down to earth research

ABN: 72 593 148 838 Tel: 1300 517 050 Mobile: 0409 775 553 (Dan) Web: dter.com.au Email admin@dter.com.au



Grains Research & Development Corporation Grower Survey June 2022

Public report Project code: DTE2203-003SAX

> Key contact: Jessie Maclean, GRDC

Report Author: Daniel Watson



Contents

Exe	cutive	e summary	3
Sur	vey sı	napshot infographics	4
Mai	n repo	ort	6
1.	Back	ground, objectives and methodology	6
2.		nitions and report notes	7
3.		ower profile	8
	3.1	Crop area and tonnages harvested	8
	3.2	Grower mood towards industry	10
	3.3	Use of fee for service agronomic advice	12
4.	Grai	ns RD&E	14
	4.1	Perceived to have benefitted from grains industry RD&E	14
	4.2	Perceived impact of RD&E activities (new in 2022)	
5.	Farr	n practices	17
	5.1	Implemented practice change over past 3 years and associated stimu	ılus 17
	5.2	Health and safety risks and prevention	19
	5.3	Confidence in the ability of the grains research industry to respond qu	uickly
		to threats (new in 2022)	21
6.	GRD	OC information products and services	23
	6.1	Summary of information product and service channels accessed	23
7.	Qua	ntitative sample demographics (based on unweighted data)	24
	7.1	Gender	24
	7.2	Age	24
	7.3	Years in industry	

REPORT SENSITIVITY:

Does the report have any of the following sensitivities? Intended for journal publication NO

inconaca for journal publication		
Results are incomplete	NO	
Commercial/IP concerns	NO	
Embargo date	NO	

Disclaimer:

Any recommendations, suggestions or opinions contained in this publication do not necessarily represent the policy or views of the Grains Research and Development Corporation (GRDC). No person should act on the basis of the contents of this publication without first obtaining specific, independent professional advice.

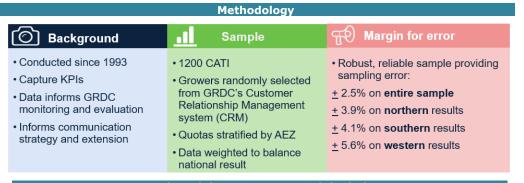
The Grains Research and Development Corporation may identify products by proprietary or trade names to help readers identify particular types of products. We do not endorse or recommend the products of any manufacturer referred to. Other products may perform as well as or better than those specifically referred to. The GRDC will not be liable for any loss, damage, cost or expense incurred or arising by reason of any person using or relying on the information in this publication.

Down To Earth Research and the Grains Research and Development Corporation would like to thank the growers who participated in the survey.

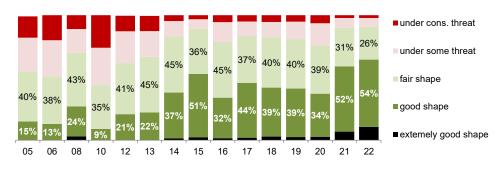
Their willingness to give generously of their time and provide insights are greatly appreciated.

Executive summary

objectives and	The Grains Research & Development Corporation (GRDC) Grower Survey has collected reliable data tracking trends across Key	Farm practices	In total, 92% of growers say that they have changed practices over the past 3 years (no real change from $2021 - 90\%$).
methodology	Performance Indicators (KPIs) grower attitudes, behaviours and practices since 1993.		However, over the past year, the proportion of growers nominating RD&E outcomes and/or GRDC information a driver to change practices
	The survey's methodology ensures robust, representative data is captured via a series of 1200 Computer Assisted Telephone		has increased a significant 4 points (now 63%).
	Interviews (CATI) with a random sample of growers and coverage, non-response and other biases are minimised, meaning an accurate margin of error can be calculated for results.		Similarly, profitability drivers, production risk management and cost management are significantly more likely to be perceived a driver of change than in 2021.
	On typical measurements involving the entire sample, the standard error at the 95% confidence level is approximately $\pm 2.5\%$. Both annual and cyclical metrics are captured, consequently, some results		The proportion of respondents implementing proactive measures to prevent or address health and safety risks has trended upwards since 2020 (now 91%).
The current state	are compared with 2021 while others with earlier survey years. Respondent harvests reflect favourable seasons across each region		Chronic exposure to chemicals, machinery and moving objects and workplace/physical stress remain the most common perceived health and safety risks for grain farming businesses.
of the industry	over the past 2 years. Last season, respondents recorded the highest average amount of grain harvested since the survey began capturing this data in 2013 (approximately 5,900 tonnes, up from 5,300 in 2020-21).		While almost 7 in 10 growers are confident in the grains research industry's ability to respond quickly to weed, pest and disease threats, respondents are significantly less confident in the ability for research to respond quickly threats associated with markets, seasonal conditions
	In total, the sample of 1200 growers is responsible for sowing 2.8 million hectares of crop and harvesting 7 million tonnes of grain.	GRDC information products and	and input costs and availability
	Consistent with favourable seasons and harvests, industry positivity has trended upwards since 2020 and is now at its most widespread since the survey first captured this data. In total, 91% of		On par with 2021, 99% of all respondents access GRDC information products and services and on average, between 3 and 4 are accessed.
	respondents now perceive the industry to be in at least <i>fair shape</i> and a significantly higher proportion see it in <i>good</i> to <i>extremely good shape</i> than 12 months ago (65%, was 59%).	services	GRDC's hard copy publications remain the most commonly accessed channel, but over the past 12 months, GRDC online content and emails have been used by significantly higher proportions of growers.
			Consistent with past years, growers aged 60+ are more likely to access GRDC information via hardcopy publications and traditional rural media, whereas younger counterparts are more likely to access each of the other GRDC channels compared to the 60+ age group.
			The vast majority of GRDC information products and services remain rated a high 3.5 points out of a possible 5 for the value they provide.
			Similarly, at least 7 in 10 growers accessing each channel believe the information provided is influencing on-farm practices at least <i>a small amount</i> and approximately 4 in 10 accessing GRDC hardcopy, face to face, online content and video materials say they have a <i>fair</i> to <i>considerable</i> influence.

