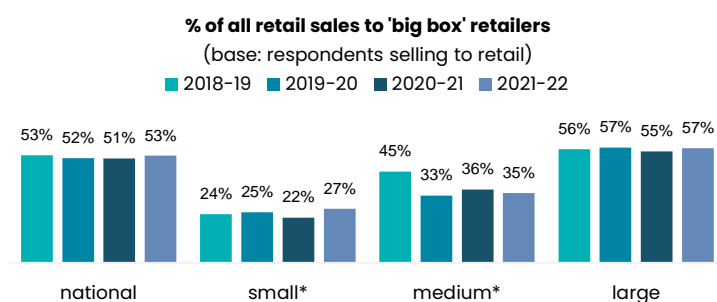
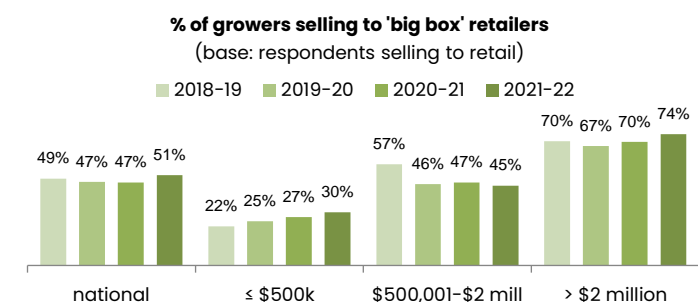
**significance testing not conducted on the number of plants sold due estimated figures provided by some respondents

3.3 Sales to 'big box' retailers

Questions asked:

Q11. In 2021-22, did you sell plants to 'big box' retailers such as Bunnings, Mitre 10, Big W or other large retailers?

Q12. What percentage of your sales to retail nurseries went to these 'big box' retailers?



Key findings

- Among wholesale greenlife businesses selling to the retail channel, approximately half sell to 'big box' retailers (51%, up slightly, but not statistically significantly from 47% in 2020-21).
- Notably, this result varies from 74% of large businesses to 30% of small counterparts.
- Sales to 'big box' customers continue to represent slightly more than half of sales to the retail supply chain (53%, was 51% in 2020-21).
- In total, these sales have continued an upwards trend evident since 2017-18 and were estimated to be valued at approximately \$800 million in 2021-22.
- Consistent with past results, businesses turning over greater than \$2 million continue to represent the bulk of sales to 'big box' retailers (90%, was 88% in 2020-21).

Implications

Survey results suggest that sales to 'big box' retailers continue to trend upwards and now represent 22% of all production nursery sales.

Results from the 2021-22 Supply Chain Survey (findings detailed in a separate Report) indicates that a similar value of Greenlife was purchased through wholesale nurseries by independent retailers bases in VIC, QLD and NSW as that sold by production businesses.

plants sold to 'big box' retailers 2021-22 (estimated)	% mentioning (base: all respondents selling to retail/able to answer) turnover				
	national	≤ \$500k*	\$500,001 to \$2 million*	> \$2 million	don't know t/o*
% selling to 'big box' retailers	51%	30%	47%	74%	-
% of retail sales to 'big box' retailers	53%	27%	35%	57%	-
Total value of plants sold	\$802,701,390	\$7,803,014	\$74,758,009	\$720,140,367	-

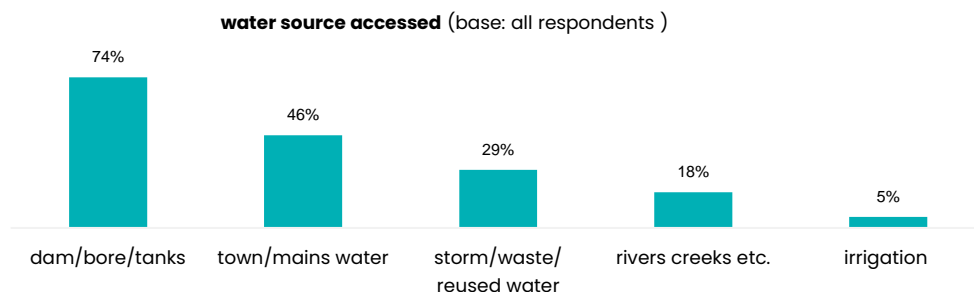
NOTE: Data is for the 2021-22 year and not necessarily representative of sales in every year.

*Caution, sub sample smaller than N=30

4. Operating and input costs

4.1 Water sources

Questions asked: Q16. During 2021-22 financial year, did you source water from any of the following?
Q17. And what was the total amount of water used by your business in 2021-22 ...



Key findings

- On average, production nurseries access between 1 and 2 sources of water (mean 1.7).
- The majority of businesses have access to dams, bores or tanks (74%), but this varies from 8 in 10 large business to two thirds (66%) of small counterparts.
- While, almost half of respondent businesses access mains water (46%), only 12% of businesses rely solely on the source.

Implications

The vast majority of production businesses, including those accessing mains water, have access to dams, reused water or permanent watercourses.

water sources	% mentioning (base: respondents able to provide data)				
	national	≤ \$500k	\$500,001 to \$2 million	> \$2 million	don't know t/o*
Dam/bore/tanks	74%	66%	77%	80%	72%
Town/mains water	46%	42%	45%	51%	40%
Stormwater/wastewater/other reused water	29%	16%	28%	40%	48%
Permanent watercourse rivers creeks etc.	18%	12%	24%	16%	12%
Irrigation channels/pipelines	5%	3%	6%	9%	0%
Other	1%	2%	0%	0%	0%

*Caution, sub sample smaller than N=30

4.2 Water usage and costs

Questions asked: Q17. And what was the total amount of water used by your business in 2021-22 ...
 Q18. What was the total amount spent on water costs? In the 2021-22 financial year?
 Q19. Is that amount more, less or the same as the prior financial year?

Key findings

- Forty eight percent (48%) of respondents were able to provide the amount of water used in 2021-22, varying significantly from 63% among large businesses to 31% of small.
- On average, respondent businesses used 29 megalitres of water in 2021-22, but this varies by business size (5 among small to 50 megalitres among large businesses).
- Average water costs in 2021-22 were approximately \$22,000 nationally, but again varies by business size, from \$43,000 among large businesses to \$6,000 among businesses with turnover less than \$500,000.
- Water costs represented 2% of total operating costs in 2021-22, but varies significantly from 4% among small businesses to 1% among large counterparts.
- Water costs in 2021-22 were greater than the prior financial year for 1 in 5 respondents, but a similar proportion say they were less. Approximately 6 in 10 believe their costs remained comparable to 2020-21.

