

AUSTRALIAN COTTON COMPARATIVE ANALYSIS 2011 CROP



Australian Government

Cotton Research and
Development Corporation



BOYCE
CHARTERED ACCOUNTANTS

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Dear Grower,

We are pleased to present to you the 2011 Australian Cotton Comparative Analysis.

The Comparative Analysis is a joint initiative between Cotton Research & Development Corporation and Boyce Chartered Accountants to produce the industry benchmark for the economics of cotton growing in Australia.

The sample of participants this year again captures a representation from the different valleys. It is our aim to increase the sample as we move forward with the analysis.

While the report focuses on the 2011 crop, it also presents trends that have been measured against more than 10 years of data.

The report has been posted on the web pages of Boyce Chartered Accountants (www.boyceca.com) and CRDC (www.crdc.om.au). While we welcome people using the figures contained in this report, it should be noted that this report or any part of it cannot be used for publication or reproduction without authorisation.

We look forward to discussing the report with you.



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Introduction to the
Australian Cotton
Comparative Analysis
2011 Crop

1 INTRODUCTION TO THE AUSTRALIAN COTTON COMPARATIVE ANALYSIS 2011 CROP

The 2011 Australian Cotton Comparative Analysis (ACCA) is the seventh report produced by Boyce Chartered Accountants in conjunction with the Cotton Research & Development Corporation (CRDC). Prior to that Boyce had produced the report since 1986.

In this report, we present an analytical review of the 2011 results, a comparison with prior years and comments on emerging trends.

This year was a record year in terms of plantings, bale production and price. After 10 years of general drought, the extent of the wet ironically caused problems, especially in Central Queensland and the Darling Downs. Having said that, it was great to see the industry back to full production.

Yield continues to be 'king' in terms of profitability, while extreme weather events seem to have become the norm. The ability to adapt to, and potentially benefit from, extreme weather events is becoming more important. The continuing clear message in this and previous reports has been the required focus on yield as opposed to cost reduction or price enhancement.

With increased hectares grown this year, we are seeing a return to more average costings as overheads are once again spread over full hectares. When reviewing the ten year schedules, you need to be aware that in some of the previous years the fixed and semi fixed costs have been allocated over a smaller area due to drought, and this has meant that the costs are higher than a 'normal year'.

Since the drought started, the industry has been searching for row configurations that make the most efficient use of water. To ensure you get the most out of these figures, it is worthwhile to stress that:

- a. in drought years, a grower may not be included in this analysis as they may not have grown a crop under normal irrigation practices, and
- b. the results from different row configurations other than solid have NOT been included in this analysis unless they could be 'normalised' to solid configuration equivalent.

For these reasons, care should be taken when using the results from this analysis as an indicator of the profitability of the industry as a whole. Understanding the basis on which the analysis is constructed is the key to getting the most out of this study.

OUR SAMPLE

- The analysis includes the results of farmers who were able to plant, grow and pick their crop using close to normal irrigation practices. This year the total number of hectares in the sample increased dramatically due to an increase in the availability of water throughout many of the cotton growing areas of Australia. The average hectares planted per participant increased from 621 hectares in 2010 to 1,426 in 2011. The total number of bales in the sample was just over 400,000 bales, approximately 10% of total cotton production.
- The primary purpose of Cotton Comparative Analysis is to show the income and expenses of growing fully irrigated cotton on a per hectare basis.
- It is important to note that the analysis does not show the health of the cotton industry. Where a cotton grower grew skip or solid cotton that did not receive the full water, or grew no cotton at all, these figures are excluded from the analysis. In most, if not all cases, these alternate crops would have returned a reduced profit in comparison to growing fully irrigated cotton. Therefore, although the grower may have made a healthy per hectare profit on the hectares grown, the net profit of the total farm would have been significantly less than if the grower was able to have normal production.
- While recognising marketing as an important part of management, growers and interested parties were concerned that participants in the top 20% may be there only due to receiving a high cotton price and not as a result of good farming practices. Alternatively, good cotton growers, due to adverse currency, lint and basis positions, may have been excluded from the top 20%.

As many growers review their operation against the top 20% to look for areas of improvement, it was suggested that the top 20% and bottom 20% be selected using an average price. We have therefore selected the top 20% and bottom 20% by substituting the price that the grower received with a price of \$526. This was the average net price for all participants. Using this average price, the participants with the highest and lowest operating profits per hectare were noted for inclusion in the top and bottom 20%.

Even though the average price was used to select the participants in the top and bottom 20%, the growers' actual figures are reported in this analysis.

THE NEED TO BENCHMARK

Financial analysis using comparative statistics helps farmers identify relative strengths and weaknesses. Accompanying budgets and long term business plans will then focus on ways to overcome weaknesses and build on strengths. In other words, this comparative analysis is a management tool to implement change and to identify where effort should be directed on a day to day basis.

Obviously, this analysis does not provide all the answers. It is a benchmark or a standard to strive for. It is up to management to develop and implement specific action plans, based on their improved knowledge, to reach new goals set.

These reliable, independent figures are the starting point for farmers to develop "best practice".

We encourage participants in this survey to discuss their results with us and to clarify any queries, so everyone can develop a better understanding of the industry.

2

Report on the 2011 crop



2 REPORT ON THE 2011 CROP

2.1 THE 2011 CROP – ANALYTICAL REVIEW

2.1.1 INTRODUCTION

After the long drought, 2011 will be remembered as an amazing year. Record crop plantings, record per bale prices, the high incidence of replanting activity, cold temperatures and flooding all played their part on the season. Further, the Murrumbidgee area has come into its own, rivalling other valleys for acres planted. Dryland areas continue to expand.

The sample size of the analysis has increased significantly, and the areas planted per farm mean that overheads per hectare have been smoothed back to more normal levels.

For the average grower, the total income per hectare (\$5,391) was a record, with the top 20% also experiencing record income per hectare (\$6,051). While the average price per bale was a very healthy \$526, very few growers got much away at the record levels read about in the press. Yield continues to increase, but in our view the increase is tapering off.

Expenses per hectare have reduced significantly from recent years, but this requires more analysis. Overheads per hectare have reduced mainly due to the increased hectares grown by participants. The top 20% had \$335 less expenses per hectare than the average growers, although it seems as though the gap between the top 20% and the average is narrowing here. A few more years of full water and therefore full plantings will give us a better idea of the rate at which expenses are increasing for both subsets of the analysis.

Profits for both the average and top 20% were at levels not previously seen under this analysis - \$1,559 per hectare for the average and \$2,749 for the top 20%.

This year we have again included trend lines in some of the graphs presented. Interesting trends from 1997 to 2011 have emerged including the following:

- The value per bale is increasing ever so slightly, although we have seen no real growth here (after inflation).
- There has been significant growth in cost per hectare. These two statistics confirm the decreasing terms of trade for the industry.
- The yield per hectare is increasing, although in our view, this increase is occurring at a reduced rate.
- The operating profit per hectare for the average grower is relatively static.
- The operating profit per hectare for the top 20% of growers is increasing.

The drought has distorted the data in the 2003, 2004 and the 2007 to 2010 years. Accordingly, when using this analysis to assist with a review of your own operations and with the preparation of budgets, we recommend that you look at the 2011 year and the 2002 and prior years' data because these were the last "normal" years.

It is important to understand that where a crop has not been picked due to flooding or some other disaster other than hail, the expenses relating to the affected area have been excluded from the sample.

5 year average (2001, 2002, 2005, 2006 & 2011)

We believe the message of the five year average is important. What we are really trying to show by the five year average is the real income and expense on a per hectare basis in a “normal” year. Therefore, as we didn’t want to distort the average by including years effected by drought, we have reported the five year average to 2011 as being the 2001, 2002, 2005, 2006 and 2011 years. As the average includes figures going back 11 years, you need to be careful how you use these figures.

2.1.2 KEY PERFORMANCE INDICATORS

1. Yield (bales / HA)

	<u>AVERAGE</u>	<u>TOP 20%</u>	<u>DIFFERENCE</u>
2011	10.04	11.20	1.08
2010	10.24	10.75	0.51
2009	9.58	9.79	0.21
2008	10.62	9.76	(0.86)
2007	10.00	10.35	0.35
5 year average to 2011	9.26	10.36	1.10



What is your water use efficiency in terms of bales per megalitre?
 Do your employees know your yield expectations?
 Have you reviewed your strategies depending on the availability of water?
 What was your maximum yield in a field and do you know why the other fields or areas did not perform as well?

2. Value (\$ / bale)

	<u>AVERAGE</u>	<u>TOP 20%</u>	<u>DIFFERENCE</u>
2011	\$526	\$508	(\$18)
2010	\$481	\$484	\$3
2009	\$487	\$500	\$13
2008	\$423	\$444	\$21
2007	\$423	\$411	(\$12)
5 year average to 2011	\$439	\$424	(\$15)

- The average cash price for the 12 months was around \$600. The average and the top 20% achieve less than the average price as most people had sold the majority of their cotton in the lead up to the high prices and by the time they realised that they may have excess bales after picking, the price had retreated to more normal levels.



What strategies do you have in place to combat adverse currency and futures?
 How much cotton have you sold for the 2012 and 2013 crops?
 How do you forward market now there is some water security?
 Do you understand all the strategies that are available?
 Has the worry and risk of your marketing strategy been worth the benefit you have gained?



3. Operating costs (\$ / HA)

	<u>AVERAGE</u>	<u>TOP 20%</u>	<u>DIFFERENCE</u>
2011	\$3,472	\$3,137	\$335
2010	\$3,976	\$3,791	\$185
2009	\$4,303	\$4,068	\$235
2008	\$4,525	\$2,821	\$1,704
2007	\$4,186	\$3,328	\$858
5 year average to 2011	\$3,083	\$2,662	\$421

- Of the total decrease in costs on the previous year of \$504/ha, most of the decreases were due to decreases in fixed type costs as growers had more area on which to spread these costs. There were increases in cartage (greater yield and cost of carrying the round bales), contract picking (increased cost of round bale pickers, farmers willing to get contractors in to get the crop off rather than spread out the picking with own pickers), contract farming (larger area planted on each farm meant that the growers required assistance to plant, cultivate etc), and cotton picking wrap and sundries (more growers moving towards round bales and therefore the cost of wrap).
- There was a large range with the operating costs varying between \$2,677/ha and \$4,093/ha. This was due to low cost growers having more water while other growers only had a small portion of their area planted due to less water.
- The average operating costs for the “low cost growers” was \$2,960 compared to \$3,574/ha in 2010.