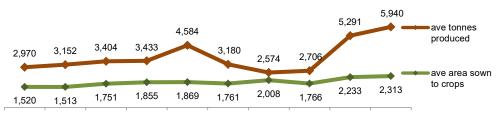


Perception of the current state of the industry



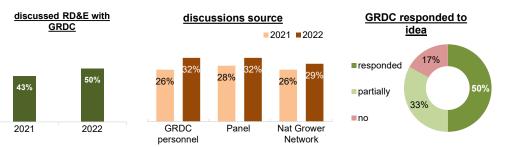
Production by growing season

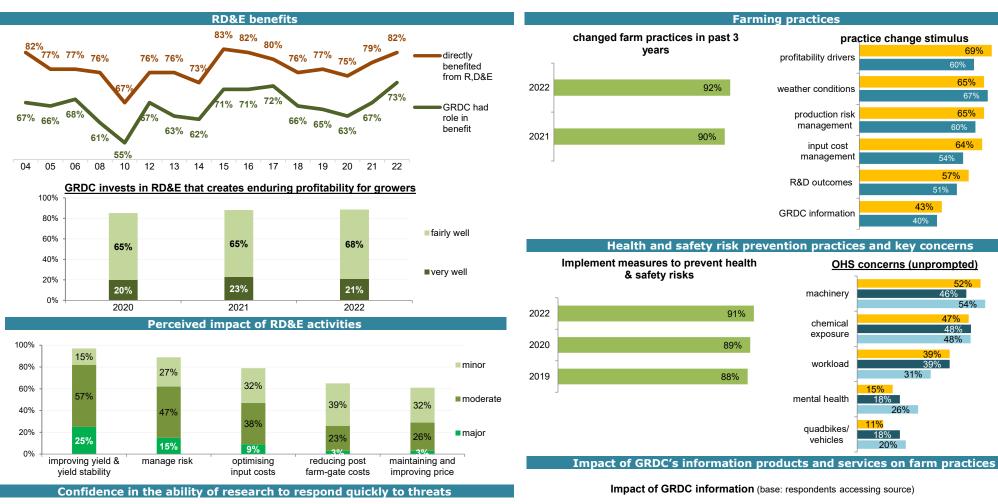


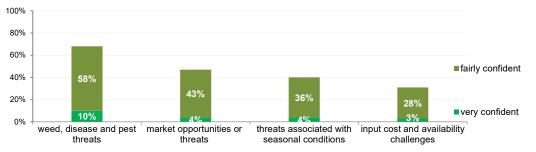


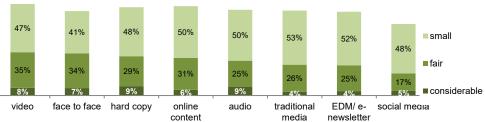
2012-13 2013-14 2014-15 2015-16 2016-17 2017-18 2018-19 2019-20 2020-21 2021-22

RD&E discussions with GRDC









Main report Background, objectives and methodology 1.

Background Conducted regularly since 1993, the Grains Research & Development and

Corporation (GRDC) Grower Survey measures trends relating to grower

Methodology continued...

objectives attitudes to Key Performance Indicators (KPIs) and corporate measures as well as gathering data on a variety of aspects linked to the

Corporation's Research, Development and Extension (RD&E) Plan.

While the survey typically focused on corporate measures, since 2019, grower perceptions relating to GRDC's information products and services have also been captured.

Both annual and cyclical metrics are captured in the survey and consequently, some data is compared with 2021 results while other data is compared with prior years.

The following concepts were included in the survey this year:

- farm and grower profile including production and perceived current state of the industry
- corporate metrics •
- perception of GRDC's role in creating enduring profitability .
- benefits from RD&E and GRDC's role in the benefit •
- perceived RD&E impact on key areas of the industry
- practice change and drivers to do so
- confidence in the research industry's ability to respond quickly to threats
- use of paid professional advice and perceived use of GRDC material • among advisors
- GRDC information product and services channels accessed
- To obtain the required data for this project, 1,200 Computer Assisted Methodoloav Telephone Interviews (CATI) were conducted with grain growers across Australia. Respondents were selected randomly from the GRDC's database of growers. The randomisation process was computer driven, using specially designed software.

Quotas were set to ensure a robust sample was obtained in each agroecological zone (AEZ), allowing sound statistical conclusions to be drawn. The sample in each location was weighted at computer stage to represent the true geographic distribution of grain growers and, consequently, national results are not disproportionately influenced by responses from zones with smaller concentrations of grain growers.

Table 1 nsw vic high ald nsw nsw ne/ nw/ qld nsw vic total central qld se sw slopes rainfall central # interviews 1,201 98 158 49 182 51 30 weighted to* 18,963 1,389 2,326 847 2,834 845 406 sa/vic sa mid/ yorke/ b'town/ sa/vic wa wa wa wa sand eyre wim mallee central eastern northern plain # interviews 123 31 149 124 146 30 30 weighted to* 2,212 2,525 2,126 1,988 377 580 508

* Based on Australian Bureau of Statistics data.

All interviews were conducted by MarketMetrics Data Collection in accordance with ISO 20252 standards. Interviewing was conducted during late May and June 2022, Daniel Watson, a research director from DTER, thoroughly briefed the interviewers and team supervisors on all aspects of the project prior to fieldwork commencing.

