



## **CCA 2202 Milestone Report 155: Final Report**

### **Annual Consultant qualitative and quantitative surveys of the Australian Cotton Industry for the seasons 2021/22, 2022/23 and 2023/24.**

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CCA 2202 – Annual consultant qualitative and quantitative surveys 2022 – 2024 is complete and this report is an overview of the coverage, learnings and outcomes of this iteration of the Cotton Consultants’ surveys. This is a long-term project aimed at gathering Cotton Production Data and seasonal trends for the Australian Cotton Industry and spans a period of 25 plus years.

Over the years the process has graduated from being paper based forms filled out throughout the seasons to delivery and quality checking on platforms including:

- Excel as a base template
- Agworld
- C-vent – the platform used for the qualitative survey, and
- A data management platform (DMP) developed by Morgan Rural Tech for CCA as a means of ensuring that the quantitative data can be collated in one format, despite how it is received by CCA.

The most recent project term, covering cotton growing seasons ending 2022 – 2024, has seen good average coverage - around 40% of the cotton growing area. Significant changes in this phase of the project are:

- An increase in the number of regions in Australia where cotton is grown consistently – extending to Northern Australia and the Wide Bay/Fraser/Burnett regions of Queensland
- Transitioning of the qualitative survey report from a printed publication to an electronic, online publication and
- The inclusion of ‘extended’ data in the quantitative survey to ensure that data is being collected on inputs that are considered significant for the calculation of greenhouse gas emissions for the cotton industry.

The categories of ‘base’ data collected in the quantitative survey include;

- Variety
- Herbicides
- Insecticides
- Plant Growth Regulators
- Defoliant

The categories of ‘base’ data collected in the quantitative survey include;

- Applied nutrient (ground and foliar applied fertiliser)
- Production (yield)
- Irrigation, (water use, type of irrigation, energy source for pumps, water source)
- Tillage operations (tillage in crop and the preceding fallow, type of operation, date of operation)
- and miscellaneous data including previous crop, length of fallow, distance to nearest gin.

Increased rewards have been offered to survey participants in this iteration of the project to encourage the submission of base and extended data. The tables in Appendix 1 of this report show that the percentage area of extended data contributions has increased over the three-year term, particularly nutrient and tillage data.

For the qualitative component of the project, survey questions encompassing the following topics have been consistently asked during this phase of the project;

- demographic makeup of the consultancy business and team
- Number of clients and regions in which they work
- Planting and farming system
- Crop protection (pests and diseases)

- Weed management
- Spray applications
- Nutrition management
- Water management
- Factors affecting yield
- *Helicoverpa* survival rates
- Sustainability
- CRDC and Cottoninfo program recognition.

Coverage and response rates for the qualitative survey are summarised in the table below.

CCA 2202 Quantitative Survey Coverage figures				
Season	No of consultants	No of cotton growers	No of hectares (Not adjusted for row spacing)	Percentage of cotton production area
2021/22	60	413	285,723	52%
2022/23	60	393	291,583	43%
2023/24	54	328	202,774	37%

Limited rewards have been offered to participants for completing the qualitative survey – and the participation rate has decreased over the past three years of the project.