What steps can you take in a “normal year” to keep your operating costs below \$3,600/ha?
 Are you monitoring the costs which are much higher than the average?
 Have you investigated group purchasing arrangements?
 Does your strategy in relation to fixed costs need to change to minimise losses in low water years?
 Should you be using more contractors so that in low water years you don't have the fixed costs?

4. Cost of production (\$ / Bale)

	<u>AVERAGE</u>	<u>TOP 20%</u>	<u>DIFFERENCE</u>
2011	\$346	\$282	\$64
2010	\$388	\$353	\$35
2009	\$449	\$415	\$34
2008	\$426	\$289	\$137
2007	\$419	\$322	\$97
5 year average to 2011	\$334	\$259	\$75

- A low cost of production per bale (driven by higher yields) is the most significant feature of the top 20%. This is achieved by producing more bales of cotton from the same cost base. In the 2011 year this was achieved by the top 20% as they grew a higher yield per hectare (11.12 bales/ha) and grew cotton on a larger area of their farm. This enabled them to spread the fixed and semi fixed costs over a greater area.
- Long-term average figures for the top producers prove that it is possible to achieve a benchmark cost of production in the \$290 to \$350 per bale range in a “normal” year.
- With the extra yield of 0.25 - 0.5 bales per hectare, costs change very little.



Are you continually focusing on your cost of production per bale?
 What are the top 20% doing different to you?



5. Comparison of valleys

Below is a comparison of statistics for each valley.

	<u>GWYDIR</u>	<u>MCINTYRE</u>	<u>MACQUARIE</u>	<u>NAMOI</u>	<u>OTHER</u>
Gross income (\$/ha)	\$6,214	\$5,855	\$5,800	\$4,327	\$5,213
Operating costs (\$/ha)	\$3,476	\$3,588	\$3,230	\$2,813	\$3,570
Operating profit (\$/bale)	\$130	\$199	\$234	\$193	\$172
Hectares grown	1,137	1,353	363	859	2,538
Yield / ha	11.45	11.41	10.98	7.83	9.56

- The sample size this year for the Emerald and Walgett valleys was not large enough to be included separately in the analysis.

6. Labour (hectares per person)

	<u>AVERAGE</u>	<u>TOP 20%</u>	<u>DIFFERENCE</u>
2011	185	176	9
2010	167	158	9
2009	172	139	33
2008	107	281	(174)
2007	140	138	2
5 year average to 2011	185	234	(49)

- The number of green hectares per person has increased on the previous year.
- The lack of skilled labour continues to be a major concern for cotton businesses.
- A number of farms are looking to outsource various operations based on priority agreements with contractors.
- Having the right balance between own labour and contractors is a definite advantage in a low water year. However, growers may struggle to find contractors in a return to full water production.



Are there some farm operations that could be outsourced while maintaining timeliness of operations?

7. Available tractor horse power (Horse power / 500 HA)

	<u>AVERAGE</u>	<u>TOP 20%</u>	<u>DIFFERENCE</u>
2011	314	344	(30)
2010	632	613	19
2009	567	521	46
2008	454	399	55
2007	447	503	(56)
5 year average to 2011	405	434	(29)

- Comments made for labour are also applicable for available tractor horsepower.
- Having the correct equipment to get the operations done on time is the most important consideration. On the other hand, over capitalisation impacts on several cost centres that can increase costs, i.e. labour and R&M.
- Having a proportion of contractors is a definite advantage in a low water year.



Are you fully utilising all machinery that you currently own or can you free up some capital by selling excess plant? What security are you using for the financing of your machinery? Will back-to-back cotton change your ability to use minimum tillage systems with consequences for tractor horse power?

8. Available picking capacity (Picker heads / 500 HA)

	<u>AVERAGE</u>	<u>TOP 20%</u>	<u>DIFFERENCE</u>
2011	2.38	3.39	(1.01)
2010	1.84	1.69	0.15
2009	2.05	2.39	(0.34)
2008	1.67	0.00	1.67
2007	2.26	2.07	0.19
5 year average to 2011	2.36	3.07	(0.71)

- The number of pickers a grower owns doesn't appear to be a significant factor in them being in the top 20%.



Do you have the capacity to pick your crop in 21 days (using your own pickers or having reliable contractors)?
 Have you analysed the full cost of owning pickers?
 What does it cost you not to pick within 21 days?
 What does it cost to have pickers in the shed, not being fully utilised?

9. Rotation

	<u>AVERAGE</u>	<u>TOP 20%</u>	<u>DIFFERENCE</u>
2011	70%	70%	(0%)
2010	34%	42%	8%
2009	52%	48%	(4%)
2008	49%	39%	(10%)
2007	50%	57%	7%
5 year average to 2011	56%	51%	(5%)

- For most farmers, water has been the major determining factor in the amount of rotation.
- Growers are very aware of the benefits of a sustainable fallow program.
- Short-term financial analysis does not prove that rotation is beneficial. Additional factors need to be considered when deciding how much country to rotate – management, agronomic, environmental, and long fallow syndrome.



What is the balance between rotation and short term profits?

2.1.3 FIVE YEAR AVERAGES TO 2011

As noted in the introduction, we believe (in normal years) the message of the five year average is important, and so we have compared five year average figures for the average farmer and the top 20% using the 2001, 2002, 2005, 2006 and 2011 years.

What makes the top 20% so much better than average?

In the five selected years, the top 20% of farmers made 237% more profit (after interest) than the average (\$1,548/ha compared to \$652/ha).

The difference is attributed to the following factors:

Land productivity (yield)	51%	or	\$457
Price	(15%)	or	(\$131)
Hail insurance claims	9%	or	\$77
Direct cost savings - excluding			
Wages - Proprietors (fine tuning)	48%	or	\$431
Interest savings (less debt)	7%	or	\$62
	100%		\$896

The message from these figures is that better land productivity (measured by higher yields) is the major feature of the top performers. Farmers should concentrate on growing more yield rather than searching for dramatic cost cutting measures if they wish to improve their performance significantly.

2.1.4 OTHER OBSERVATIONS

Over the years, many “rules of thumb” have been developed and quoted by farmers, financiers and accountants:

- Cotton farmers are, in principle, debt free if, at year-end, their equity in cotton pools covers their total borrowings.
- The contingent tax liability associated with crop proceeds tipped forward (pools) should always be calculated and bought to account at year end when measuring your wealth.
- Debt should not exceed 150% of average gross farm income (100% when interest rates are above 12%).
- High wage costs and machinery horsepower are a quick indicator of overall high costs of operations.
- Don't underestimate the value of knowledge, within your industry and worldwide. It can be difficult to keep up to date on the latest practices, but falling behind can cost you money.
- Because of the high fixed and semi fixed costs in this industry, it is becoming increasingly important to be able to grow enough area every year to cover these costs.

2.1.5 FEATURES OF THE TOP PERFORMERS

Over the past fifteen years, many cotton farmers have been able to achieve top-class results, even in years when seasonal or financial circumstances were less than favourable.

Outlined below are some of the distinguishing characteristics and features of successful cotton growers:

- **Controlled operating costs**

Operating costs (before interest) for farmers have averaged \$3,083/ha for the past five years. With fine-tuning, the best farmers have been able to keep their operating costs under control without sacrificing yield, while still adequately maintaining all assets. The performance of the “low cost” farmers operating at their optimum scale over the past five years proves that a target for operating costs of \$3,000 to \$3,300/ha is achievable in a normal year. These figures translate to operating costs per bale of \$300 to \$330.

- **Consistent marketing strategies**

There are a large number of marketing alternatives available to cotton farmers. The strategies adopted by individual farmers depend on:

- a. Individual outlook on risk
- b. World-wide economic outlook
- c. Taxation implications
- d. Cash flow implications
- e. Water availability
- f. Level of knowledge on how to use the complex alternatives.

To date, the perfect marketing strategy has proved to be elusive. Farmers need to make marketing decisions with the aim of maximising their crop income and remembering that a net return in excess of \$485/bale should produce a sizeable profit.

In our opinion, the application of consistent marketing strategies on a year in year out basis is the key to maximising per bale prices on the longer term.

The top farmers know their cost of production per bale. They then base marketing decisions on that cost and work on yield to increase their profit.

- **Productive labour**

Top-class results cannot be produced without having a top-class team of employees who are efficient, focused, motivated and stable. The best farms ensure that employees are kept informed, are trained to do their job properly, given responsibility and an opportunity to participate in on-farm decision making. It is also essential that employees are properly remunerated and take their holidays every year. The most efficient farms are operating with one permanent person for every 220 hectares.

- **Reliable machinery**

All good farmers appreciate the importance of timing, so they ensure that they own or have access to sufficient reliable machinery to carry out all operations efficiently and on time. For farmers who decide to own tractors to carry out all field operations, capacity of 450 to 500 engine horsepower per 500 hectares is generally required. The ideal picking capacity for farms is subject to a great deal of debate, with many efficient operators concluding that the whole picking operation should be carried out by contractors. The best farmers aim to complete their picking operation within 21 days.

- **Sustainable farming techniques (rotation)**

Many of the benefits of a stringent rotation program are not quantifiable in the short term and the benefits that are quantifiable are often disguised by other variables that can affect yield in any season. However, growers are rotating to address the issues of disease and to allow for the re-levelling of fields.

If farmers are going to maintain a sustainable cotton production system, maintain high yields, and achieve high levels of profitability in the long term, the issue of rotation needs to be included in the equation.