This year's response rate (57%) is slightly lower than in 2021 (63%), but provides a high level of confidence in results.

Standard error and limitations of the data

The sample of grain growers participating in the survey is 1,200. On typical measurements involving the entire sample (where 70% of respondents concur). the standard error at the 95% confidence level is approximately ± 2.5 %. Readers should exercise caution however, when examining responses for small subsamples. The table below summarises the standard error at the 95% confidence level:

Table 2	
sample base	margin for error
1,200 (entire sample)	±2.5%
1,000	±2.8%
750	±3.2%
493 (northern region results)	±3.9%
469 (southern region results)	±4.1%
238 (western region results)	±5.6%
200	±6.3%
100	±9.0%

For example, if 85% of the entire sample of respondents are satisfied with GRDC's overall performance and the survey was repeated 100 times, in 95 out of 100 surveys, the result would fall between 82.5% and 87.5%

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

Table 3		
Age group	Younger	Growers aged 18-39 years
	40-59	Growers aged 40-59
	60+	Growers aged 60 years or older
*	Caution small sample	Caution sample size smaller than n=30, data is indicative only
<i>t</i>	Longitudinal comparison unavailable	Comparison to past data unavailable due to question alteration in 2022
Production segment (tonnes	<5,000 tonnes	Less than 5,000 tonnes of all grain types produced last season
produced)	5,000 to 9,999 tonnes	Between 5,000 and 9,999 tonnes produced last season
	10,000 to 14,999 tonnes	Between 10,000 and 14,999 tonnes produced last season
	15,000 to 24,999 tonnes	Between 15,000 and 24,999 tonnes produced last season
	25,000+ tonnes	25,000 or more tonnes produced last season

Comparison of survey measures with previous years

Due to some survey sections last being asked in 2021 and others being asked in previous years, comparison years may change throughout this report. Sample bases Throughout this report, bases used for various measurements differ. Readers should note that bases are identified for all report sections, tabulations and charts.

StatisticallyStatistical significance analyses whether variation in results either year on yearsignificantor between segments in the survey is great enough to infer true change in thedifferencespopulation, not the result of sampling error or chance.

Statistical significance follows rules of statistics and is based on p values computed by specialist market research software and the result based on the normal distribution curve. The software considers size of the effect, variation in the sample data, the sample size and identifies significant variation in results.

For example, when results have parity in opinion and a 2 point difference from 50% to 52% is noted, the result may not be statistically significant, but where almost all of the sample shares a similar result, the chance or error is much smaller and a 2 point shift from 95% to 97% is more meaningful and also statistically significant.

In this report, statistically significant differences at the 95% confidence level will be highlighted using the terminology *significant*. Where results may appear to be significant but are not, terminology such as *slight* is used.

Statistical comparisons made to segments within the 2022 dataset, for example, difference in results between northern, southern and western region respondents are analysed automatically with specialist market research software using Chi-Square testing at the 95% confidence interval.

Longitudinal statistical comparisons, for example, 2021 versus 2022 national results undergo either Chi-Square or z tests using specialist market research software to identify where shifts in data is unlikely to be the result of sampling error and can accurately be inferred to result from changes in the grower population. These are identified in Report tables with \uparrow or \checkmark .

Rounding Throughout this report, there are instances where totals do not exactly match the addition of individual question components due to data rounding.

3. Grower profile

3.1 Crop area and tonnages harvested

Questions asked: S1. Taking all grains into account, how many **hectares** did you sow last season? Q1. Taking all grains into account, approximately how many tonnes of grain did you produce last season? S2. If less than 200 hectares harvested, ask: Was the amount of hectares sown last season impacted by adverse weather conditions in any way at all?

Key findings Nationally, the area sown to crops by respondents last season was similar to 2020-21 (2,313, was 2,333), but the amount of grain harvested was significantly greater (5,940 tonnes, up from 5,291).

Notably, the area sown to crops and amount of grain harvested by northern and western respondents is the highest since the survey began capturing this data in 2013.

While the area sown and tonnes harvested was similar to the previous season among southern region respondents, it was slightly higher than all prior years.

Nationally, compared to the 2021 survey, significantly fewer respondents harvested less than 5,000 tonnes of grain and a significantly higher proportion harvested between 15,000 and 24,999 and more than 25,000 tonnes.

In total, without weighting, the 1200 survey respondents are responsible for sowing almost 3 million hectares of crop and harvesting almost 7 million tonnes of grain.

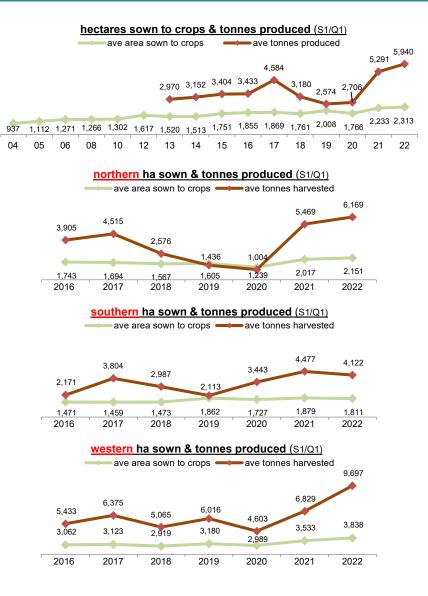


Table 4												
	% mentioning (base: all respondents able to answer)											
crop area last season (S1) grain tonnage produced last season	total		region			tonnes produced						
(Q1)	2021 n = 1201	2022 n = 1200	northern n = 493	southern n = 469	western n = 238	<5000 n = 661	5,000-9,999 n = 276	10,000- 14,999 n=69	15,000- 24,999 n=77	25000+ n = 42		
Mean area sown (hectares)	2,233	2,313	2,151	1,811	3,838	1,085	2,701	3,951	5,949	11,849		
Median area sown (hectares)	1,300	1,416	1,100	1,214	3,000	800	2,400	3,845	5,500	11,000		
Average crop harvested (tonnes)	5,291	^ 5,940	6,169	4,122	1 9,697	1,989	6,555	11,559	18,292	36,348		
Median crop harvested (tonnes)	3,000	^ 3,500	3,500	3,000	^ 6,729	1,800	6,000	11,000	18,000	31,000		
% adversely affected by weather conditions	2%	2%	3%	2%	1%	4%	0%	0%	0%	0%		