Implications

On average, wholesale greenlife production businesses used 29ML of water in 2021-22 and spent approximately \$22,000 on water costs (including maintenance costs), representing 2% of their total input costs.

The large proportion of businesses unable to provide the amount of water used may suggest there is an opportunity to encourage all greenlife production businesses to monitor their water usage.

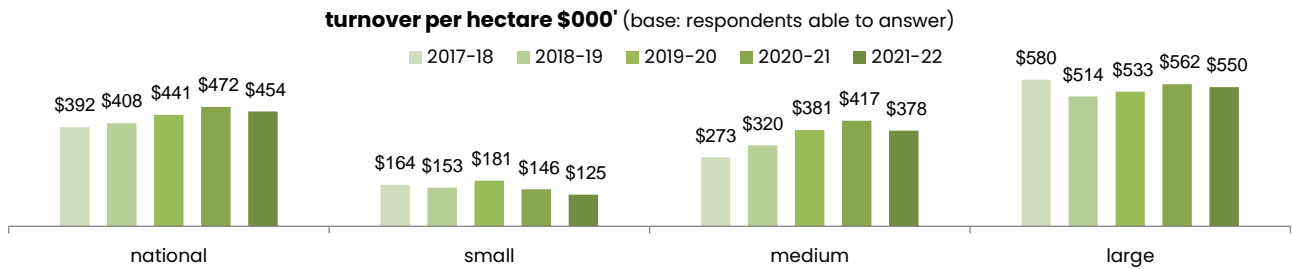
water sources	% mentioning (base: respondents able to provide data)				
	national	≤ \$500k	\$500,001 to \$2 million	> \$2 million	don't know t/o*
Total: able to provide amount of water used in 2021-22	48%	31%	51%	63%	27%
Average amount of water used in 2021-22 (megalitres)	29	5	15	50	83
Average cost spent on water in 2021-22	\$21,949	\$6,094	\$14,756	\$43,412	\$28,298
Average % of total costs spent on water in 2021-22	2%	4%	2%	1%	-
2021-22 water costs greater than in 2020-21	20%	19%	17%	26%	16%
2021-22 water costs same as 2020-21	57%	59%	60%	50%	68%
2021-22 water costs less than in 2020-21	23%	22%	23%	24%	16%

*Caution, sub sample smaller than N=30

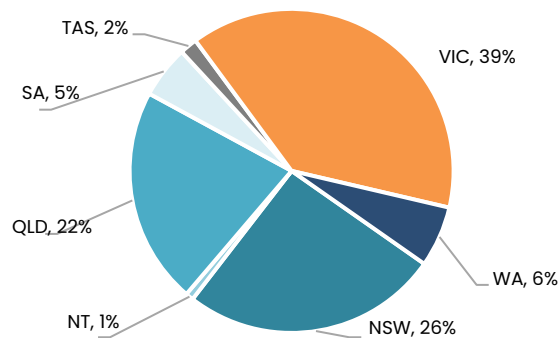
5. Turnover per hectare and overall production area

Question asked:

Q6. What is the total farm area in each State used for nursery production – and I would like you to give me outdoor area first and then undercover including greenhouses, cold frames, cloth houses and lath houses?



share of total production area x state



Key findings

- In total, it is estimated that production nurseries operate across approximately 8,000 hectares (7,998 in 2022, was 7,634 in 2021).
- The majority (84%) of this area is made up of outdoor production area.
- On average, respondent business generate \$454,000 per hectare – no real change from 2020-21, but ends the upwards trend evident since 2017-18.
- When an average is applied to data across the past 5 surveys, it is estimated that Victorian production businesses represent 39% of national production area, NSW 26%, Queensland 22% and the other states and territories make up the remaining 14% of area.

Implications

Survey data suggests that more than 80% of greenlife production nursery area is based in Victoria, NSW and Queensland.

While there has been a slight dip in the turnover generated per hectare, the result remains slightly higher than in financial years prior to 2020-21.

production area (hectares) (estimated)	% mentioning (base: respondents able to provide data)				
	national	turnover			
		≤ \$500k	\$500,001 to \$2 million	> \$2 million	don't know t/o*
Estimated turnover per hectare (outdoor + indoor)	\$454,734	↓ \$125,872	\$378,631	\$550,322	\$454,734
Outdoor area (approximate)					
Average ha per farm	4.1	1.4	↓ 2.3	9.0	3.1
Median ha per farm	1.2	0.6	1.2	4.0	0.2
Estimated total outdoor area (ha)	6,688	↓ 709	1,272	4,545	162
Indoor area (approximate)					
% of farms with indoor area	85%	87%	85%	84%	81%
Average ha per farm with indoor area	0.8	0.4	0.6	1.6	0.6
Median ha per farm with indoor area	0.4	0.1	0.3	1.0	0.0
Estimated total indoor area (ha)	1,310	↑ 200	328	755	27

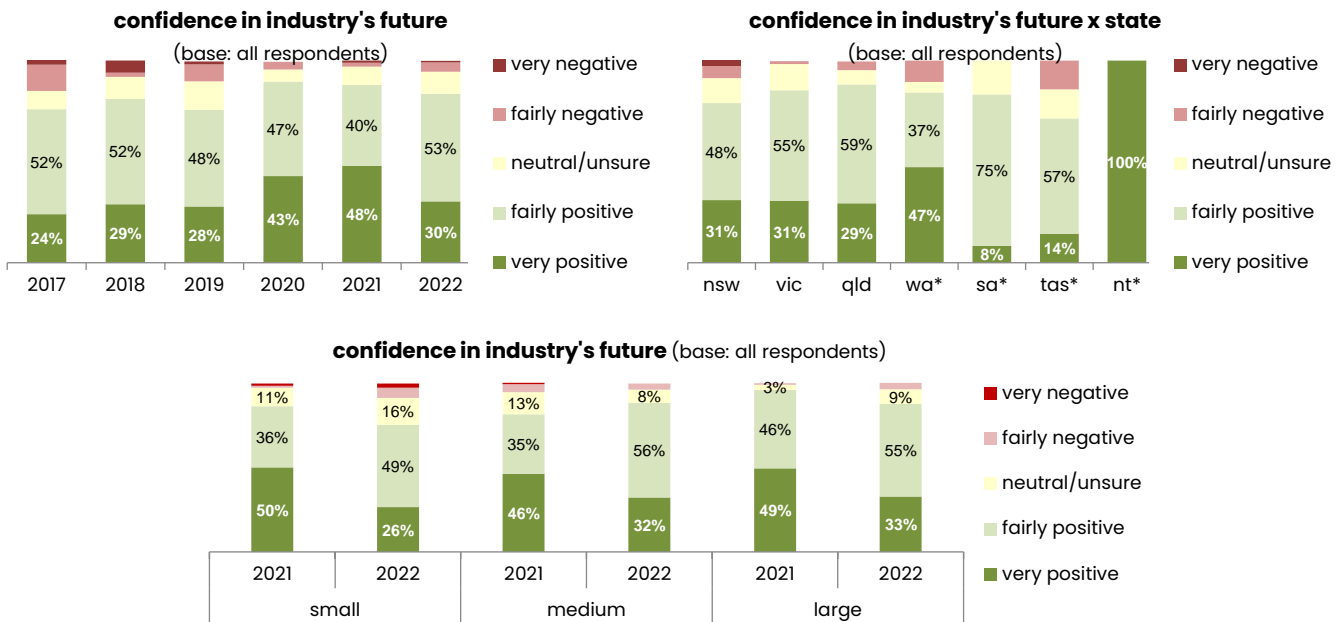
↑ significant increase since 2021; ↓ significant decrease since 2021 *Caution sub sample smaller than N=30