Obviously, the amount of water plays a huge role in rotation however the idea is to aim for a 2:1 rotation in the long term.

The top performers are continually looking at varied crops for rotation. These decisions are being made for agronomic and financial reasons. Industry awareness is required to learn from these operators.



- **Water use efficiency**

The timing of when water is applied is critical in the production of high yielding crops. As water becomes even more limited, the science behind the timing of watering and understanding each variety's reaction to the timing of water will become even more crucial. Growers are now paying closer attention to measuring water use efficiency.

- **Conservative levels of debt**

Many farmers are carrying large amounts of debt, with debt levels of 40% to 50% being common. By adopting sound, sustainable practices, the best farmers have been able to generate a significant cash surplus to repay borrowings. The best farmers are in an enviable position of being able to survive in tough times, and in some circumstances expand the scale of their operations. It must be remembered that debt can only be repaid out of a cash surplus after allowing for taxation, drawings and capital purchases, or from the sale of other assets. Over the last 15 years there has been significant capital gain for the holders of water licences. This has allowed debt levels to increase while maintaining the debt to equity margin. We do not believe that capital gain can continue at the same rate, and the future reduction in the debt to equity margin will need to be out of profits, not capital gain.

Our current low interest rate environment should encourage growers to look at protecting their borrowings through interest rate management. Financiers are offering many varied products that provide this protection.

Farmers are considered to be in a solid financial position (category A) if their debts are covered by the value of equity in cotton pools at 30 June.

- **Efficient financial management**

Good farmers keep their financial affairs up to date and under control by utilising computerised office tools.

Annual budgets are prepared by the top performers on a conservative basis, with realistic yet challenging targets. Performance is then monitored monthly, comparing actual results with the previously prepared budget. With up-to-date management reports, top performers are able to analyse performance and fine tune operations on a regular basis. They also keep their financiers well informed at all times.

- **Timing**

The best farms carry out all operations "on time". Fields are ready to plant as soon as the season permits, machinery is always ready to carry out the next task and team members always know what they have to do a week or a month ahead. Waterings are never late. Being "on time" is a result of good planning and good communication and leads to increased yields.

- **Planning and long term vision**

At the heart of every good operation is a person with vision; vision of where the business is going on a day-to-day basis, on an annual basis, and on a long-term basis (10 years plus). The best farmers always seem to have time on their hands because they have clearly defined goals. They have communicated those goals to their team members, then take on the role of a coach, guiding and encouraging their team who carry out the day-to-day activities.

- **High yields**

High yields are the reward for getting all aspects of a farming operation right. No single farming technique, method of operation or management decision is going to have a significant impact. Top performers do all the little things thoroughly and on time, and as a consequence "reap the rewards".

The best farmers consistently achieve yields in excess of 10 bales/ha year after year (assuming adequate water availability and no disasters – hail, floods). Total farm averages of greater than 11.0 bales/ha have been achieved and are now a realistic goal, especially using the excellent cotton varieties that are continually being developed.



2.2 RETURN ON ASSETS

2.2.1 WHAT RETURN ON ASSETS AM I GETTING?

With costs continuing to rise, current low cotton prices, land and water at record levels (in proportion to return) and a lot of discussion regarding where capital growth of the industry will come from, growers must continue to look at the return on assets of a cotton farm.

Although a long term view is essential, if the industry is in for a period of sustained reduced return on assets, and potentially low capital growth, growers must continually look at alternative investments (allowing for risk) to assess what is the real return of a cotton farm.

As a general statement, the 10 year average figures should not be used when analyzing the return on assets of the industry as a whole without making an allowance for the drought years where the figures on non-irrigated areas will not be included in the report and taking into account the fallow fields.

Trend lines indicate that the top 20% profit is relatively flat and the average growers' profits are trending down.

How do I calculate my simple return on assets (ROA)?

The simple ROA is calculated by dividing your operating profit per hectare (before interest) by the value of a fully developed, protected and licenced hectare.

We have included a worksheet to calculate your individual ROA. The process is easy to follow and is as below:-

- i. From the farm operating profit/(loss) per ha spread sheet find your yield and price per bale. Match these up to calculate your operating profit (before interest) based on costs of \$3,500/ha.
- ii. Find the profit closest to your farm along the base of the return on assets based on various profits and land variations spread sheets.
- iii. Select a value per developed, licenced and protected hectare. (You may want to add a value per hectare based on your machinery investment e.g. \$1,500,000 machinery divided by 1,500 hectares increases your investment by \$1,000/ha).
- iv. Match the two up and calculate your simple return on assets.

RETURN ON ASSETS CALCULATOR 2011

FARM OPERATING PROFIT/(LOSS) PER HECTARE BASED ON ALTERNATIVE YIELDS AND PRICES - BEFORE INTEREST.

650	1,213	1,375	1,538	1,700	1,863	2,025	2,188	2,350	2,513	2,675	2,838	3,000	3,163	3,325	3,488	3,650	3,813	3,975	4,138	4,300	4,463	4,625
640	1,140	1,300	1,460	1,620	1,780	1,940	2,100	2,260	2,420	2,580	2,740	2,900	3,060	3,220	3,380	3,540	3,700	3,860	4,020	4,180	4,340	4,500
630	1,068	1,225	1,383	1,540	1,698	1,855	2,013	2,170	2,328	2,485	2,643	2,800	2,958	3,115	3,273	3,430	3,588	3,745	3,903	4,060	4,218	4,375
620	995	1,150	1,305	1,460	1,615	1,770	1,925	2,080	2,235	2,390	2,545	2,700	2,855	3,010	3,165	3,320	3,475	3,630	3,785	3,940	4,095	4,250
610	923	1,075	1,228	1,380	1,533	1,685	1,838	1,990	2,143	2,295	2,448	2,600	2,753	2,905	3,058	3,210	3,363	3,515	3,668	3,820	3,973	4,125
600	850	1,000	1,150	1,300	1,450	1,600	1,750	1,900	2,050	2,200	2,350	2,500	2,650	2,800	2,950	3,100	3,250	3,400	3,550	3,700	3,850	4,000
590	778	925	1,073	1,220	1,368	1,515	1,663	1,810	1,958	2,105	2,253	2,400	2,548	2,695	2,843	2,990	3,138	3,285	3,433	3,580	3,728	3,875
580	705	850	995	1,140	1,285	1,430	1,575	1,720	1,865	2,010	2,155	2,300	2,445	2,590	2,735	2,880	3,025	3,170	3,315	3,460	3,605	3,750
570	633	775	918	1,060	1,203	1,345	1,488	1,630	1,773	1,915	2,058	2,200	2,343	2,485	2,628	2,770	2,913	3,055	3,198	3,340	3,483	3,625
560	560	700	840	980	1,120	1,260	1,400	1,540	1,680	1,820	1,960	2,100	2,240	2,380	2,520	2,660	2,800	2,940	3,080	3,220	3,360	3,500
550	488	625	763	900	1,038	1,175	1,313	1,450	1,588	1,725	1,863	2,000	2,138	2,275	2,413	2,550	2,688	2,825	2,963	3,100	3,238	3,375
540	415	550	685	820	955	1,090	1,225	1,360	1,495	1,630	1,765	1,900	2,035	2,170	2,305	2,440	2,575	2,710	2,845	2,980	3,115	3,250
530	343	475	608	740	873	1,005	1,138	1,270	1,403	1,535	1,668	1,800	1,933	2,065	2,198	2,330	2,463	2,595	2,728	2,860	2,993	3,125
520	270	400	530	660	790	920	1,050	1,180	1,310	1,440	1,570	1,700	1,830	1,960	2,090	2,220	2,350	2,480	2,610	2,740	2,870	3,000
510	198	325	453	580	708	835	963	1,090	1,218	1,345	1,473	1,600	1,728	1,855	1,983	2,110	2,238	2,365	2,493	2,620	2,748	2,875
500	125	250	375	500	625	750	875	1,000	1,125	1,250	1,375	1,500	1,625	1,750	1,875	2,000	2,125	2,250	2,375	2,500	2,625	2,750
490	53	175	298	420	543	665	788	910	1,033	1,155	1,278	1,400	1,523	1,645	1,768	1,890	2,013	2,135	2,258	2,380	2,503	2,625
480	-20	100	220	340	460	580	700	820	940	1,060	1,180	1,300	1,420	1,540	1,660	1,780	1,900	2,020	2,140	2,260	2,380	2,500
470	-93	25	143	260	378	495	613	730	848	965	1,083	1,200	1,318	1,435	1,553	1,670	1,788	1,905	2,023	2,140	2,258	2,375
460	-165	-50	65	180	295	410	525	640	755	870	985	1,100	1,215	1,330	1,445	1,560	1,675	1,790	1,905	2,020	2,135	2,250
450	-238	-125	-13	100	213	325	438	550	663	775	888	1,000	1,113	1,225	1,338	1,450	1,563	1,675	1,788	1,900	2,013	2,125
440	-310	-200	-90	20	130	240	350	460	570	680	790	900	1,010	1,120	1,230	1,340	1,450	1,560	1,670	1,780	1,890	2,000
430	-383	-275	-168	-60	48	155	263	370	478	585	693	800	908	1,015	1,123	1,230	1,338	1,445	1,553	1,660	1,768	1,875
	7.25	7.50	7.75	8.00	8.25	8.50	8.75	9.00	9.25	9.50	9.75	10.00	10.25	10.50	10.75	11.00	11.25	11.50	11.75	12.00	12.25	12.50

\$/ BALE

AVERAGE YIELD PER HECTARE

Steps

1. Pick your price per bale & yield / HA.
2. Match them up and get your profit per hectare based on growing costs of \$2,950.
3. Find your closest profit range on the bottom of the next graph.