n statistically significant increase since 2021; ↓ statistically significant decrease since 2021 *Caution small sub sample

3.2 Grower mood towards industry

Questions asked:

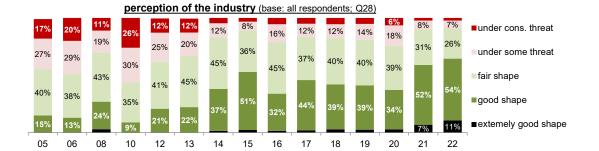
- 28. Which of the following best describes how you feel about the current state of the Australian grains industry?
- Q29. To what extent do you agree or disagree with the following statement: 'I am optimistic about the future of the Australian grains industry?

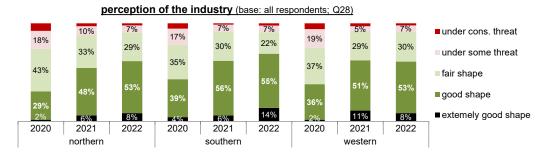
Key findings Over the past 12 months, belief the industry is in *extremely good* to *good* shape has increased slightly and is now at its most widespread since survey began capturing this data in 2005 (65%).

Notably, this sentiment among northern (61%) and southern (69%) respondents is also at its highest since 1993 and remains widespread among those in the and west (61%).

In total, 91% of all respondents nationally now perceive the industry to be in *at least fair shape*.

Since 2019, optimism towards the industry's future has trended upwards (now rated 7.7 out of a possible 10 points). This result is reflected across northern and southern regions and while not trending upwards among those in the west, optimism towards the future remains high.





average rating on optimism about future (out of 10 points) (base: all respondents; Q29)

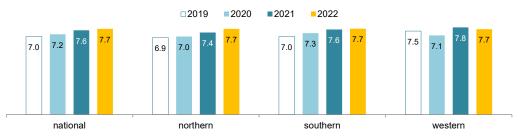


Table 5												
	% mentioning (base: all respondents)											
mood about state of industry (028/029)	total		region					tonnes produced	I			
	2021 n = 1201	2022 n = 1200	northern n = 493	southern n = 469	western n = 238	<5000 n = 661	5,000-9,999 n = 276	10,000-14,999 n=69	15,000-24,999 n=77	25000+ n = 42		
Extremely good shape	7%	^ 11%	8%	^ 14%	8%	1 0%	11%	14%	13%	8%		
Good shape	52%	54%	53%	55%	53%	53%	55%	62%	48%	64%		
Fair shape, but likely to come under threat	31%	↓ 26%	29%	V 22%	30%	↓ 27%	27%	19%	^ 31%	19%		
Already under some threat	8%	7%	7%	7%	7%	7%	6%	3%	6%	7%		
Already under considerable threat	2%	2%	2%	2%	2%	3%	1%	1%	1%	2%		
Total: Extremely good/good shape	59%	<mark>↑</mark> 65%	^ 61%	<u></u> 69%	61%	<u></u> 63%	66%	76%	61%	72%		
Total: Fair/good/extremely good shape	90%	91%	91%	91%	91%	90%	93%	96%	92%	90%		
Total: Under some/considerable threat	10%	9%	9%	9%	9%	10%	7%	4%	8%	10%		
Mean rating of the industry's future out of possible 10 points	7.6	7.7	7.7	7.7	7.7	7.6	7.7	8.2	7.9	8.1		

↑ statistically significant increase since 2021; ↓ statistically significant decrease since 2021 *Caution small sub sample

3.3 Use of fee for service agronomic advice

Questions asked:

Q19. Do you currently receive professional advice from any of the following people?

Q20. Does your paid adviser use or refer to GRDC as a source of information? (minor wording alteration in 2021)

Key findings Nationally, over the past year, the proportion of respondents using a fee for service adviser has increased significantly (68%, up from 61%).

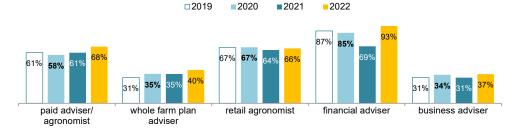
Similarly, northern and southern region respondents are significantly more likely to use a paid adviser than in 2021.

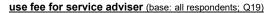
Consistent with past results, respondents producing greater than 5,000 tonnes of grain are significantly more likely to use paid advisers than counterparts producing less.

Approximately 8 in 10 (79%, was 84% in 2021) respondents using a fee for service adviser believe GRDC's information is referred to or used, but respondents are significantly less likely to say this occurs *regularly* than in 2021 (35%, down from 45%).