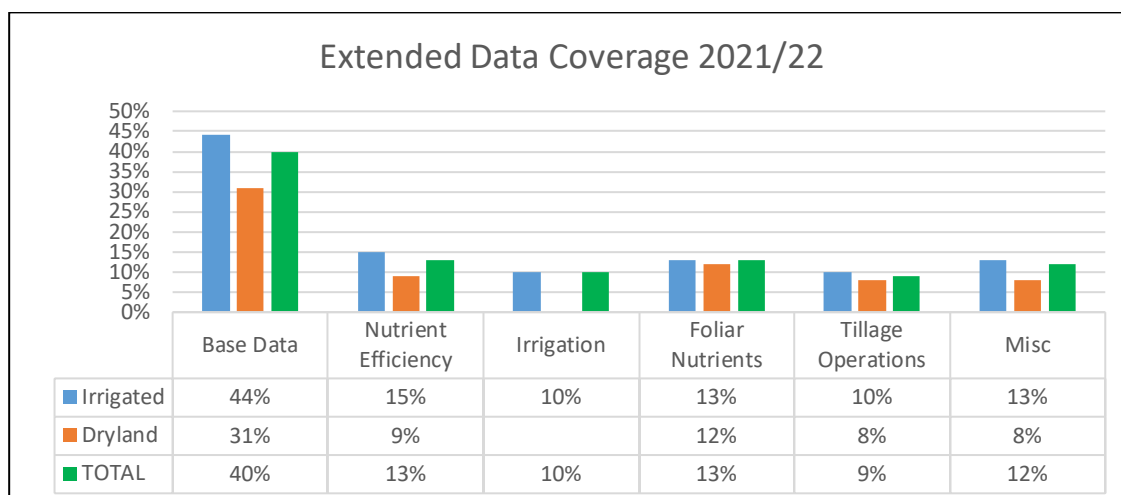
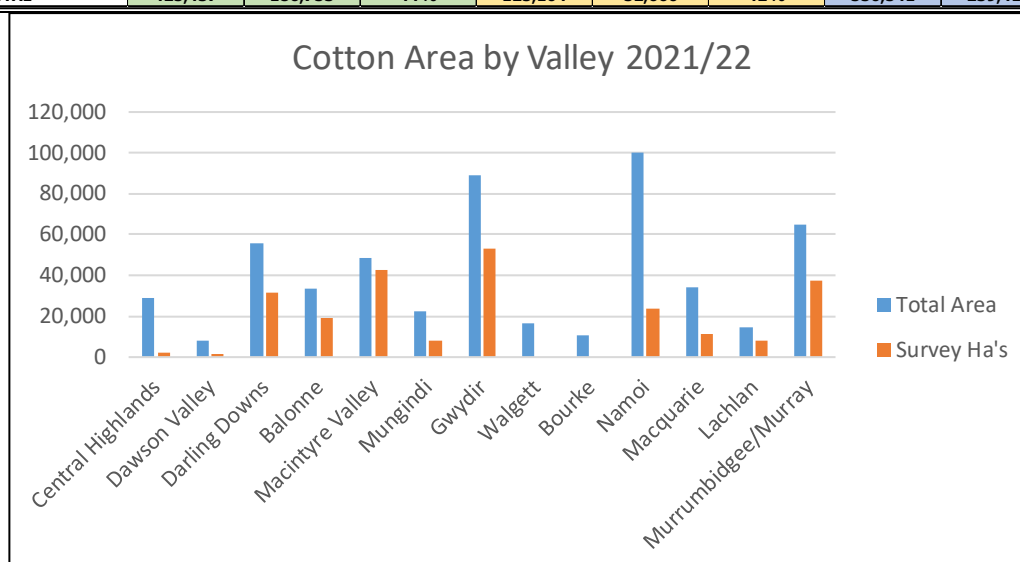
### Implications for the next phase of the project

CRDC and CCA are continuing to work together to undertake the Cotton Consultants' qualitative and quantitative surveys beyond the 2023/24 season and making some changes and adaptations to work with evolving data collection systems for the industry as well as encouraging continued participation and coverage. Some of the changes that are being considered for the next phase of the project are:

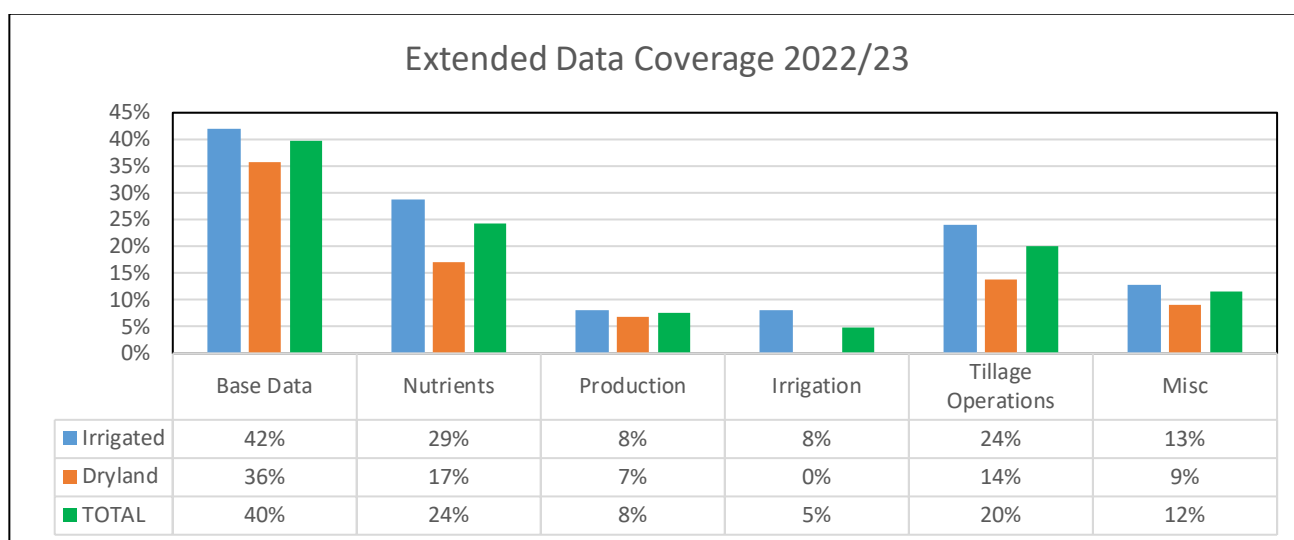
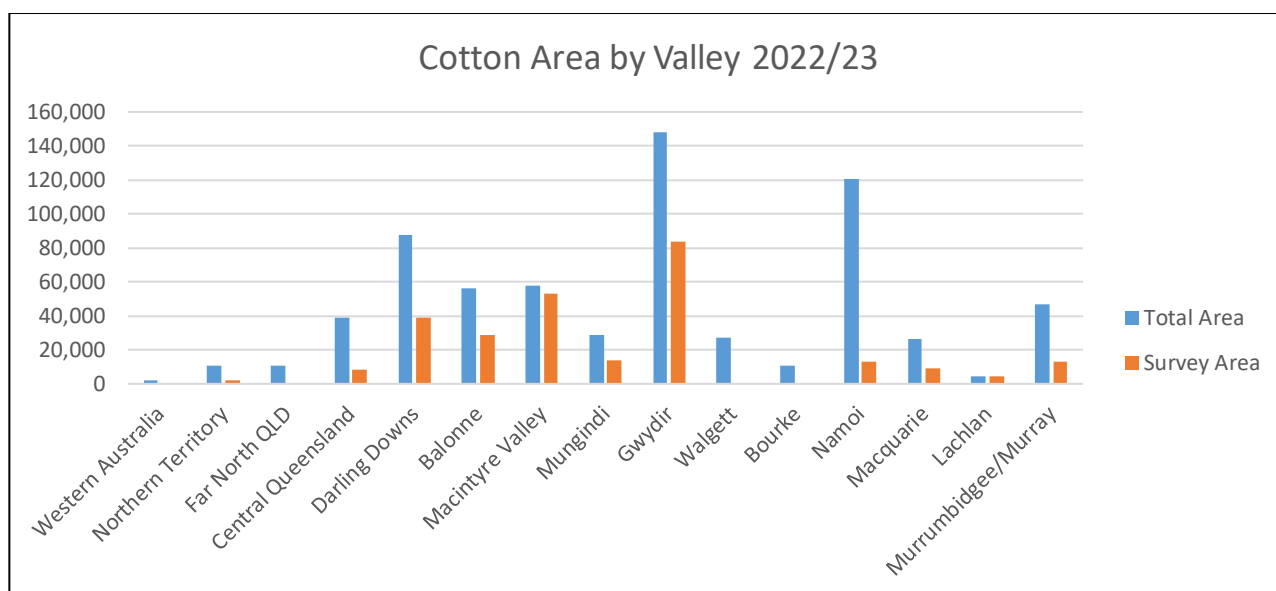
- Increasing focus on the qualitative survey as this is the component of the project that has more long-term application. This includes refining the questions and offering more incentives to participate
- Areas that have evolved with farming systems and technologies where questions will be introduced are the use of precision agriculture tools (optical spray technology) and the use of organic fertilisers
- After the second year of the new project – there is potential to look at undertaking some trend analysis of the repeated questions/topics in the qualitative survey
- The quantitative data will continue to be collected, however as CRDC is working on systems to collate this data on a larger scale, this component will be phased out into the future
- Rewards/incentives will continue to be offered for this data however more focus will be on more complete sets of extended data.