RETURN ON ASSETS CALCULATOR 2011

RETURN ON ASSETS BASED ON VARIOUS PROFITS AND LAND VALUATIONS

	100	300	500	600	700	800	900	1,000	1,100	1,200	1,300	1,400	1,500	1,700	1,900	2,000	2,200	2,400	2,600	2,800	3,000	3,200
\$20,000	0.5%	1.5%	2.5%	3.0%	3.5%	4.0%	4.5%	5.0%	5.5%	6.0%	6.5%	7.0%	7.5%	8.5%	9.5%	10.0%	11.0%	12.0%	13.0%	14.0%	15.0%	16.0%
\$19,500	0.5%	1.5%	2.6%	3.1%	3.6%	4.1%	4.6%	5.1%	5.6%	6.2%	6.7%	7.2%	7.7%	8.7%	9.7%	10.3%	11.3%	12.3%	13.3%	14.4%	15.4%	16.4%
\$19,000	0.5%	1.6%	2.6%	3.2%	3.7%	4.2%	4.7%	5.3%	5.8%	6.3%	6.8%	7.4%	7.9%	8.9%	10.0%	10.5%	11.6%	12.6%	13.7%	14.7%	15.8%	16.8%
\$18,500	0.5%	1.6%	2.7%	3.2%	3.8%	4.3%	4.9%	5.4%	5.9%	6.5%	7.0%	7.6%	8.1%	9.2%	10.3%	10.8%	11.9%	13.0%	14.1%	15.1%	16.2%	17.3%
\$18,000	0.6%	1.7%	2.8%	3.3%	3.9%	4.4%	5.0%	5.6%	6.1%	6.7%	7.2%	7.8%	8.3%	9.4%	10.6%	11.1%	12.2%	13.3%	14.4%	15.6%	16.7%	17.8%
\$17,500	0.6%	1.7%	2.9%	3.4%	4.0%	4.6%	5.1%	5.7%	6.3%	6.9%	7.4%	8.0%	8.6%	9.7%	10.9%	11.4%	12.6%	13.7%	14.9%	16.0%	17.1%	18.3%
\$17,000	0.6%	1.8%	2.9%	3.5%	4.1%	4.7%	5.3%	5.9%	6.5%	7.1%	7.6%	8.2%	8.8%	10.0%	11.2%	11.8%	12.9%	14.1%	15.3%	16.5%	17.6%	18.8%
\$16,500	0.6%	1.8%	3.0%	3.6%	4.2%	4.8%	5.5%	6.1%	6.7%	7.3%	7.9%	8.5%	9.1%	10.3%	11.5%	12.1%	13.3%	14.5%	15.8%	17.0%	18.2%	19.4%
\$16,000	0.6%	1.9%	3.1%	3.8%	4.4%	5.0%	5.6%	6.3%	6.9%	7.5%	8.1%	8.8%	9.4%	10.6%	11.9%	12.5%	13.8%	15.0%	16.3%	17.5%	18.8%	20.0%
\$15,500	0.6%	1.9%	3.2%	3.9%	4.5%	5.2%	5.8%	6.5%	7.1%	7.7%	8.4%	9.0%	9.7%	11.0%	12.3%	12.9%	14.2%	15.5%	16.8%	18.1%	19.4%	20.6%
\$15,000	0.7%	2.0%	3.3%	4.0%	4.7%	5.3%	6.0%	6.7%	7.3%	8.0%	8.7%	9.3%	10.0%	11.3%	12.7%	13.3%	14.7%	16.0%	17.3%	18.7%	20.0%	21.3%
\$14,500	0.7%	2.1%	3.4%	4.1%	4.8%	5.5%	6.2%	6.9%	7.6%	8.3%	9.0%	9.7%	10.3%	11.7%	13.1%	13.8%	15.2%	16.6%	17.9%	19.3%	20.7%	22.1%
\$14,000	0.7%	2.1%	3.6%	4.3%	5.0%	5.7%	6.4%	7.1%	7.9%	8.6%	9.3%	10.0%	10.7%	12.1%	13.6%	14.3%	15.7%	17.1%	18.6%	20.0%	21.4%	22.9%
\$13,500	0.7%	2.2%	3.7%	4.4%	5.2%	5.9%	6.7%	7.4%	8.1%	8.9%	9.6%	10.4%	11.1%	12.6%	14.1%	14.8%	16.3%	17.8%	19.3%	20.7%	22.2%	23.7%
\$13,000	0.8%	2.3%	3.8%	4.6%	5.4%	6.2%	6.9%	7.7%	8.5%	9.2%	10.0%	10.8%	11.5%	13.1%	14.6%	15.4%	16.9%	18.5%	20.0%	21.5%	23.1%	24.6%
\$12,500	0.8%	2.4%	4.0%	4.8%	5.6%	6.4%	7.2%	8.0%	8.8%	9.6%	10.4%	11.2%	12.0%	13.6%	15.2%	16.0%	17.6%	19.2%	20.8%	22.4%	24.0%	25.6%
\$12,000	0.8%	2.5%	4.2%	5.0%	5.8%	6.7%	7.5%	8.3%	9.2%	10.0%	10.8%	11.7%	12.5%	14.2%	15.8%	16.7%	18.3%	20.0%	21.7%	23.3%	25.0%	26.7%
\$11,500	0.9%	2.6%	4.3%	5.2%	6.1%	7.0%	7.8%	8.7%	9.6%	10.4%	11.3%	12.2%	13.0%	14.8%	16.5%	17.4%	19.1%	20.9%	22.6%	24.3%	26.1%	27.8%
\$11,000	0.9%	2.7%	4.5%	5.5%	6.4%	7.3%	8.2%	9.1%	10.0%	10.9%	11.8%	12.7%	13.6%	15.5%	17.3%	18.2%	20.0%	21.8%	23.6%	25.5%	27.3%	29.1%
\$10,500	1.0%	2.9%	4.8%	5.7%	6.7%	7.6%	8.6%	9.5%	10.5%	11.4%	12.4%	13.3%	14.3%	16.2%	18.1%	19.0%	21.0%	22.9%	24.8%	26.7%	28.6%	30.5%
\$10,000	1.0%	3.0%	5.0%	6.0%	7.0%	8.0%	9.0%	10.0%	11.0%	12.0%	13.0%	14.0%	15.0%	17.0%	19.0%	20.0%	22.0%	24.0%	26.0%	28.0%	30.0%	32.0%

PROFIT PER HECTARE FROM PREVIOUS WORKSHEET

VALUE €/HA

Steps

1. Once you have found out your closest profit, select a value per developed, licensed and protected hectare and work our your simple return on assets.



2.2.2 WHY MEASURE ROA?

- In isolation ROA provides you with a measure to better assess alternative investments. Any one year's ROA should not serve as the yardstick to base decisions such as entry or exit of the industry.
- This ROA does not include any increase in the value of your assets. If, in a year, you achieve 7% ROA and the value of your assets increase by 5% then your total return is 12%.

Linked directly to this is the fact that you now have a higher asset value, and next year if you achieve the same profit your ROA will be lower.

- Use the calculator to predict what your future returns may be.

For example:

- Assume a profit of \$800/ha against today's valuation of \$10,000 ha – 8% return
- Now use the same profit against an increased market rate of \$15,000/ha – 5.3% return
- To achieve an 8% return against a \$15,000/ha valuation you need to reach a profit of \$1,200/ha.

- The cotton yield remains the greatest variable when looking forward or doing current comparisons between growers. As discussed in this and prior reports, land productivity (yield) contributes to the majority of the difference between the top 20% and the average. What difference does yield make on ROA?

For example:

- 2011 profit before interest for the 5 year average of \$1,072/ha against \$17,500/ha – 6.1% return
- 2011 profit before interest for the 5 year top 20% of \$1,854/ha against \$17,500/ha – 10.6% return
(Yield differential of 1.10 bales/ha).

- ROA needs to be balanced against such factors as risk, sustainability and reinvestment. If an individual has as their main aim to increase the ROA, this may have a negative impact on sustainability, as they may not reinvest through redevelopment and take other sustainable actions.
- There is a direct link between ROA and yield. The drive continues to be to increase yield which should increase profits and ROA. The need to balance this aim and long-term sustainability becomes the challenge facing the industry.



2.3 CONCLUSION

The 2011 season will be remembered for a return to more normal conditions with respect to water, and a year in which good yields and price aligned. Average gross income was the highest on record. Although the lint price exceeded \$AU1,000 per bale for a short period, the average bale price was \$526, which was the highest since 2004. Yield continues to climb.

Net profit per hectare was the highest seen under this analysis.

While this is all very positive for irrigated cotton production, in our view there are some questions being asked of the industry.

The agricultural sector in general and the cotton industry in particular are known for their early adoption of technology. The technology available to today's industry, whether it is genetic, machinery based, or relating to systems and process is definitely leading to increased yield and reduced labour. The question is, at what cost? If profit maximising is the goal, we think growers should establish the impact of technology on profitability before it is adopted.

We believe that 2012 and 2013 will be tougher financially. Primarily, this will be due to the troubles the industry is experiencing with marketing, the size of the crop putting pressure on service related industries (for example ginning) and soil nutrition depletion which will result in increasing costs of inputs such as fertiliser.

The data in the Cotton Comparative Analysis has been affected by low water years and while much effort continues to be invested in trying to argue whether climate change is real, our view remains that growers should spend their efforts on ensuring they can survive and in fact profit during extreme events. If this is achieved, profit will be maximised regardless of the outcome of the climate change debate.

Although we have not attempted to analyse in detail the return on assets from a capital growth perspective, we have noted that, in the past, many growers have obtained a large increase in their net assets from the increase in the value of land and licences, rather than the accumulation of profits. It is probable that capital growth of water has slowed in established cotton growing valleys, and for some growers, this has formed the majority of their increase in net assets over time. A slowing of the increase of asset values will see a focus on profits.

This focus should see all farmers understanding what it takes to be in the top 20% and strive to ensure their business implements the necessary changes to achieve this objective.

A healthy industry cannot survive on capital growth alone.

This report has continued to measure the components that give farmers a stronger financial bottom line. The industry continues to reinvest in BMP, sustainability programs and in the communities in which it operates.