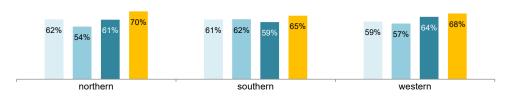
Compared to 12 months ago, using a person providing whole farm planning advice is significantly more widespread (40%, up from 35%).

source of professional advice (base: all respondents; Q19)





2019 2020 2021 2022



paid adviser acknowledges GRDC (base: respondents paying for advice; Q20)

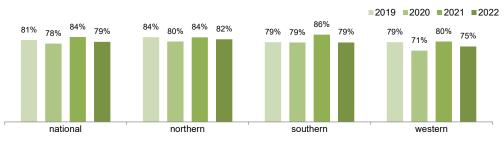


Table 6												
				%	mentioning (ba	oning (base: all respondents)						
source of professional advice (Q19)	to	tal		region			tonnes produced					
	2021 n = 1201	2022 n = 1200	northern n = 493	southern n = 469	western n = 238	<5000 n = 661	5,000-9,999 n = 276	10,000-14,999 1 n=69	5,000-24,999 n=77	25000+ n = 42		
Fee for service agronomist or cropping adviser	61%	<mark>↑</mark> 68%	^ 70%	<mark>↑</mark> 65%	68%	^ 58%	78%	86%	81%	90%		
Retail agronomist or cropping adviser providing a free service	64%	66%	62%	66%	72%	70%	60%	57%	56%	55%		
Agronomic whole farm planning advice	35%	^ 40%	^ 35%	40%	50%	^ 34%	48%	54%	41%	57%		
A consultant giving business, marketing or NRM advice	31%	^ 37%	^ 35%	35%	48%	24%	49%	<mark>↑</mark> 71%	61%	72%		
Precision Agriculture consultant	Na	6%	7%	6%	5%	4%	9%	9%	9%	19%		
Data analyst	Na	3%	4%	1%	3%	2%	3%	1%	5%	13%		
Total: financial planner/accountant	69%	93%	93%	93%	94%	91%	95%	100%	99%	100%		
An Accountant	Na	92%	92%	92%	92%	89%	95%	100%	99%	100%		
Financial planner or farm financial adviser	Na	40%	36%	40%	49%	33%	46%	64%	44%	62%		

	% mentioning (base: respondents paying for advice)									
GRDC information acknowledgement (Q20)	total		region			tonnes produced				
	2021 n = 732	2022 n = 803	northern n = 340	southern n = 304	western n = 159	<5000 n = 379	5,000-9,999 n = 214	10,000-14,999 n = 59	15,000-24,999 n = 62	25000+ n = 38
Paid adviser regularly acknowledges GRDC as source of info	45%	V 35%	V 37%	4 38%	V 21%	♦ 33%	↓ 39%	39%	42%	32%
Paid adviser occasionally acknowledges GRDC as source of info	39%	<u></u> 45%	45%	41%	<u></u> 54%	41%	<u></u> 49%	44%	45%	47%
Total: Paid adviser regularly/occasionally acknowledges GRDC as source of information	84%	↓ 79%	82%	↓ 79%	75%	↓ 73%	87%	83%	87%	79%

∱ statistically significant increase since 2021; ↓ statistically significant decrease since 2021 errors due to rounding *Caution: small sub sample

4. Grains RD&E 4.1 Perceived to have benefitted from grains industry RD&E

Questions asked: Q12. Do you feel you have directly benefited from any research and development project or extension activities or on farm trials undertaken in the grains industry in the past five years? Q14. Did the GRDC play a role in achieving any of these benefits from R&D?

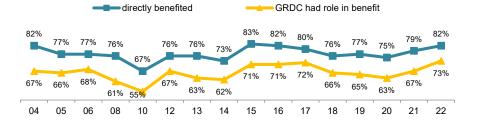
Key findings The majority of respondents feel they have benefitted from RD&E (82%) and survey results suggest this perception has trended upwards since 2020.

While this result does not vary significantly by region, variation is evident by production segment (95% of those producing greater than 25,000 tonnes to 80% producing less than 5,000) and AEZ (91% in SA Mid/Yorke/Eyre to 73% in WA Eastern).

In total, 73% of growers believe that GRDC played a role in RD&E benefits, up from 2021 (67%). Some caution is required comparing 2022 results to past years however, due to minor question alteration and changes to questionnaire structure.

Belief GRDC played a role in the RD&E benefit varies significantly by AEZ, from 80% of SA Mid/Yorke/Eyre to 62% in WA Eastern.

directly benefited from RD&E (base: all respondents; Q12/14)



not sure 29% 299 30% 1/10 280 24% 25% no role 26% 28% 26% 23% 27% 29% 30% 21% 27% 27% 20% minor role significant role 04 05 06 08 10 12 13 14 15 16 17 18 19 20 21 22

degree of GRDC's role in benefit (base: all respondents; Q14)

Table 8	% mentioning (base: all respondents)										
whether direct has $f(x) = f(x)$	total		region			tonnes produced					
whether direct benefit felt (Q12/Q14)	2021 n = 1201	2022 n = 1200	northern n = 493	southern n = 469	western n = 238	<5000 n = 661	5,000-9,999 n = 276	10,000-14,999 n=69	15,000-24,999 n=77	25000+ n = 42	
Direct benefit felt	79%	82%	80%	85%	81%	80%	83%	93%	92%	95%	
GRDC had significant role in benefit	38%	29%	32%	30%	23%	27%	30%	37%	42%	27%	
GRDC had minor role in benefit	29%	44%	41%	44%	49%	44%	48%	41%	37%	40%	
Total: GRDC had role in benefit	67%	73%	73%	74%	72%	72%	78%	78%	79%	67%	

[†]Comparison to past data unavailable due to question alteration in 2022 **Caution small sub sample*

4.2 Perceived impact of RD&E activities (new in 2022)

Questions asked: Q13. For each of the following 5 areas, I would like you to tell me if you think RD&E activities have had a major impact on the grains industry over the past 5 years, a moderate impact, a minor impact or no impact at all? New question in 2022