6. Industry confidence

Questions asked:

Q24. Overall, how do you feel about the future of the nursery and garden industry? Would you say you feel (read out)

Q25. Why do you say that?



Key findings

- While the vast majority of respondents remain positive towards the industry's future (84%), it is notable this proportion is now trending downwards (88% in 2021 and 90% in 2020).
- Similarly, compared to 12 months ago, the proportion of respondents *very positive* has decreased significantly (30%, down from 48%) and respondents are now considerably more likely to be *fairly positive* (53%, was 40%).
- However, only 1 in 20 (5%) respondents are negative towards the industry's future.
- Demand for product (56%), including due to environmental aspects (20%) continues to be the main driver of industry positivity, but the former proportion is significantly lower than in 2021.
- Similarly, a significantly greater proportion of respondents this year are concerned with decreased demand for product, mostly due to more widespread concern with the impact of an economic downturn.

Implications

Encouragingly, the vast majority of respondents remain confident in the industry's future, however, concerns with the impact that a global downturn will impact demand for product is impacting sentiment for a greater proportion of growers than in past years.

confidence	% mentioning (base: all respondents)				
	national (n=266)	turnover			don't know t/o* (n=9)
≤ \$500k (n=83)		\$500,001 to \$2 mil (n=94)	> \$2 million (n=80)		
Very positive	↓ 30%	↓ 26%	32%	↓ 33%	25%
Fairly positive	↑ 53%	49%	↑ 56%	55%	52%
Neutral	9%	13%	7%	9%	0%
Fairly negative	5%	6%	3%	4%	12%
Very negative	1%	3%	0%	0%	0%
Can't say	2%	3%	1%	0%	11%
Total: positive	84%	75%	88%	↓ 87%	77%
Total: negative	5%	9%	3%	4%	12%

reasons for level of confidence (main mentions)	% mentioning (base: all respondents)				
	national (n=266)	turnover			don't know t/o* (n=9)
≤ \$500k (n=83)		\$500,001 to \$2 mil (n=94)	> \$2 million (n=80)		
Positive mentions:					
Total: Demand for product	↓ 56%	50%	59%	61%	53%
Product demand (general)	32%	27%	34%	36%	12%
Environmental aspects creating demand - carbon sequestration, urban greening, heat mitigation etc.	20%	20%	21%	16%	41%
Opportunities through selling niche/innovative products	14%	21%	11%	10%	12%
Optimistic outlook/enjoyment of being in the industry	8%	9%	8%	8%	0%
Negative mentions:					
Total: Decreased demand for product	↑ 13%	9%	15%	↑ 16%	0%
Economic downturn impact on sales	↑ 10%	5%	12%	↑ 15%	0%
Effect of climate on demand	3%	4%	2%	4%	0%
Young people not entering industry	4%	5%	3%	6%	0%
Input cost concerns	3%	0%	4%	4%	0%

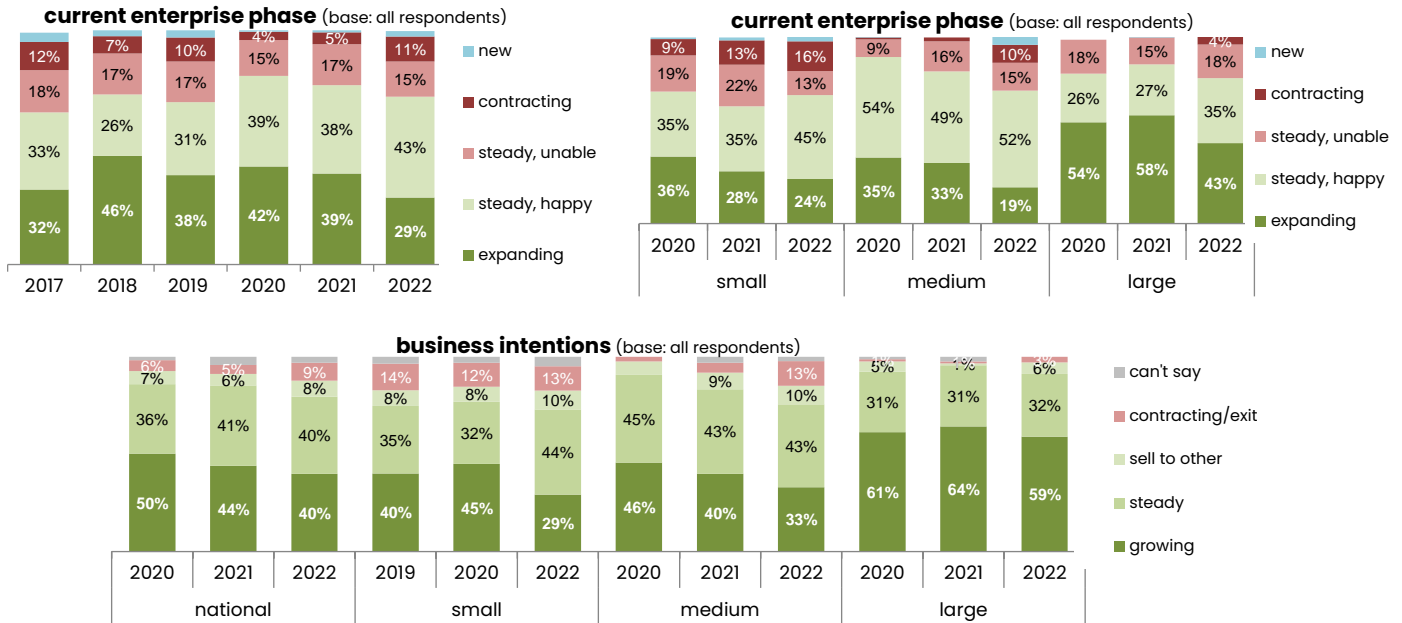
↑ significant increase since 2021; ↓ significant decrease since 2021 *Caution sub sample smaller than N=30.