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3

Comparative Statistics



3.1 PARTICIPANTS

3.1.1 COMPARISON OF PARTICIPANTS' INFORMATION TO THE ANALYSIS

	YOUR FARM (TOTAL)	YOUR FARM	ALL FARMS	TOP 20%	BOTTOM 20%	LOW COST	GROWERS (>2,500 HA)	YOUR VALLEY
INCOME								
Cotton proceeds - Lint			5,256	5,659	4,888	4,508	5,508	
Cotton proceeds - Seed			546	584	520	440	564	
Ginning			(484)	(560)	(407)	(445)	-453	
Levies			(33)	(36)	(29)	(29)	-29	
Cotton proceeds - Hail claims			106	404	20	350	1	
			5,391	6,051	4,992	4,824	5,591	
EXPENSES								
Cartage			136	148	138	122	160	
Chemical application			138	149	136	129	127	
Chemicals - Defoliants			55	50	60	69	51	
Chemicals - Herbicides			108	112	116	108	111	
Chemicals - Insecticides			142	146	103	80	136	
Chemicals - Others			11	12	15	11	12	
Chipping			2	0	1	0	3	
Consultants			64	60	68	57	62	
Contract picking			282	253	301	258	328	
Contract farming and ripping			122	97	161	64	185	
Cotton picking wrap and sundries			55	51	62	43	50	
Depreciation			164	112	149	141	177	
Electricity			76	115	86	66	63	
Fertiliser			387	353	400	296	368	
Fuel and oil			258	213	243	201	289	
Hire of plant			22	35	21	11	26	
Insurance			161	174	151	141	182	
Licence fee - Bollgard			286	298	296	315	276	
Licence fee - Roundup ready			60	43	66	55	70	
Motor vehicle expenses			21	17	22	18	18	
R & M - Farming plant			121	87	124	77	133	
R & M - Pumps and earthworks			61	54	57	58	45	
Seed			115	102	132	101	121	
Water charges			134	61	155	144	108	
Wages - Employees			357	274	407	285	461	
Wages - Proprietors			20	20	12	7	4	
Administration			49	50	50	38	43	
Other farm overheads			65	51	61	65	57	
			3,472	3,137	3,593	2,960	3,666	
OPERATING PROFIT/(LOSS)			1,919	2,914	1,399	1,864	1,925	
ADD:								
Wages - Proprietors			20	20	12	7	4	
FARM OPERATING PROFIT/(LOSS)			1,939	2,934	1,411	1,871	1,929	

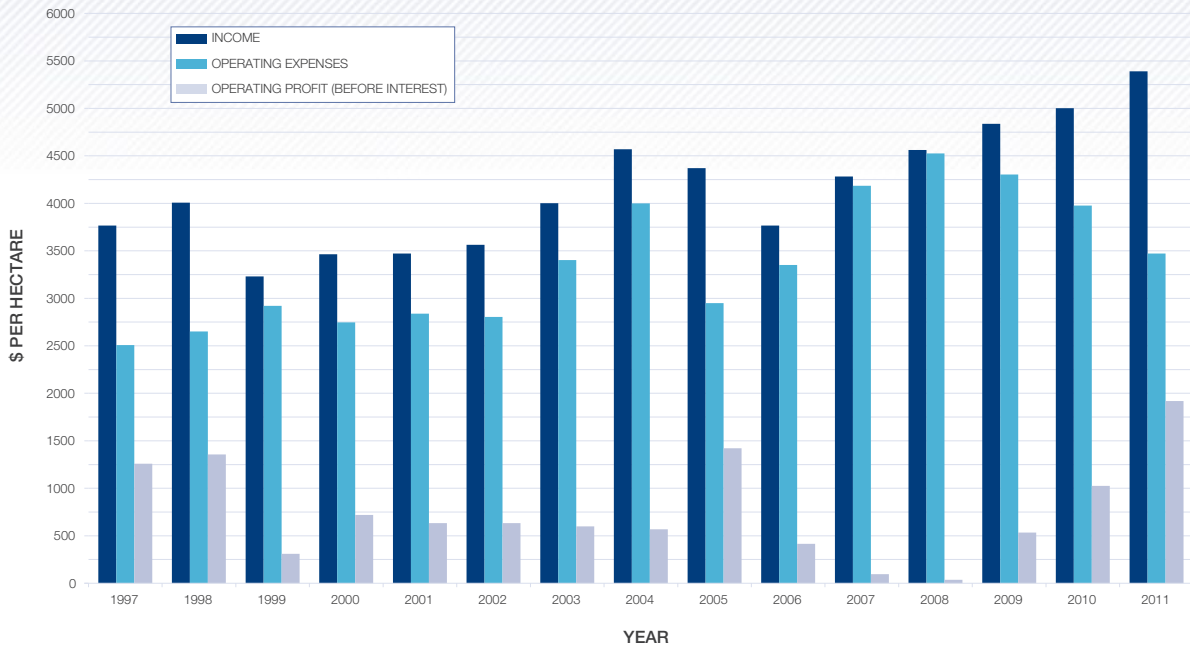
3.1.1 COMPARISON OF PARTICIPANTS' INFORMATION TO THE ANALYSIS (CONTINUED)

	<u>YOUR FARM (TOTAL)</u>	<u>YOUR FARM</u>	<u>ALL FARMS</u>	<u>TOP 20%</u>	<u>BOTTOM 20%</u>	<u>LOW COST</u>	<u>GROWERS (>2,500 HA)</u>	<u>YOUR VALLEY</u>
DEDUCT:								
Interest and bank charges			380	185	334	333	283	
Interest - Crop terms			0	0	0	0	0	
			380	185	334	333	283	
FARM NET PROFIT/(LOSS)			\$1,559	\$2,749	\$1,077	\$1,538	\$1,646	
CROP RESULTS								
Hectares of cotton grown			1,426.48	1,124.75	1,827.25	1,276.20	4,681.00	
Total yield			14,325.75	12,506.75	16,726.15	11,428.00	48,085.00	
Yield per hectare			10.04	11.12	9.15	8.95	10.27	
Value per bale			\$526.23	\$507.94	\$543.10	\$499.65	\$544.26	
Cost of production per bale			\$345.82	\$282.04	\$392.84	\$330.42	\$357.05	
Operating profit/(loss) per bale			\$190.92	\$262.27	\$152.45	\$208.27	\$187.31	
No. of bales per hectare required to cover operating expenses			6.60	6.17	6.62	5.92	6.74	
No. of bales per hectare required to cover total expenses			7.32	6.54	7.24	6.59	7.26	
LABOUR								
Number of Hectares per permanent person (excluding proprietors)			184.91	176.43	192.34	168.91	157.34	
AVAILABLE TRACTOR HORSE POWER								
Tractor horse power per 500 hectares			313.55	344.27	283.03	306.11	251.76	
AVAILABLE PICKING CAPACITY								
Picker heads per 500 hectares			2.38	3.39	2.17	2.31	1.28	
ROTATION								
Percentage of the current years' crop being grown on fallow fields or new fields (developed within the last 3 years)			69.98%	70.38%	75.43%	70.67%	80.38%	
WATER USAGE								
Megalitres per hectare			8.78	8.60	8.57	8.67	8.96	
Megalitres per bale			0.87	0.77	0.94	0.97	0.87	