- **Key findings** When asked to rate the impact that RD&E activities have had on the grains industry over the past 5 years, the majority of growers perceive at least a *minor* impact for each of the following 5 areas:
 - improving yield & yield stability (96% of respondents, including 82% saying a major to moderate impact)
 - managing risk to maximise profit and minimise losses (89%, including 62% saying a major to moderate impact)
 - optimising input costs (79%, including 47% saying a *major* to *moderate* impact)
 - reducing post-farm-gate costs (65%, including 26% saying a *major* to *moderate* impact)
 - maintaining and improving price (61%, including 29% saying a *major* to *moderate* impact)

Notably, southern region growers are significantly more likely to believe RD&E has had a *major* to *moderate* impact than northern and western counterparts on:

- Improving yield and yield stability
- Managing risk to maximise profit and minimise losses

Similarly, compared to those producing greater than 15,000 tonnes, respondents producing less than 10,000 are significantly more likely to believe RD&E has had a *major* to *moderate* impact on:

- Reducing post-farm-gate costs
- Maintain and improving price



minimise losses

		% mentioning (base: all respondents)										
perceived impact of RD&E activities	total: at least minor impact	total: moderate to major impact	major impact	moderate impact	minor impact	no impact at all	unsure					
Improving yield & yield stability	96%	82%	25%	57%	15%	2%	1%					
Managing risk to maximise profit and minimise losses	89%	62%	15%	47%	27%	10%	2%					
Optimising input costs	79%	47%	9%	38%	32%	19%	2%					
Reducing post-farm-gate costs	65%	26%	3%	23%	39%	29%	6%					
Maintaining and improving price	61%	29%	3%	26%	32%	33%	6%					

Table 10

	% mentioning (base: all respondents)											
perceive RD&E activities had a major to	total		region		tonnes produced							
moderate to impact over the past 5 years	2022 n = 1200	northern n = 493	southern n = 469	western n = 238	<5000 n = 661	5,000-9,999 n = 276	10,000-14,999 n=69	15,000-24,999 n=77	25000+ n = 42			
Improving yield & yield stability	82%	79%	88%	73%	82%	84%	76%	80%	72%			
Managing risk to maximise profit and minimise losses	62%	59%	68%	53%	61%	66%	68%	59%	67%			
Optimising input costs	47%	48%	50%	40%	46%	52%	55%	45%	53%			
Reducing post-farm-gate costs	26%	25%	29%	23%	28%	27%	21%	14%	22%			
Maintaining and improving price	29%	28%	31%	25%	32%	30%	18%	16%	20%			

*Caution: small sub sample

5. Farm practices

5.1 Implemented practice change over past 3 years and associated stimulus

Questions asked:

Q15. Have you changed your farming practices, techniques or methods in the past 3 years as a result of any of the following?

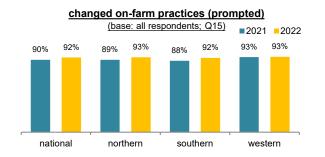
Key findings When prompted, more than 9 in 10 growers say that they have changed their farming practices, techniques or methods in the past 3 years.

Compared to 12 months ago, R&D outcomes, profitability drivers, production risk and input cost management are significantly more likely to have been a driver of practice change. Notably however, there has been no change in the proportion of respondents changing practices due to seasonal conditions.

In total, 63% of growers changed practices due to GRDC information and/or R&D outcomes generally – up a significant 4 points since 2021 (59%).

This result varies by production segment (76% of those producing greater than 15,000 tonnes to 61% producing less than 10,000) and age (72% of those aged 18-39 to 57% aged 60+).

Similarly, identifying GRDC information as a driver for change varies from 47% of southern to 37% of western region respondents and 58% of those producing greater than 15,000 tonnes to 41% producing less than 10,000.



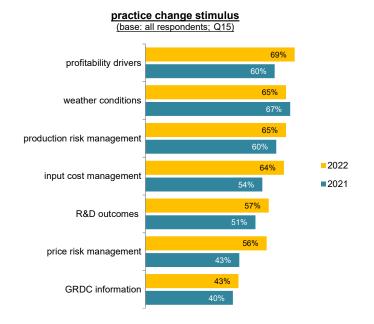


Table 11	% mentioning (base: all respondents)										
stimulus (prompted) (Q15)	total		region			tonnes produced					
	2021 n = 1201	2022 n = 1200	northern n = 493	southern n = 469	western n = 238	<5000 n = 661	5,000-9,999 n = 276	10,000-14,999 n=69	15,000-24,999 n=77	25000+ n = 42	
Total: changed practices in the last 3 years	90%	92%	93%	92%	93%	91%	94%	94%	94%	95%	
Profitability drivers	60%	69%	70%	67%	75%	66%	74%	78%	78%	72%	
Production risk management	60%	65%	64%	65%	68%	59%	75%	68%	71%	72%	
Seasonal or weather conditions	67%	65%	74%	57%	65%	64%	63%	70%	76%	64%	
Input cost management	54%	64%	67%	60%	66%	63%	66%	67%	62%	67%	
R&D outcomes in the grains industry generally	51%	57%	55%	58%	58%	53%	57%	66%	74%	67%	
Price risk management	43%	56%	57%	54%	61%	54%	59%	72%	54%	69%	
GRDC information, supported training event, workshop, project or other specific activity	40%	43%	43%	47%	37%	40%	45%	54%	60%	54%	

*Caution small sub sample

5.2 Health and safety risks and prevention

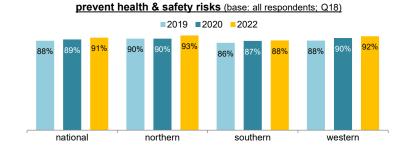
Questions asked:

Q17. What do you believe are the top three health and safety risks for people in your farming business? Q18. Are you currently taking any proactive measures to address or prevent health and safety risks in your farming business?