Appendix 1 attached illustrates the geographic coverage of the quantitative survey as well as the amount of extended data contributed of the past three seasons on the project (CCA 2202)

CCA Cotton Market Audit 2021/22 - Data Coverage									
Source: 2021/22 Australian Cotton Production Forecast (Cotton Australia). Estimated at June 2022. All areas expressed in paddock hectares (not adjusted for skip row).									
Growing Region	Irrigated			Dryland			Total		
	Total Area	Survey Ha's	Coverage (%)	Total Area	Survey Ha's	Coverage (%)	Total Area	Survey Ha's	Coverage (%)
NORTHERN AUSTRALIA									
Western Australia	2,395		0%				2,395	0	0%
Northern Territory	325		0%	9,321		0%	9,646	0	0%
Far North QLD	2,737		0%	8,000		0%	10,737	0	0%
Nth Australia Total	5,457	0	0%	17,321	0	0%	22,778	0	0%
SOUTH & CENTRAL QUEENSLAND									
Central Highlands	18,188	1,984	11%	10,465		0%	28,653	1,984	7%
Dawson Valley	7,167	1,530	21%	1,027		0%	8,194	1,530	19%
Darling Downs	40,000	19,203	48%	16,021	12,352	77%	56,021	31,555	56%
Balonne	33,743	19,412	58%	60		0%	33,803	19,412	57%
Macintyre Valley	42,244	39,437	93%	6,424	3,283	51%	48,668	42,720	88%
QLD Total	141,342	81,566	58%	33,997	15,635		175,339	97,201	55%
NEW SOUTH WALES									
Mungindi	21,533	4,062	19%	619	4,244	686%	22,152	8,306	37%
Gwydir	61,771	24,256	39%	27,126	28,642	106%	88,897	52,898	60%
Walgett	15,198		0%	1,562		0%	16,760	0	0%
Bourke	10,834		0%				10,834	0	0%
Namoi	57,449	20,004	35%	42,656	3,943	9%	100,105	23,947	24%
Macquarie	32,781	11,532	35%	1,567	31	2%	34,348	11,563	34%
Lachlan	14,212	8,216	58%	250	69		14,462	8,285	57%
Murrumbidgee/Murray	64,860	37,117	57%	6	96		64,866	37,213	57%
NSW Total	278,638	105,187	38%	73,786	37,025	50%	352,424	142,212	40%
AUSTRALIAN TOTAL	425,437	186,753	44%	125,104	52,660	42%	550,541	239,413	43%



CCA Cotton Market Audit 2022/23 - Data Coverage									
Source: 2022/23 Australian Cotton Production Forecast (Cotton Australia). Estimated at June 2023. All areas expressed in paddock hectares (not adjusted for skip row).									
Growing Region	Irrigated			Dryland			Total		
	Total Area	Survey Ha's	Coverage (%)	Total Area	Survey Ha's	Coverage (%)	Total Area	Survey Ha's	Coverage (%)
NORTHERN AUSTRALIA									
Western Australia	2,200		0%				2,200	0	0%
Northern Territory	500	143	29%	10,000	2,131	21%	10,500	2,274	22%
Far North QLD	1,500		0%	9,000		0%	10,500	0	0%
Nth Australia Total	4,200	143	3%	19,000	2,131	11%	23,200	2,274	10%
SOUTH & CENTRAL QUEENSLAND									
Central Queensland	28,364	8,461	30%	10,723	10	0%	39,087	8,471	22%
Darling Downs	46,141	18,741	41%	41,285	20,512	50%	87,426	39,253	45%
Balonne	53,070	29,134	55%	2,770		0%	55,840	29,134	52%
Macintyre Valley	44,000	46,761	106%	13,734	6,075	44%	57,734	52,836	92%
QLD Total	171,575	103,097	60%	68,512	26,597	39%	240,087	129,694	54%
NEW SOUTH WALES									
Mungindi	19,375	8,715	45%	9,255	5,025	54%	28,630	13,740	48%
Gwydir	68,000	34,159	50%	80,040	49,312	62%	148,040	83,471	56%
Walgett	14,300		0%	12,737		0%	27,037	0	0%
Bourke	10,600		0%				10,600	0	0%
Namoi	54,500	3,791	7%	65,706	8,983	14%	120,206	12,774	11%
Macquarie	25,000	8,769	35%	1,670		0%	26,670	8,769	33%
Lachlan	4,520	4,202	93%	220	145	66%	4,740	4,347	92%
Murrumbidgee/Murray	47,000	13,024	28%		21		47,000	13,045	28%
NSW Total	243,295	72,660	30%	169,628	63,486	37%	412,923	136,146	33%
AUSTRALIAN TOTAL	419,070	175,900	42%	257,140	92,214	36%	676,210	268,114	40%