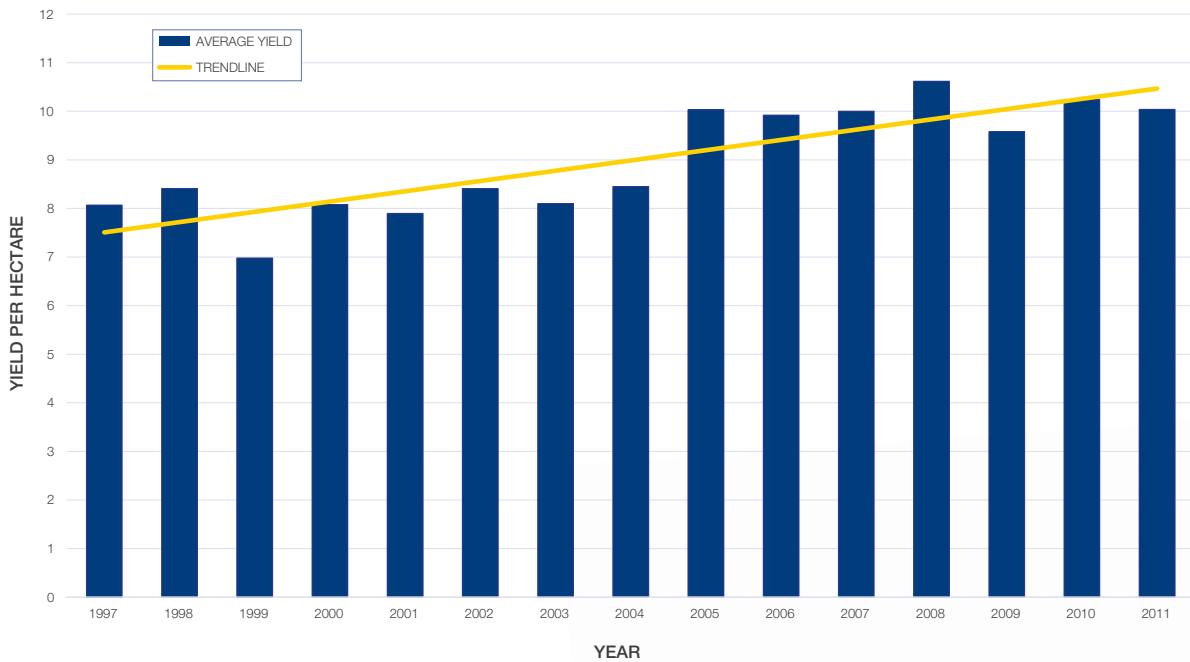


3.2 AVERAGE

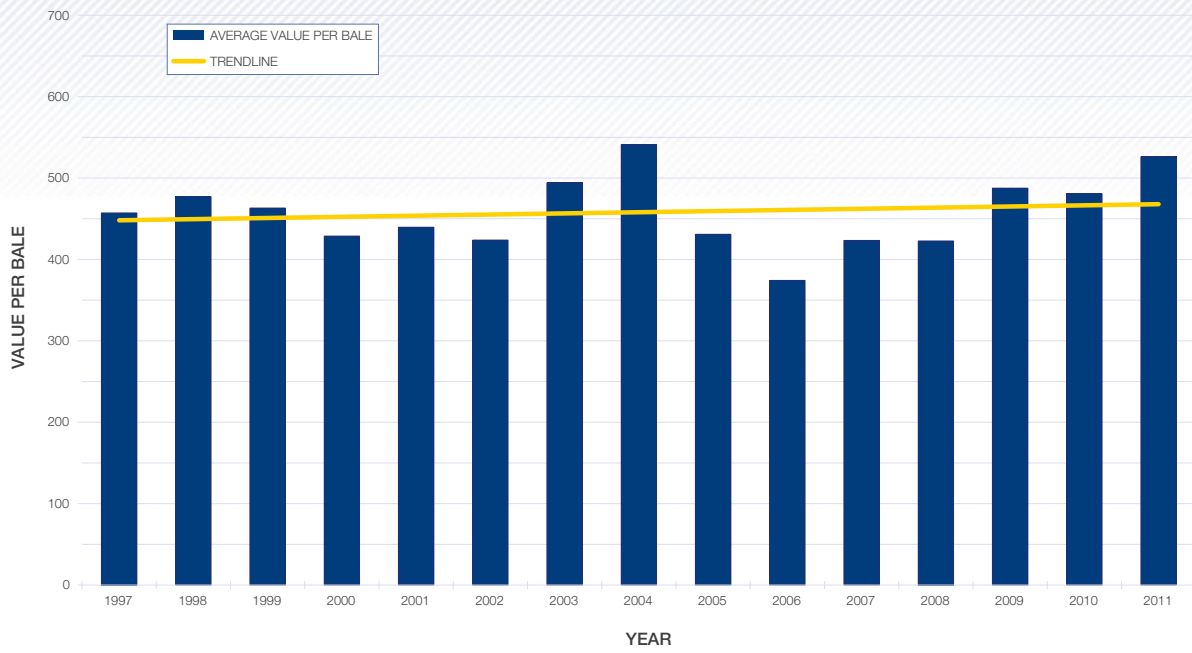
3.2.1.1 COMPARISON OF AVERAGE INCOME AND EXPENSE ITEMS



3.2.1.2 YIELD



3.2.1.3 VALUE PER BALE



3.2.2 THE PAST TEN YEARS (PER HA)

2002	2003	2004	2005	2006	2007	2008	2009	2010		2011
INCOME										
3,590	3,795	4,502	4,419	3,788	3,963	4,027	4,265	4,758	Cotton proceeds - Lint	5,256
454	542	524	452	436	859	1,016	935	742	Cotton proceeds - Seed	546
-449	-428	-436	-511	-479	-551	-521	-495	-542	Ginning	-484
-32	-32	-34	-38	-33	-38	-33	-37	-35	Levies	-33
0	124	13	48	55	49	73	169	79	Cotton proceeds - Hail claims	106
3,563	4,001	4,569	4,370	3,767	4,282	4,562	4,837	5,002		5,391
EXPENSES										
76	69	70	96	105	128	101	100	112	Cartage	136
126	105	172	137	158	115	110	87	136	Chemical application	138
83	67	95	55	57	54	71	79	63	Chemicals - Defoliants	55
124	133	178	153	109	159	183	174	108	Chemicals - Herbicides	108
304	232	451	198	292	132	116	144	151	Chemicals - Insecticides	142
12	10	11	5	3	3	4	48	38	Chemicals - Others	11
81	50	44	44	66	91	39	24	15	Chipping	2
50	54	69	58	59	75	63	76	72	Consultants	64
176	195	178	173	180	257	250	255	261	Contract picking	282
64	108	135	57	89	77	85	42	24	Contract farming and ripping	122
10	12	9	19	11	10	6	14	9	Cotton picking wrap & sundries	55
241	322	376	206	199	338	508	372	426	Depreciation	164
19	40	33	25	21	40	46	59	79	Electricity	76
249	292	263	242	356	312	394	428	399	Fertiliser	387
155	216	239	229	323	418	429	327	305	Fuel and oil	258
18	11	10	3	3	9	12	2	7	Hire of plant	22
89	131	152	116	144	227	216	217	179	Insurance	161
55	52	49	127	150	173	232	218	252	Licence fee - Bollgard	286
5	12	14	16	25	26	50	50	62	Licence fee - Roundup ready	60
16	26	30	22	22	30	31	34	35	Motor vehicle expenses	21
127	147	143	174	135	133	139	137	154	R & M - Farming plant	121
101	121	151	114	101	128	133	116	183	R & M - Pumps and earthworks	61
70	84	103	80	77	112	98	105	126	Seed	115
104	319	364	113	188	399	439	486	189	Water charges	134
309	365	384	321	327	473	445	391	384	Wages - Employees	357
51	82	91	46	38	96	105	106	69	Wages - Proprietors	20
40	66	75	45	41	68	58	58	35	Administration	49
50	81	111	75	73	103	162	154	103	Other farm overheads	65
2,805	3,402	4,000	2,949	3,352	4,186	4,525	4,303	3,976		3,472
758	599	569	1,421	415	96	37	534	1,026	OPERATING PROFIT/(LOSS)	1,919
ADD:										
51	82	91	46	38	96	105	106	69	Wages - Proprietors	20
809	681	660	1,467	453	192	142	640	1,095	FARM OPERATING PROFIT/(LOSS)	1,939



3.2.2 THE PAST TEN YEARS (PER HA) (CONTINUED)

2002	2003	2004	2005	2006	2007	2008	2009	2010		2011
DEDUCT:										
282	676	918	583	544	1,168	1,704	1,137	1,009	Interest and bank charges	380
15	41	5	3	4	0	0	0	0	Interest - Crop terms	0
297	717	923	586	548	1,168	1,704	1,137	1,009		380
\$512	(\$36)	(\$263)	\$881	(\$95)	(\$976)	(\$1,562)	(\$497)	\$86	FARM NET PROFIT/(LOSS)	\$1,559
CROP RESULTS										
1,039.06	534.91	498.09	1,027.71	936.02	531.13	449.09	486.65	621.17	Hectares of cotton grown	1,426.48
8,736.63	4,331.56	4,209.07	10,312.15	9,285.42	5,311.07	4,769.71	4,660.90	6,363.40	Total yield (bales)	14,325.75
8.41	8.10	8.45	10.03	9.92	10.00	10.62	9.58	10.24	Yield per hectare (bales)	10.04
\$423.76	\$493.92	\$540.85	\$430.78	\$374.23	\$423.35	\$422.66	\$487.41	\$480.56	Value per bale	\$526.23
\$333.67	\$420.29	\$473.60	\$293.75	\$337.82	\$418.66	\$425.99	\$449.40	\$388.37	Cost of production per bale	\$345.82
\$90.09	\$73.63	\$67.25	\$141.84	\$41.94	\$9.61	\$3.50	\$55.70	\$99.94	Operating profit per bale	\$190.92
6.62	6.89	7.40	6.84	8.95	9.89	10.70	8.83	8.28	No. of bales per hectare required to cover operating expenses	6.60
7.32	8.34	9.11	8.20	10.42	12.65	14.74	11.16	10.38	No. of bales per hectare required to cover total expenses	7.32
LABOUR										
199.99	146.72	132.82	173.78	185.44	139.77	107.24	171.76	167.24	Number of hectares per permanent person (excluding proprietors)	184.91
AVAILABLE TRACTOR HORSE POWER										
332.99	690.70	659.97	555.52	409.98	446.78	453.75	566.80	632.44	Tractor horse power per 500 hectares	313.55
AVAILABLE PICKING CAPACITY										
1.70	2.61	4.02	2.95	2.44	2.26	1.67	2.05	1.84	Picker heads per 500 hectares	2.38
ROTATION										
32.62%	41.19%	75.62%	75.68%	69.44%	49.67%	48.99%	51.68%	33.69%	Percentage of the current years' crop being grown on fallow fields or new fields (developed within the last 3 years)	69.98%
WATER USAGE										
9.29	8.14	6.93	9.00	9.62	9.00	9.00	9.00	9.00	Megalitres per hectare	8.78
1.10	1.01	0.82	0.90	0.97	0.90	0.85	0.94	0.88	Megalitres per bale	0.87



3.2.3 COMPARISON BETWEEN THE 2011 YEAR AND THE 2010 YEAR (PER HA)

	ALL FARMS 2011	ALL FARMS 2010	DIFFERENCE
INCOME			
Cotton proceeds - Lint	5,256	4,758	498
Cotton proceeds - Seed	546	742	-196
Ginning	(484)	(542)	58
Levies	(33)	(35)	2
Cotton proceeds - Hail claims	106	79	27
	5,391	5,002	389
EXPENSES			
Cartage	136	112	-24
Chemical application	138	136	-2
Chemicals - Defoliants	55	63	8
Chemicals - Herbicides	108	108	0
Chemicals - Insecticides	142	151	9
Chemicals - Others	11	38	27
Chipping	2	15	13
Consultants	64	72	8
Contract picking	282	261	-21
Contract farming and ripping	122	24	-98
Cotton picking wrap and sundries	55	9	-46
Depreciation	164	426	262
Electricity	76	79	3
Fertiliser	387	399	12
Fuel and oil	258	305	47
Hire of plant	22	7	-15
Insurance	161	179	18
Licence fee - Bollgard	286	252	-34
Licence fee - Roundup Ready	60	62	2
Motor vehicle expenses	21	35	14
R & M - Farming plant	121	154	33
R & M - Pumps and earthworks	61	183	122
Seed	115	126	11
Water charges	134	189	55
Wages - Employees	357	384	27
Wages - Proprietors	20	69	49
Administration	49	35	-14
Other farm overheads	65	103	38
	3,472	3,976	504
OPERATING PROFIT/(LOSS)	1,919	1,026	893
ADD:			
Wages - Proprietors	20	69	49
FARM OPERATING PROFIT/(LOSS)	1,939	1,095	-844