Key findings Since 2019, there is an upwards trend evident in the proportion of respondents implementing proactive measures to prevent or address health and safety risks (now 91%).

Chronic exposure to chemicals, machinery and moving objects and workplace/physical stress remain the most commonly recognised health and safety risks for grain farming businesses

Notably, OHS concerns resulting from new staff or those lacking training has trended upwards since 2019.



OHS concerns (unprompted) (base: all respondents; Q17)

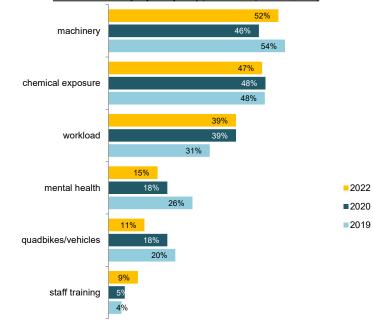


Table 12

	% mentioning (base: all respondents)										
health and safety risks	total		region			tonnes produced					
(Q17 main mentions/Q18)	2020 n = 1200	2022 n = 1200	northern n = 493	southern n = 469	western n = 238	<5000 n = 661	5,000-9,999 n = 276	10,000-14,999 n=69	15,000-24,999 n=77	25000+ n = 42	
Implement health and safety risk prevention	89%	91%	93%	88%	92%	88%	95%	97%	94%	98%	
Plan to implement measures to prevent health and safety risks	3%	4%	3%	5%	4%	5%	3%	3%	1%	2%	
Machinery/moving objects	46%	^ 52%	<mark>↑</mark> 56%	49%	50%	51%	53%	52%	57%	57%	
Chronic exposure to chemicals	48%	47%	46%	45%	52%	49%	44%	49%	38%	53%	
Workload/physical/muscular stress	39%	39%	33%	42%	42%	38%	43%	39%	39%	50%	
Mental health	18%	15%	14%	16%	15%	14%	20%	20%	15%	10%	
Quadbikes and other vehicles	18%	11%	12%	9%	13%	10%	8%	11%	25%	19%	
Staff training and knowledge	5%	<u></u> 9%	8%	7%	16%	7%	12%	10%	13%	24%	
Staff falls	9%	9%	8%	8%	11%	8%	10%	10%	9%	9%	
Livestock	10%	8%	8%	8%	5%	10%	5%	4%	5%	0%	

∱ statistically significant increase since 2021; ↓ statistically significant decrease since 2021 *Caution small sub sample

Key findings 67% of respondents are confident in the grains research industry's ability to respond quickly to weed, pest and disease threats.

However, this result varies by production segment, from 69% of those producing less than 10,000 tonnes to a significantly lower 53% producing greater than 25,000.

Confidence that research can respond to market opportunities or threats is polarised (47% confident, 51% not). Confidence varies by region (50% in the south to 35% the west) and production segment (49% among those producing less than 5,000 tonnes to 39% producing in excess of 15,000).

Respondents are significantly more likely to be not confident than confident in the research industry's ability to respond quickly to threats associated with seasonal conditions and input costs and availability.

Notably, southern region growers are significantly more likely to be confident in these two metrics than western counterparts.

For each threat tested, respondents perceiving to have directly benefitted from RD&E are significantly more likely than those not believing they have benefitted to be confident in the research industry's ability to respond.

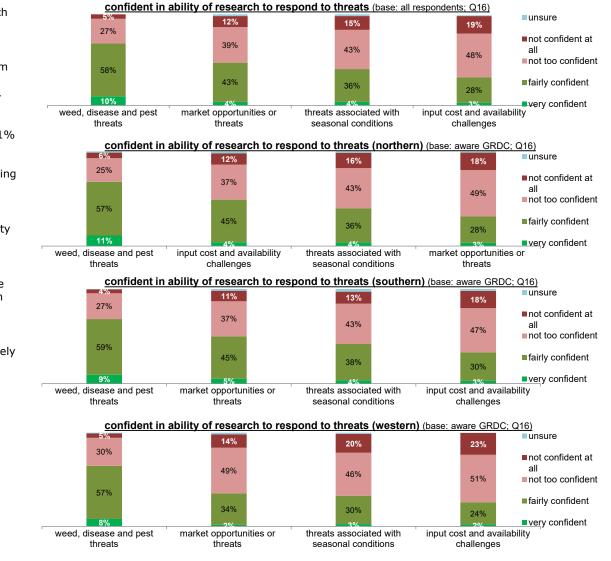


Table 13	% mentioning (base: all respondents)									
confidence in the research industry's ability to respond quickly to threats	total: confident	very confident	fairly confident	total: not confident	not too confident	not confident at all	unsure			
New biosecurity threats, such as managing weed, disease and pest threats	67%	10%	58%	32%	27%	5%	1%			
Opportunities or threats to Australian grain markets	47%	4%	43%	51%	39%	12%	2%			
Threats associated with seasonal or weather conditions	39%	4%	36%	59%	43%	15%	2%			
Challenges associated with inputs, such as fertilizer costs and availability	31%	3%	28%	68%	48%	19%	1%			

Table 14

	% mentioning (base: all respondents)										
% fairly to very confident in the research	total region				tonnes produced						
industry's ability to respond quickly to threat	2022 n = 1200	northern n = 493	southern n = 469	western n = 238	<5000 n = 661	5,000-9,999 n = 276	10,000-14,999 n=69	15,000-24,999 n=77	25000+ n = 42		
New biosecurity threats, such as managing weed, disease and pest threats	67%	68%	68%	65%	68%	70%	67%	67%	53%		
Opportunities or threats to Australian grain markets	47%	49%	50%	35%	49%	46%	44%	39%	39%		
Threats associated with seasonal or weather conditions	39%	40%	42%	33%	38%	39%	47%	46%	39%		
Challenges associated with inputs, such as fertilizer costs and availability	31%	31%	33%	26%	32%	25%	34%	35%	29%		

*Caution: small sub sample

6. GRDC information products and services

6.1 Summary of information product and service channels accessed

Questions asked: Q21. Which of the following ways do you access GRDC information products and services?