7. Current business phase and future intentions

Questions asked:

Q22. Which of the following best describes your nursery business over the past few years?

Q23. At this point in time, what is the intention for the business over the next 5 years?



Key findings

- Over the past 2 years, the proportion of production businesses expanding has trended downwards, resulting in less than 1 in 3 currently in expansion. Notably, this is the lowest result since the survey first captured the metric in 2015-16.
- Similarly, the proportion of businesses operating in a steady (58%, was 55% in 2021) or contracting phase (11%, up from 5%) has trended upwards over the past 2 years.
- While compared to 12 months ago, a slightly lower proportion of large businesses are expanding (43%), expansion remains significantly more widespread than among small (24%) and medium (33%) production businesses.
- The proportion of businesses planning expansion over the next 5 years is also trending downwards. However, an arguably large proportion (40%) continue to expect growth, including approximately 6 in 10 large businesses.
- Compared to 2021, a slightly higher proportion of businesses expected to contract or wind down and exit over the next 5 years (9%, up from 5%)

Implications

Over the past 2 years, a growing number of businesses have realised their short term growth potential and are now operating in a steady or contracting phase.

However, a substantial proportion of businesses, particularly those with turnover exceeding \$2 million anticipate further growth over the next 5 years.

current business stage	% mentioning (base: all respondents)				
	national (n=266)	turnover			don't know t/o* (n=9)
≤ \$500k (n=83)		\$500,001 to \$2 mil (n=94)	> \$2 million (n=80)		
Expanding	↓ 29%	24%	↓ 19%	43%	36%
Steady, where want it to be	43%	45%	52%	35%	12%
Steady, unable to expand	15%	13%	15%	18%	16%
Contracting/winding down	↑ 11%	16%	↑ 10%	4%	36%
New business	2%	2%	4%	0%	0%

future intentions for business	% mentioning (base: all respondents)				
	national (n=266)	turnover			don't know t/o* (n=9)
≤ \$500k (n=83)		\$500,001 to \$2 mil (n=94)	> \$2 million (n=80)		
Growing business	40%	29%	33%	59%	36%
Remaining steady	40%	44%	43%	32%	41%
Contracting/winding down	5%	5%	9%	2%	0%
Sell as business to other person/company	8%	10%	10%	6%	0%
Sell land to developer	0%	1%	0%	0%	0%
Close business	4%	7%	3%	1%	0%
Can't say	3%	5%	2%	0%	23%

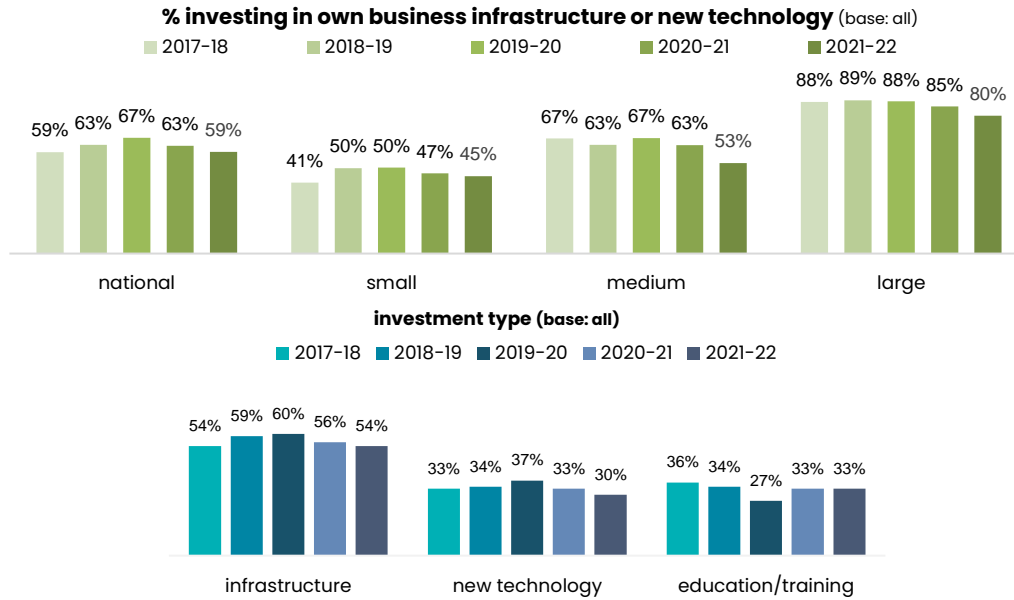
↑ significant increase since 2020-21; ↓ significant decrease since 2020-21

*Caution sub sample smaller than N=30.

8. Business investment

Question asked: Q29. During the 2021-22 financial year, did you invest in either infrastructure or new technology or training and education for the business?

Q30. If yes: Approximately how much did you invest in infrastructure? Q31. If yes: Approximately how much did you invest in new technology?





Key findings

- Over the past 12 months, there has been a slight (not statistically significant) dip in the proportion of businesses investing in either new infrastructure or technology (59% in 2021-22, was 63% in 2020-21).
- Consistent with past results, investment is significantly more widespread among large and medium businesses than small counterparts.
- In 2021-22, 8 in 10 large businesses invested in new technology or infrastructure, but this proportion has trended downwards since 2019-20.
- On par with 2020-21, one third (33%) of all businesses invested in education and training.

Implications

While investment in new infrastructure and/or technology remains widespread among large businesses, nationally, this proportion is trending downwards and appears consistent with the reduced proportion of businesses expanding.