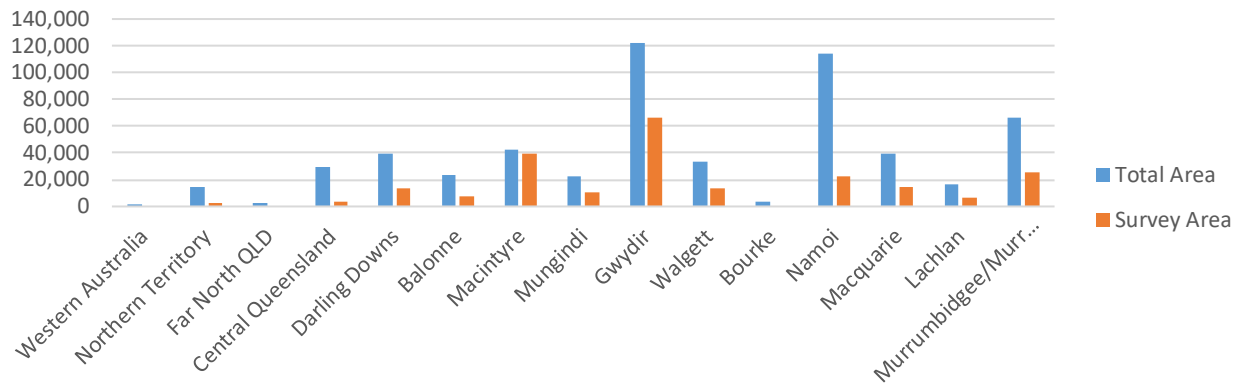


### CCA Cotton Market Audit 2023/24 - Data Coverage

Source: 2023/24 Australian Cotton Production Forecast (Cotton Australia). Estimated at June 2024. All areas expressed in paddock hectares (not adjusted for skip row).

Growing Region	Irrigated			Dryland			Total		
	Total Area	Survey Area	Coverage %	Total Area	Survey Area	Coverage %	Total Area	Survey Area	Coverage %
<b>NORTHERN AUSTRALIA</b>									
Western Australia	1,844		0%				1,844	0	
Northern Territory	575	51	9%	14,000	2,061	15%	14,575	2,112	14%
Far North QLD	1,500		0%	1,000		0%	2,500	0	0%
<b>Nth Australia Total</b>	<b>3,919</b>	<b>51</b>	<b>1%</b>	<b>15,000</b>	<b>2,061</b>	<b>14%</b>	<b>18,919</b>	<b>2,112</b>	<b>11%</b>
<b>STH &amp; CENTRAL QUEENSLAND</b>									
Central Queensland	26,474	3,256	12%	2,780		0%	29,254	3,256	11%
Darling Downs	27,302	9,186	34%	12,000	4,469	37%	39,302	13,655	35%
Balonne	22,601	7,390	33%	500		0%	23,101	7,390	32%
Macintyre	28,575	30,847	108%	13,950	8,342	60%	42,525	39,189	92%
<b>QLD Total</b>	<b>104,952</b>	<b>50,679</b>	<b>48%</b>	<b>29,230</b>	<b>12,811</b>	<b>44%</b>	<b>134,182</b>	<b>63,490</b>	<b>47%</b>
<b>NEW SOUTH WALES</b>									
Mungindi	13,148	2,570	20%	9,500	8,304	87%	22,648	10,874	48%
Gwydir	53,795	33,063	61%	68,000	33,168	49%	121,795	66,231	54%
Walgett	11,693	140	1%	22,200	13,015	59%	33,893	13,155	39%
Bourke	3,341		0%			0%	3,341	0	0%
Namoi	52,950	9,690	18%	61,000	13,145	22%	113,950	22,835	20%
Macquarie	37,528	14,437	38%	1,600	428	27%	39,128	14,865	38%
Lachlan	16,436	6,428	39%	60		0%	16,496	6,428	39%
Murrumbidgee/Murray	66,677	25,927	39%		13	0%	66,677	25,940	39%
<b>NSW Total</b>	<b>255,568</b>	<b>92,255</b>	<b>36%</b>	<b>162,360</b>	<b>68,073</b>	<b>42%</b>	<b>417,928</b>	<b>160,328</b>	<b>38%</b>
<b>AUSTRALIAN TOTAL</b>	<b>364,439</b>	<b>142,985</b>	<b>39%</b>	<b>206,590</b>	<b>82,945</b>	<b>40%</b>	<b>571,029</b>	<b>225,930</b>	<b>40%</b>

### Cotton Area by Valley 2023/24



### Extended Data Coverage 2023/24