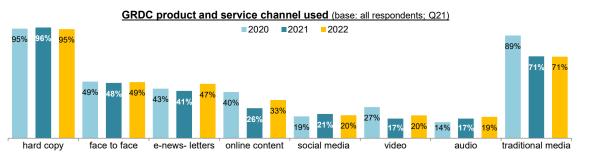
Key findings Consistent with past results, 99% of growers access at least one GRDC information product or service and on average, between 3 and 4 channels are accessed.

There is some variation in the latter result by production size, from an average of 4 channels accessed by those producing greater than 25,000 tonnes of grain to 3 channels among those producing less than 5,000.

Compared to 12 months ago, a significantly higher proportion of respondents access GRDC enewsletters/electronic direct mail (EDM) and GRDC online content, but some caution is required comparing the former channel to past results due to questionnaire alteration.

Growers aged 18-59 are significantly more likely than older counterparts to access GRDC's content via digital channels.

Whereas those aged 60+ are more likely than younger age groups to access GRDC information via hardcopy and traditional rural/regional media.



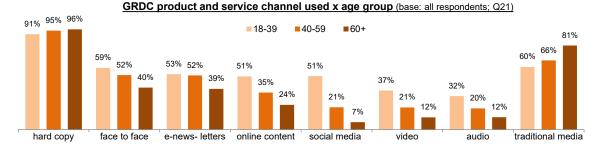


Table 15

		% mentioning (base: all respondents)										
GRDC info product or service channel accessed	total		region			tonnes produced						
(Q21)	2021 n = 1201	2022 n = 1200	northern n = 493	southern n = 469	western n = 238	<5000 n = 661	5,000-9,999 n = 276	10,000-14,999 n=69	15,000-24,999 n=77	25000+ n = 42		
Access GRDC products and services	99%	99%	99%	100%	99%	99%	99%	100%	99%	100%		
GRDC hard copy printed materials	96%	95%	94%	97%	92%	96%	95%	96%	88%	88%		
GRDC face-to-face interactions	48%	49%	48%	48%	51%	41%	55%	69%	73%	65%		
GRDC emails/e-newsletters	41%	<u></u> 47%	<u></u> 47%	49%	44%	<u></u> 44%	50%	55%	57%	51%		
GRDC online content	26%	^ 33%	^ 33%	^ 32%	^ 37%	<u></u> 29%	35%	45%	42%	50%		
GRDC Social Media	21%	20%	18%	18%	27%	14%	28%	33%	31%	34%		
GRDC video materials	17%	20%	19%	22%	16%	16%	26%	26%	20%	27%		
GRDC audio packages or programs	17%	19%	17%	18%	23%	15%	22%	31%	27%	27%		
Via traditional media	71%	71%	67%	70%	80%	73%	70%	71%	63%	68%		

r statistically significant increase since 2021; ↓ statistically significant decrease since 2021 *Caution small sub sample

7. Quantitative sample demographics (based on unweighted data)

7.1 Gender

Table 16										
				% men	tioning (base: all res	spondents)				
gender (Q26)	total		region		tonnes produced					
gender (Q20)	2022 n = 1200	northern n = 493	southern n = 469	western n = 238	<5000 n = 661	5,000-9,999 n = 276	10,000-14,999 n=69	15,000-24,999 n=77	25000+ n = 42	
Male	93%	92%	97%	90%	94%	95%	97%	90%	100%	
Female	7%	8%	3%	10%	6%	5%	3%	10%	0%	

*Caution small sub sample

7.2 Age

Table 17

	% mentioning (base: all respondents)											
age (Q25)	total		region				tonnes produced					
	2022 n = 1200	northern n = 493	southern n = 469	western n = 238	<5000 n = 661	5,000-9,999 n = 276	10,000-14,999 n=69	15,000-24,999 n=77	25000+ n = 42			
18 to 39	14%	15%	11%	19%	12%	16%	17%	22%	29%			
40 to 59	47%	46%	48%	47%	42%	55%	49%	53%	48%			
60+	39%	39%	41%	34%	46%	30%	33%	25%	24%			
Mean age (years)	55	55	55	53	57	52	52	50	50			

*Caution small sub sample

7.3 Years in industry

				% men	tioning (base: all res	spondents)					
years in industry (Q26)	total		region		tonnes produced						
	2022 n = 1200	northern n = 493	southern n = 469	western n = 238	<5000 n = 661	5,000-9,999 n = 276	10,000-14,999 n=69	15,000-24,999 n=77	25000+ n = 42		
or less	2%	2%	1%	2%	2%	1%	0%	0%	5%		
to 10	5%	6%	4%	5%	6%	4%	6%	5%	7%		
.1 to 20	16%	16%	14%	19%	13%	16%	16%	30%	24%		
21+	77%	75%	80%	74%	78%	79%	78%	65%	64%		
1ean (years)	34	34	35	32	35	32	33	30	30		

A statistically significant increase since 2021; Ψ statistically significant decrease since 2021 *Caution small sub sample