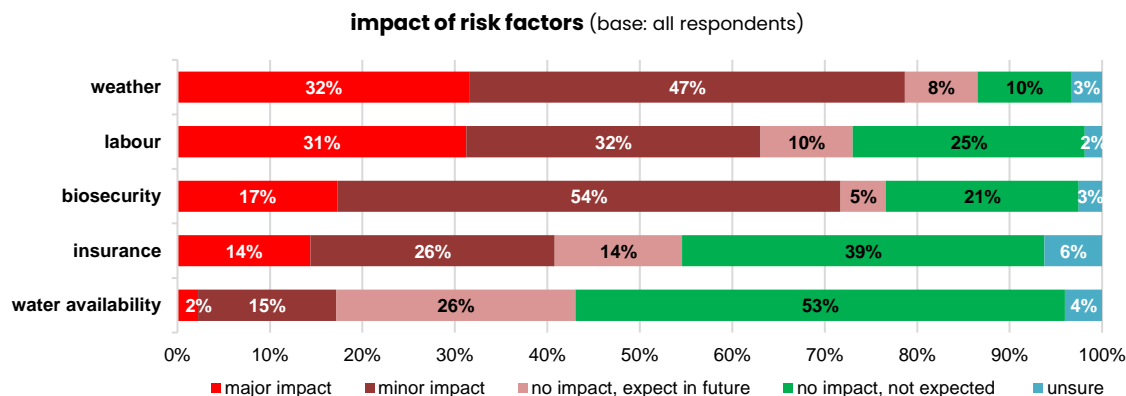
business investment	% mentioning (base: all respondents able to answer) turnover				
	national	≤ \$500k *	\$500,001-\$2 mil *	> \$2 million	don't know t/o*
% making business investment in infrastructure or new technology	59%	45%	53%	80%	64%
% investing in infrastructure	54%	43%	48%	73%	40%
Average amount invested in infrastructure (base: those investing)	\$181,188	↓ \$43,920	↓ \$73,566	\$346,657	\$106,189
Total invested in infrastructure (extrapolated)	\$147,352,201	↓ \$8,707,212	↓ \$18,752,275	\$117,712,194	\$2,180,520
% investing in new technology	30%	12%	23%	54%	41%
Average amount invested in new technology	\$78,840	↓ \$17,405	\$41,743	\$116,995	\$6,391
Total invested in new technology (extrapolated)	\$34,430,146	↓ \$1,059,444	\$4,583,743	\$28,651,917	\$135,042
% investing in education and training	33%	16%	37%	46%	29%

 significant increase since 2020-21;
  significant decrease since 2020-21
 *Caution sub sample smaller than N=30.

9. Current and expected future impact of risk factors

Question asked: Q20.

For the issues listed below, how much impact are they currently having on your business?



Key findings

- Currently, severe weather, labour and biosecurity are each impacting more than 6 in 10 businesses and securing insurance policies 4 in 10.
- Severe weather (32%) and labour shortages (31%) are the most commonly mentioned issues currently having a *major* impact on production businesses.
- As expected, the impact from labour shortages is considerably more widespread among large (83%) and medium (71%) businesses (83%) than small counterparts (38%).

Implications

An arguably large proportion of businesses are being impacted by weather, labour, biosecurity and insurance issues and where possible, indicate areas of opportunity for broader industry to support production businesses.

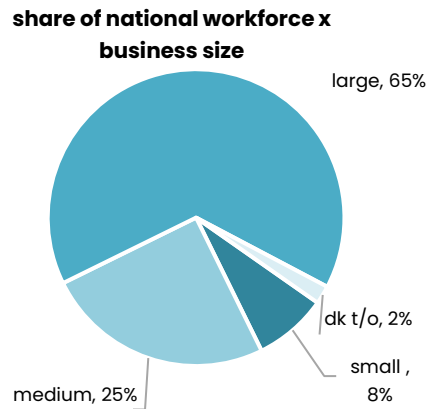
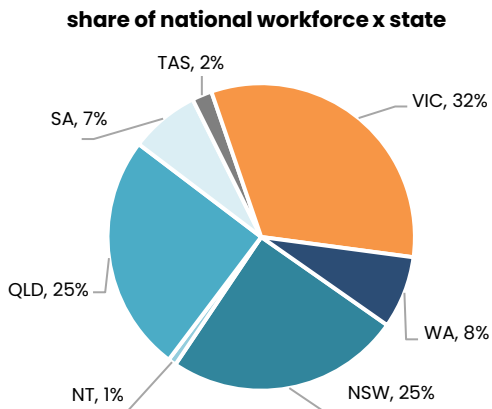
risk factor	current and future impact (% mentioning - base: all respondents; n = 266)				
	major impact	minor impact	no impact, but expect in future	no impact, not expect in future	unsure/can't say
Severe weather - such as storms, hail, wind, rain & flood	32%	47%	8%	10%	3%
Labour shortages	31%	32%	10%	25%	2%
Biosecurity - controlling/ preventing pests & diseases	17%	54%	5%	21%	3%
Insurance - securing policies, exclusion of events and cost	14%	26%	14%	39%	6%
Water availability	2%	15%	26%	53%	4%

*Caution sub sample smaller than N=30.

10. Industry workforce

10.1 Number of people employed and roles

Questions asked: Q3. How many people including yourself are employed in the business in each of the States it operates in? Q4. And what would be the full time equivalent for each of the following in the States you operate in?



Key findings

- Survey results suggest that there has been no significant variation workforce numbers since 2019.
- When the survey’s margin for error is considered, it is estimated there are between 22,500 and 25,500 people working in production nurseries (including owners).
- In total, this represents an estimated full time equivalent (FTE) of approximately 20,500 – no real change from 2021.
- On average, turnover per FTE is consistent with 2021 (approximately \$175,000), but this varies significantly by farm size (\$210,000 among large to \$55,000 among small businesses).
- Applying an average to data from the past 5 surveys, suggests that Victorian production businesses represent 32% of the total workforce, NSW and Queensland each 25% and the other states and territories make up the remaining 18%.

Implications

Nationally, the production nursery workforce is estimated at between 22,000 and 26,000 people, with approximately 80% of based in Victoria, NSW and Queensland.