3.2.3 COMPARISON BETWEEN THE 2011 YEAR AND THE 2010 YEAR (PER HA) (CONTINUED)

	<u>ALL FARMS 2011</u>	<u>ALL FARMS 2010</u>	<u>DIFFERENCE</u>
DEDUCT:			
Interest and bank charges	380	1,009	629
Interest - Crop terms	0	0	0
	380	1,009	629
FARM NET PROFIT/(LOSS)	\$1,559	\$86	\$1,473
CROP RESULTS			
Hectares of cotton grown	1,426.48	621.17	805.31
Total yield (bales)	14,325.75	6,363.40	7,962.35
Yield per hectare (bales)	10.04	10.24	-0.20
Value per bale	\$526.23	\$480.56	\$45.67
Cost of production per bale	\$345.82	\$388.37	\$42.55
Operating profit per bale	\$190.92	\$99.94	\$90.98
No. of bales per hectare required to cover operating expenses	6.60	8.28	1.68
No. of bales per hectare required to cover total expenses	7.32	10.38	3.06
LABOUR			
Number of hectares per permanent person (excluding proprietors)	184.91	167.24	17.67
AVAILABLE TRACTOR HORSE POWER			
Tractor horse power per 500 hectares	313.55	632.44	318.89
AVAILABLE PICKING CAPACITY			
Picker heads per 500 hectares	2.38	1.84	-0.54
ROTATION			
Percentage of the current years' crop being grown on fallow fields or new fields (developed within the last 3 years)	69.98%	33.69%	36.29%
WATER USAGE			
Megalitres per hectare	8.78	9.00	0.22
Megalitres per bale	0.87	0.88	0.01



3.2.4 COMPARISON OF THE AVERAGE OF THE DIFFERENT VALLEYS (PER HA)

	ALL VALLEYS AVE FIGURES	GWYDIR AVE FIGURES	MCINTYRE/ BARWON AVE FIGURES	MACQUARIE AVE FIGURES	NAMOI AVE FIGURES	OTHER AREAS AVE FIGURES
INCOME						
Cotton proceeds - Lint	5,256	6,213	5,905	5,787	3,386	5,122
Cotton proceeds - Seed	546	622	586	627	367	545
Ginning	-484	-594	-613	-569	-339	-423
Levies	-33	-33	-36	-45	-22	-33
Cotton proceeds - Hail claims	106	6	13	0	935	2
	5,391	6,214	5,855	5,800	4,327	5,213
EXPENSES						
Cartage	136	103	125	187	72	156
Chemical application	138	158	143	130	132	133
Chemicals - Defoliant	55	41	45	77	93	52
Chemicals - Herbicides	108	87	110	64	127	110
Chemicals - Insecticides	142	274	177	58	76	123
Chemicals - Other	11	2	5	4	8	17
Chipping	2	0	6	0	0	1
Consultants	64	89	64	64	47	64
Contract picking	282	55	291	350	160	334
Contract farming & ripping	122	100	61	39	65	176
Cotton picking wrap and sundries	55	91	62	10	57	49
Depreciation	164	140	219	180	139	143
Electricity	76	141	60	31	94	75
Fertiliser	387	395	446	399	276	376
Fuel & oil	258	236	304	209	201	252
Hire of plant	22	79	8	29	2	24
Insurance	161	184	195	103	139	149
Licence fee - Bollgard	286	204	289	307	305	291
Licence fee - Roundup ready	60	51	60	79	59	61
Motor vehicle expenses	21	31	21	22	22	20
R & M - Farming plant	121	138	154	79	98	109
R & M - Pumps and earthworks	61	101	50	73	54	61
Seed	115	118	115	144	106	114
Water charges	134	122	127	266	158	125
Wages - Employees	357	281	316	136	221	436
Wages - Proprietors	20	91	25	90	0	7
Administration	49	101	50	30	35	45
Other farm overheads	65	63	60	70	67	67
	3,472	3,476	3,588	3,230	2,813	3,570
OPERATING PROFIT/(LOSS)	1,919	2,738	2,267	2,570	1,514	1,643
ADD:						
Wages - Proprietors	20	91	25	90	0	7
FARM OPERATING PROFIT/(LOSS)	1,939	2,829	2,292	2,660	1,514	1,650

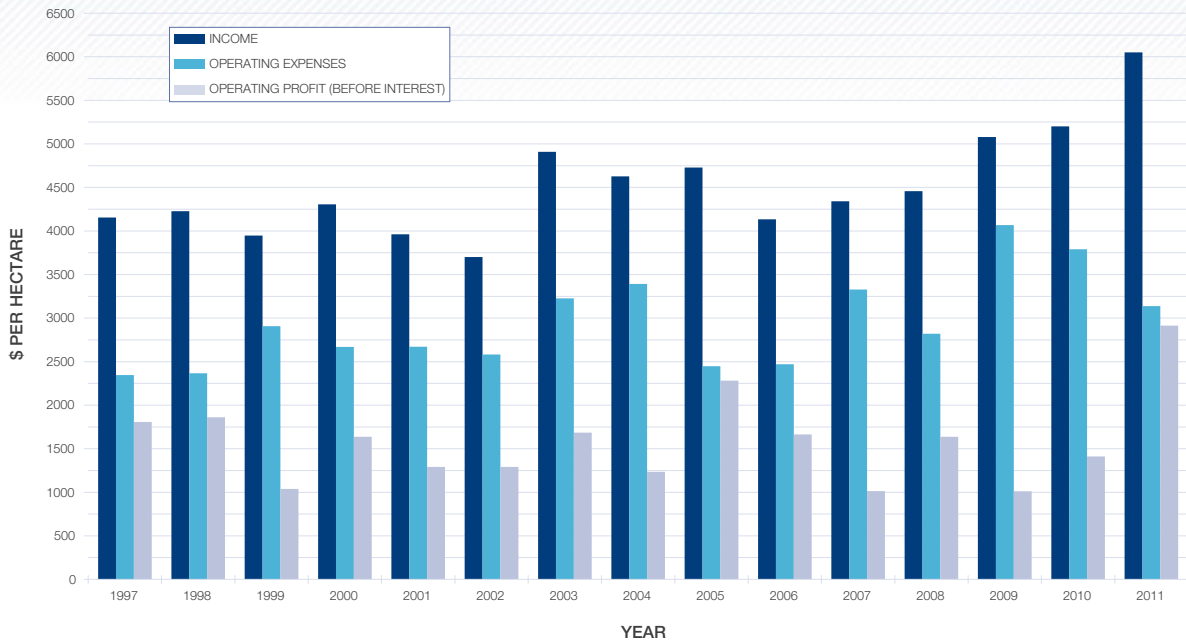


3.2.4 COMPARISON OF THE AVERAGE OF THE DIFFERENT VALLEYS (PER HA) CONTINUED

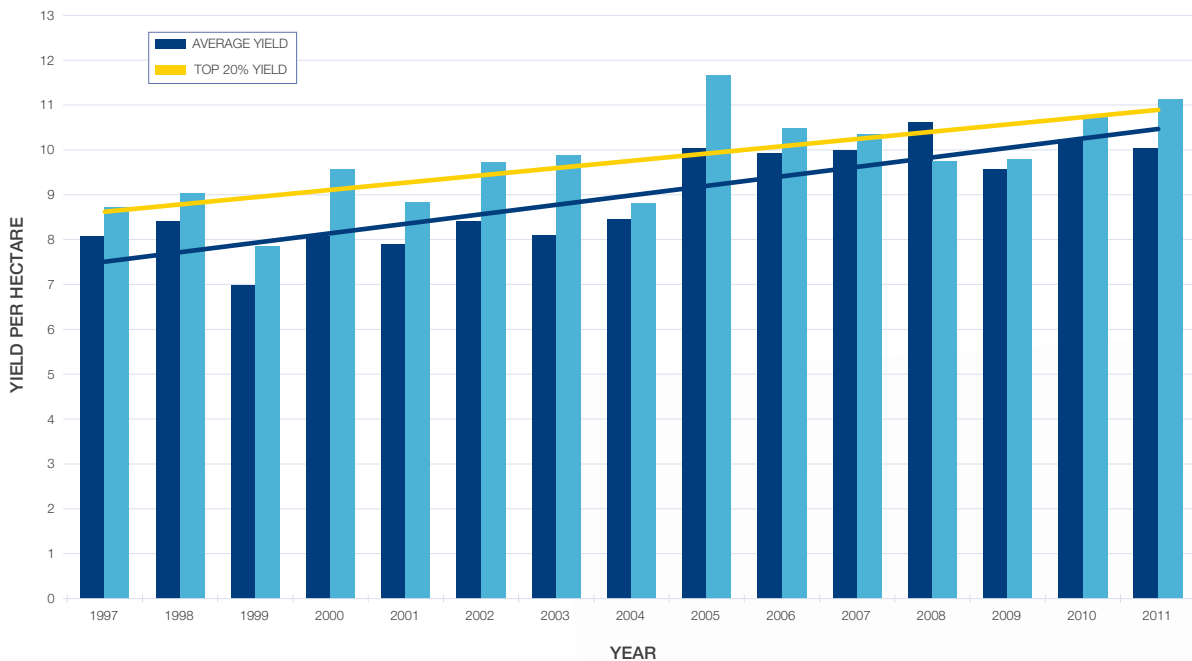
	<u>ALL VALLEYS AVE FIGURES</u>	<u>GWYDIR AVE FIGURES</u>	<u>MCINTYRE/ BARWON AVE FIGURES</u>	<u>MACQUARIE AVE FIGURES</u>	<u>NAMOI AVE FIGURES</u>	<u>OTHER AREAS AVE FIGURES</u>
DEDUCT:						
Interest and bank charges	380	449	690	255	252	241
Interest - Crop terms	0	0	0	0	0	0
	380	449	690	255	252	241
FARM NET PROFIT/(LOSS)	\$1,559	\$2,380	\$1,602	\$2,405	\$1,262	\$1,409
CROP RESULTS						
Hectares of cotton grown	1426.48	1137.00	1,352.65	363.00	858.50	2,537.98
Total yield	14325.75	13016.00	15,436.43	3,986.41	6,722.94	24,250.67
Yield per hectare	10.04	11.45	11.41	10.98	7.83	9.56
Value per bale	\$526.23	\$474.59	\$511.97	\$528.14	\$552.58	\$545.36
Cost of production per bale	\$345.82	\$344.64	\$314.28	\$294.26	\$359.44	\$373.46
Operating profit/(loss) per bale	\$190.92	\$129.95	\$198.84	\$233.89	\$193.14	\$172.11
No. of bales per hectare required to cover operating expenses	6.60	8.31	7.01	6.12	5.09	6.54
No. of bales per hectare required to cover total expenses	7.32	10.05	8.35	6.60	5.55	6.98
LABOUR						
Number of Hectares per permanent person (excluding proprietors)	184.91	162.43	186.57	138.29	238.47	168.50
AVAILABLE TRACTOR HORSE POWER						
Tractor horse power per 500 hectares	313.55	615.66	297.31	957.30	318.08	258.39
AVAILABLE PICKING CAPACITY						
Picker heads per 500 hectares	2.38	3.52	1.99	2.75	4.66	1.67
ROTATION						
Percentage of the current years' crop being grown on fallow fields or new fields (developed within the last 3 years)	69.98%	26.39%	57.38%	58.61%	75.80%	75.62%
WATER USAGE						
Megalitres per hectare	8.78	9.00	8.55	6.62	8.08	9.32
Megalitres per bale	0.87	0.79	0.75	0.60	1.03	0.98