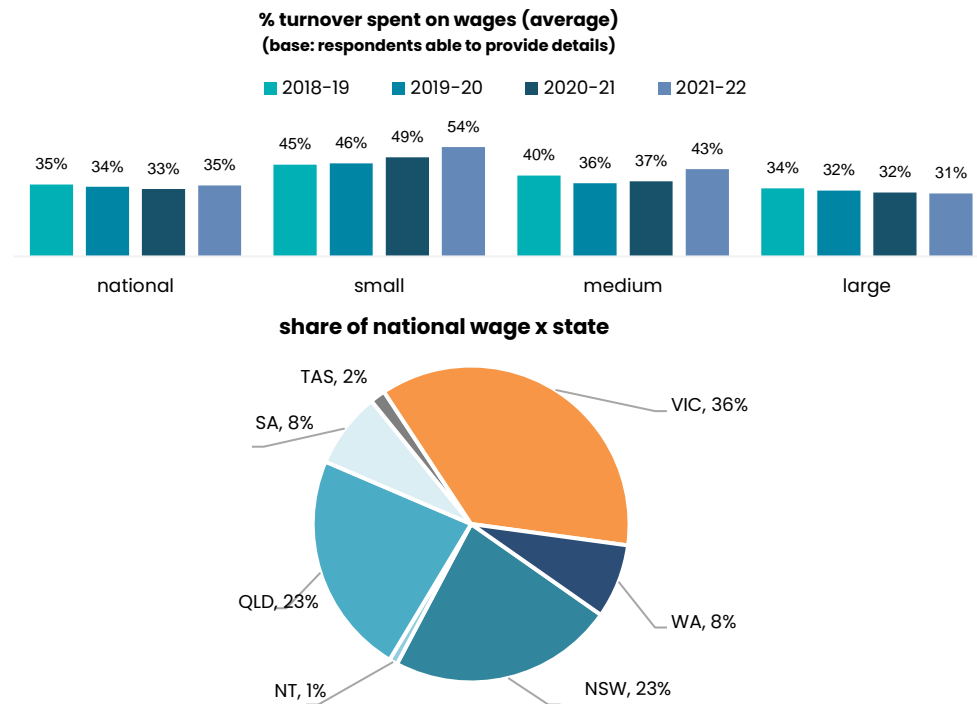
total people employed by production greenlife nurseries (estimated)	% mentioning (base: all respondents able to answer)				
	national	turnover			don't know t/o*
		≤ \$500k	\$500,001 to \$2 mil	> \$2 million	
Total people employed	24,137	↓ 1,991	5,927	15,625	593
Full time equivalent	20,388	2,158	3,986	13,896	347
Turnover per FTE	\$178,396	↓ \$53,015	\$152,020	\$209,897	-

⬆️ significant increase since 2021; ⬇️ significant decrease since 2021 *Caution, sub sample smaller than N=30

10.2 Wages paid

Question asked:

Q5. What was the total cost of wages for the business in the 2021-22 financial year, including your own?



Key findings

- An estimated almost 1.3 billion dollars in wages (including business owners) was paid in 2021-22, up slightly from 1.2 billion in the prior financial year.
- Wage costs continue to represent approximately one third (35%) of turnover, but consistent with previous years, varies from 54% among small businesses to 31% among those with turnover exceeding \$2 million.
- There is some suggestion this year that there has been a slight (not statistically significant) increase in the average wage (approximately \$62,000, up from \$59,000), but this may be due to the survey's margin for error and diversity among businesses participating year on year.
- Using the average based on data from the past 5 surveys, it is estimated that Victorian production businesses represent 36% of total wages paid, NSW and Queensland each 23% and the other states and territories make up the remaining 18%.
- It should be noted the figures represented in this section include wages paid to business owners and variation in profitability is likely to result in the fluctuation seen in businesses turning over less than \$2 million.

Implications

Production nursery businesses are estimated to contribute nearly \$1.3 billion to the national workforce, representing approximately one third of the industry's turnover.

cost of wages in 2021-22 (estimated)	% mentioning (base: all respondents able to answer) turnover				
	national	≤ \$500k	\$500,001-\$2 mill	> \$2 million	don't know t/o*
Approximate total cost of wages	\$1,276,459,344	\$61,970,861	\$261,735,940	\$918,191,351	\$34,561,191
Average wage based on FTE (including owners)	\$62,610	↓ \$28,711	↑ \$65,671	\$66,076	\$99,460
% of turnover spent on wages (average, including owners)	35%	54%	43%	31%	-

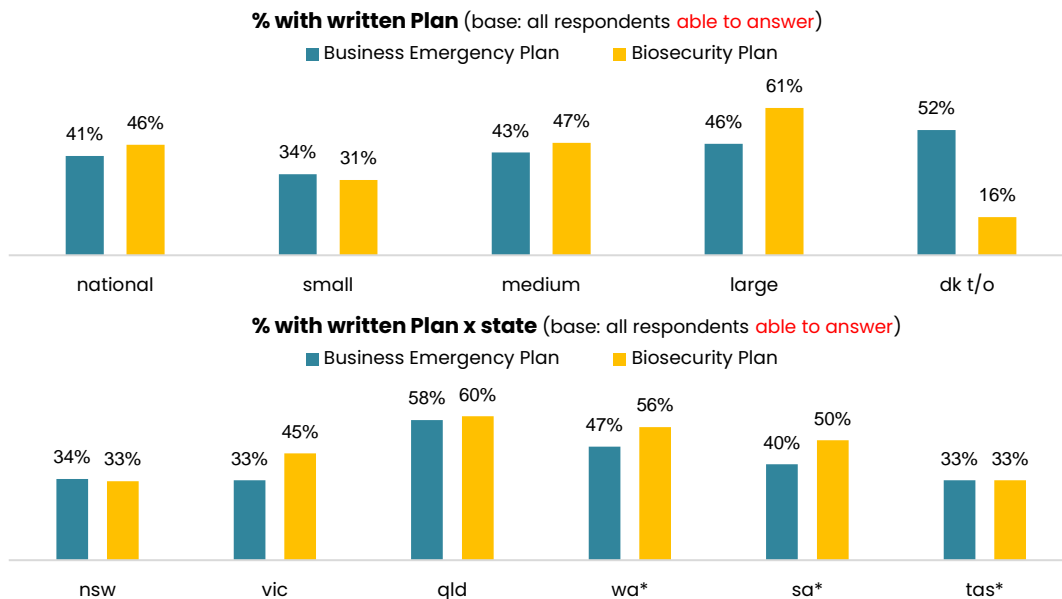
↑ significant increase since 2020-21; ↓ significant decrease since 2020-21

*Caution, sub sample smaller than N=30.

11. Business Emergency & Biosecurity Plans

Question asked:

Q21. Do you have any of the following plans in writing> (Business Emergency Plan/Biosecurity Plan)?



Key findings

- Less than half of all respondents have a written Biosecurity (46%) Plan to assess and manage pest, disease and weed risks.
- This however, varies from 61% of large businesses to 31% with turnover less than \$500,000.
- Written Business Emergency Plans have been completed by approximately 4 in 10 (41%) production businesses.
- While adoption is higher among large and medium business than small, less than half of each segment have a written Plan.

Implications

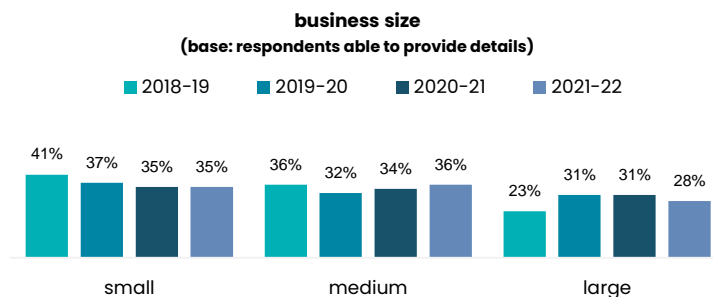
Despite widespread recognition of current biosecurity and weather threats (detailed in section 10), nationally, uptake of documented Plans to manage these threats appears modest.

management plan	National (n=266)	% mentioning (base: all respondents able to answer) turnover			
		≤ \$500k (n=83)	\$500,001 to \$2 mil (n=94)	> \$2 million (n=80)	don't know t/o* (n=9)
Business Emergency Plan	41%	34%	43%	46%	52%
Biosecurity Plan	46%	31%	47%	61%	16%

📈 significant increase since 2020-21; 📉 significant decrease since 2020-21

*Caution sub sample smaller than N=30.

12. Organisation size (based on survey sample)



Key findings



- Consistent with past survey waves, the survey sample provides a spread of businesses sizes.
- However, in 2021-22, a greater proportion of businesses with turnover exceeding \$10 million participated than in the previous survey wave.



Implications

Positively, the survey continues to receive participation across a spread of different business sizes. This year, data weighting accounts for the increase in xx-large businesses participating.

business turnover	% mentioning (base: respondents able to provide data)	
	2021 survey (2020-2021 year)	2022 survey (2020-2021 year)
Less than \$500,000	35%	35%
\$500,001 to \$1,000,000	16%	18%
\$1,000,001 to \$1,500,000	10%	13%
\$1,500,001 to \$2,000,000	8%	6%
\$2,000,001 to \$2,500,000	7%	4%
\$2,500,001 to \$3,000,000	4%	5%
\$3,000,001 to \$3,500,000	3%	2%
\$3,500,001 to \$4,000,000	2%	2%
\$4,000,001 to \$4,500,000	1%	2%
\$4,500,001 to \$5,000,000	1%	2%
\$5,000,000 to \$10,000,000	8%	4%
\$10 million+	4%	6%

13. Sample demographics

demographic metric	% of sample (base: all respondents)				
	national (n=266)	≤ \$500k (n=83)	\$500,001 to \$2 mil (n=94)	> \$2 million (n=80)	don't know t/o* (n=9)
Age:					
18 to 39 years	8%	5%	7%	13%	0%
40 to 59 years	52%	47%	56%	49%	84%
60 and older	40%	49%	37%	38%	16%
Average age	56	58	55	54	51
Average years business operated	34	26	30	46	29
Gender:					
Male	 74%	68%	76%	81%	47%
Female	 26%	32%	24%	19%	53%
Respondent role:					
Owner or joint owner of the business	75%	77%	83%	64%	64%
Manager	23%	22%	15%	33%	24%
Admin/Accounts	2%	0%	2%	2%	0%

 significant increase since 2021;  significant decrease since 2021 *Caution, sub sample smaller than N=30.

Appendix 1: Confidentiality statement

10 October 2022

Nursery and Garden Industry Data & Statistics Collection

Confidentiality Statement

Thank you for your interest in providing data for the Hort Innovation project NY21000 – Nursery Industry Research and Statistics.

This project is a strategic levy investment that is part of the Hort Innovation Nursery Fund and follows the prior 3 survey waves that captured figures and trends on the value of greenlife production and will collect information for the 2021-22 financial year. The aim of this project is to deliver accurate and timely industry statistics to support strategy development, decision making, advocacy and investment decisions.

Data for the project will be collected and stored securely by Market Metrics Data Collection, an independent, fully accredited data collection company based in Frankston, Victoria. Their web address is <http://www.marketmetrics.com.au> should you wish to read about their services. Data and information collected will only be used for the purposes of this specific project.

In accordance with Australia's strict Privacy Principles, full confidentiality is assured and once information processing has been completed, any identifying data such as your name, company and contact details (including address and postcode) will be removed from your responses to the survey. While interviewing is taking place, data held by Market Metrics will remain identifiable in case there is an anomaly in the data that requires a call back and clarification. Once Market Metrics has completed this process, de-identification will occur.

On completion of all interviewing, Down To Earth Research (DTER) and Acil Allen will be provided with a de-identified data set so data can be aggregated and analysed. DTER will then provide an overall industry report to Hort Innovation. No one from the nursery and garden industry, Hort Innovation, industry organisations and associations, government departments, etc. will know who participated in the study nor the information and data they provided. DTER's privacy principles can be found at <https://www.dter.com.au/privacy-statement>.

Should you have any concerns whatsoever, please contact Daniel Watson from DTER (daniel@dter.com.au or 0409 775 553) or Lucy Noble from Hort Innovation (Lucy.Noble@horticulture.com.au or 02 8295 2313).

Thank you again for your assistance. The data collected for the study will assist Hort Innovation and Greenlife Industry Australia to have more meaningful discussions with government organisations in the future. Additionally, survey data is used to provide a tool that your company will be able to use for benchmarking purposes and to better understand the size and nature of the industry.

Kind regards



Dan Watson
Research Director
Down To Earth Research

Appendix 2: CATI questionnaire

Q1. Firstly, I need to clarify how many sites your nursery business operates from _____ sites

Q2. What states and territories are the sites located in?

If only 1 site OR more than 1 site, but in the same state, ask:

Q3. How many people including yourself are employed in the business in each of the States it operates in?

Q4. And what would be the full time equivalent (so 38 hours per week, including business owners) for each of the following in the States you operate in?

Q5. (By state if operate in more than one state), what was the total cost of wages (inclusive of superannuation) for the business in the 2021-22 year, including your own?

If only 1 site OR more than 1 site, but in the same state, ask:

Q6. What is the total area of the farm used for nursery production – and I would like you to give me outdoor area first and then undercover including greenhouses, cold frames, cloth houses and lath houses?

If more than 1 site in different states, ask:

Q7. What is the total farm area in each State used for nursery production – and I would like you to give me outdoor area first and then undercover including greenhouses, cold frames, cloth houses and lath houses?

Q7. Would you be able to provide accurate information on the total number or value of plants your business sold in the 2021-22 financial year or would you have to give me an estimate?

Q8. And what was the total value (including resale) excluding GST in the plants sold to (from Q7) in 2021-22 ...

	NSW	VIC	QLD	SA	WA	TAS	NT	ACT
Whole sale nurseries:								
Number of plants								
Value								
Retail nurseries:								
Number of plants								
Value								
Revegetation, including forestry:								
Number of plants								
Value								
Local, State & Federal government departments including water corporations, RTA, schools, etc:								
Number of plants								
Value								
Landscapers, developers and builders:								
Number of plants								
Value								
Primary industry:								
Number of plants								
Value								
Direct to consumers/public:								
Number of plants								
Value								
Other (specify): <i>DP note: allow for more than 1 other</i>								
Number of plants								
Value								
Only able to provide total sold/total value:								
Number of plants								
Value								
TOTAL (computer calculate and confirm with respondent):								
Number of plants								
Value								

- Q9. During the 2021-22 financial year, how many plants did you sell in the following categories (including resale)?
 Q10. And what was the total value of (from Q) plants sold (including resale)? If you don't know exactly, please give us your best estimate.

	NSW	VIC	QLD	SA	WA	TAS	NT	ACT
Propagation plants (eg, plugs, tubestock, cuttings, tissue culture):								
Number of plants								
Value								
Herbs and vegetables (excluding seeds and bulbs):								
Number of plants								
Value								
Fruit trees, nut trees and vines (excluding seeds and bulbs):								
Number of plants								
Value								
Bedding and potted colour (eg. annuals):								
Number of plants								
Value								
Indoor plants (excluding seeds, bulbs):								
Number of plants								
Value								
Perennials, trees and shrubs:								
Number of plants								
Value								
Other (including seeds, bulbs, water plants, shot seed, etc)								
Number of plants								
Value								
TOTAL (computer calculate and confirm with respondent):								
Number of plants								
Value								

- Q11. In 2021-22 did you sell plants to 'big box' retailers such as Bunnings, Mitre 10, Big W or other large retailers?
- Q12. In total, what percentage of your sales to retail nurseries went to these 'big box' retailers?
- Q13. Do you know what your business's total operating costs or expenses were for the 2021-22 financial year, so this includes input costs, wages, cost of goods sold, transport costs/freight, rent etc?
- Q14. And what were your total operating costs or expenses (including input costs, wages, cost of goods sold, transport costs, rent) (or estimated total operating costs if Q22 = 2) for the 2021-22 year?
- Q15. Approximately what proportion of your business turnover was taken up by operating costs or expenses for the 2021-22 financial year?
- Q16. During 2021-2022 financial year, did you source water from any of the following (yes/no/unsure grid):
- Town/mains water ----- 1
 - Irrigation channels/pipelines ----- 2
 - Dam/bore/tanks ----- 3
 - Stormwater/wastewater/other reused water ----- 4
 - Permanent watercourse rivers creeks etc.----- 5
 - Other (please specify) ----- 6
 - Unsure ----- 7
- Q17. What was the total volume of water used by your business in 2021-22 (DP note: allow KL and ML). _____ML/KL
- Q18. What was the total amount spent on water costs (including town water, maintenance costs etc. but excluding irrigation equipment/capital investments) in the 2021-22 financial year? \$ _____
- Q19. Is that amount more, less or the same as the prior financial year (2020-21)?
- Q20. For the issues listed below, how much impact are they currently having on your business?

		No impact and not expected to be in future	No impact, but expected to impact in future	Having a minor impact	Having a major impact	Unsure/ can't say
Q20a	Biosecurity – controlling/ preventing pests & diseases	1	2	3	4	5
Q20b	Severe weather - such as storms, hail, wind, rain & flood	1	2	3	4	5
Q20c	Water availability	1	2	3	4	5
Q20d	Labour shortages	1	2	3	4	5
Q20e	Insurance - securing policies, exclusion of events and cost	1	2	3	4	5

Q21. Do you have any of the following plans in writing:

		Yes	No	Unsure
Q21a	A Business Emergency Plan detailing how your business would respond to internal/external emergencies such as extreme weather, fire, chemicals etc.	1	2	3
Q21b	A Biosecurity Plan assessing pest, disease, weed risks and management	1	2	3

- Q22. Which of the following best describes your nursery business currently. Is it ...
- In an expansion phase ----- 1
 - In a steady phase because it was difficult to expand ----- 2
 - In a steady phase because it is where it needed to be ----- 3
 - In a contracting or winding down phase ----- 4
 - A new business just starting up ----- 5
- Q23. At this point in time, what is the intention for the business over the next 5 years? Is the intention ...
- To grow the business ----- 1
 - Keep the business in a steady phase ----- 2
 - Contract or wind down the business ----- 3
 - Sell it as a business to another person or company ----- 4
 - Sell the land to a developer ----- 5
 - Wind down and close ----- 6
 - Do not read out/avoid* Can't say ----- 7
- Q24. Overall, how do you feel about the future of the nursery and garden industry? Would you say you feel ... (*read out*)
- Very positive ----- 1
 - Fairly positive ----- 2
 - Fairly negative ----- 3
 - Very negative ----- 4
 - Do not read* Neutral ----- 5
 - Do not read* Unsure ----- 6
- Q25. Why do you say that? *Probe fully*
- Q26. In the 2021-22 financial year, did your nursery business make an operating profit?
- Yes ----- 1
 - No ----- 2
 - Don't know ----- 3
 - Refused ----- 4
- Q27. And do you expect to make an operating profit in the 2022-23 financial year?
- Yes ----- 1
 - No ----- 2
 - Don't know ----- 3
 - Refused ----- 4
- Q28. Compared to the average of the past 5 years, do you expect profit levels for the 2022-23 financial year to be ... *read out*
- Considerably higher ----- 1
 - Slightly higher ----- 2
 - About the same ----- 3
 - Slightly lower ----- 4
 - Considerably lower ----- 5
 - Avoid* Don't know yet ----- 6
- Q29. During the 2021-22 financial year did you invest in either infrastructure, new technology or training and education for the business?
- Yes, new infrastructure ----- 1
 - Yes, new technology ----- 2
 - Yes, training and education ----- 3
 - No ----- 4
- Q30. Approximately how much did you invest in new infrastructure during 2021-22?
- Q31. Approximately how much did you invest in new technology for the business during 2021-22?
- Q32. May I ask your age please?
- Q33. And how many years has your nursery business operated for?
- Q34. Are you the ...
- Owner or joint owner of the business ----- 1
 - Manager ----- 2
 - Other role (specify) ----- 3
- Q35. Record gender