3.3 TOP 20% FARMERS

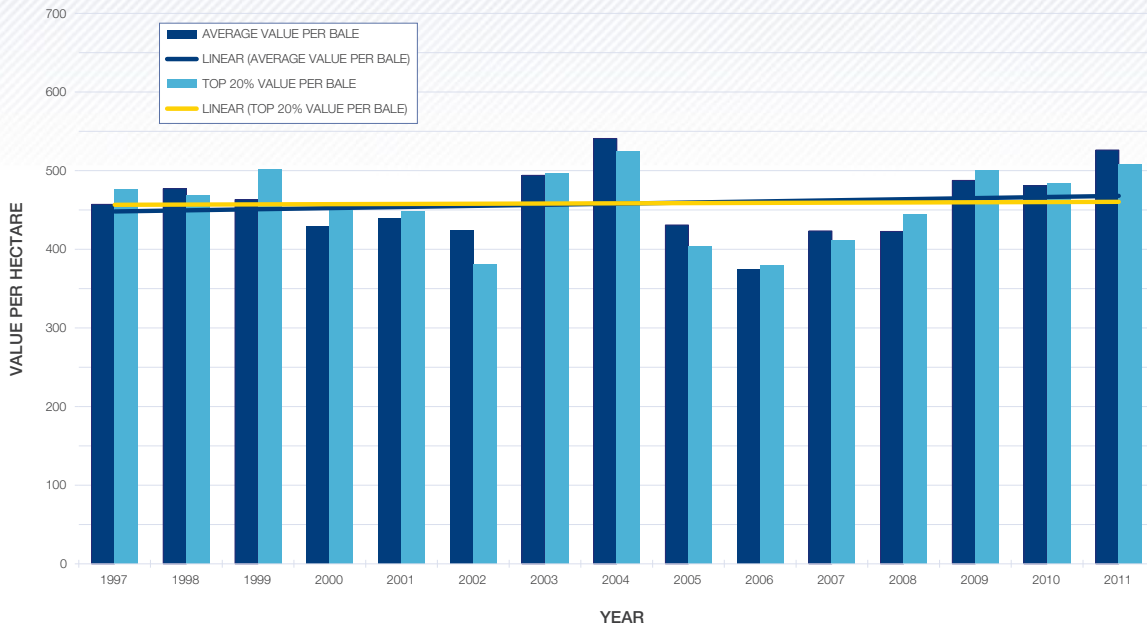
3.3.1 COMPARISON OF TOP 20% INCOME AND EXPENSE ITEMS



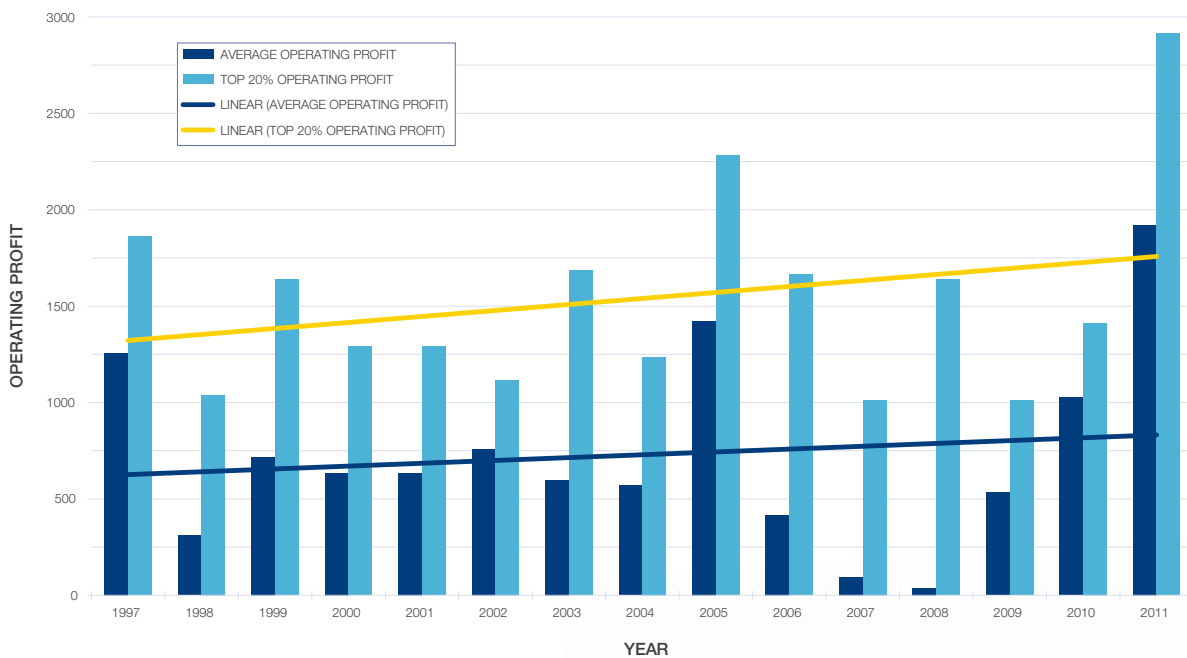
3.3.1.2 COMPARISON OF THE YIELD FOR THE AVERAGE AND THE TOP 20%



3.3.1.3 COMPARISON OF THE VALUE PER BALE FOR THE AVERAGE AND THE TOP 20%



3.3.1.4 COMPARISON OF THE OPERATING PROFIT FOR THE AVERAGE AND THE TOP 20%



3.3.2 TOP 20% FARMERS - THE PAST TEN YEARS (PER HA)

2002	2003	2004	2005	2006	2007	2008	2009	2010		2011
INCOME										
3,685	4,771	4,543	4,835	4,065	3,950	3,997	4,368	5,067	Cotton proceeds - Lint	5,659
523	645	584	522	434	848	871	1,081	753	Cotton proceeds - Seed	584
(478)	(521)	(466)	(617)	(491)	(508)	(499)	(518)	(581)	Ginning	(560)
(30)	(35)	(34)	(37)	(36)	(38)	(34)	(40)	(37)	Levies	(36)
0	50	0	26	163	89	123	188	0	Cotton proceeds - Hail claims	404
3,700	4,910	4,627	4,729	4,135	4,341	4,458	5,079	5,202		6,051
EXPENSES										
104	100	70	160	161	94	125	113	123	Cartage	148
116	99	140	107	144	95	99	77	152	Chemical application	149
77	74	91	56	61	43	63	59	45	Chemicals - Defoliants	50
105	119	152	203	70	117	97	154	108	Chemicals - Herbicides	112
314	245	423	147	293	113	67	160	175	Chemicals - Insecticides	146
4	6	3	5	2	4	6	79	61	Chemicals - Others	12
86	65	10	35	50	70	38	14	14	Chipping	0
56	48	60	59	62	63	49	73	81	Consultants	60
101	105	99	86	57	258	321	201	192	Contract picking	253
44	86	109	43	85	133	126	30	17	Contract farming and ripping	97
11	16	13	21	10	7	3	24	8	Cotton picking wrap and sundries	51
208	307	296	157	142	251	208	298	423	Depreciation	112
24	52	24	16	15	15	16	76	124	Electricity	115
268	297	218	202	262	207	169	422	299	Fertiliser	353
151	198	239	293	224	411	280	444	298	Fuel and oil	213
3	1	8	2	8	0	0	3	0	Hire of plant	35
77	126	150	84	71	207	195	238	204	Insurance	174
58	63	55	64	65	152	259	220	221	Licence fee - Bollgard	298
5	22	22	17	39	22	50	45	60	Licence fee - Roundup ready	43
14	34	18	12	16	37	26	37	36	Motor vehicle expenses	17
122	136	140	123	105	103	64	147	145	R & M - Farming plant	87
152	202	112	45	45	141	70	114	221	R & M - Pumps and earthworks	54
70	74	119	74	75	84	99	112	108	Seed	102
29	127	276	11	28	14	1	107	30	Water charges	61
243	346	323	245	246	484	273	453	428	Wages - Employees	274
66	86	62	77	54	88	29	114	76	Wages - Proprietors	20
31	94	91	46	36	65	32	65	24	Administration	50
44	98	69	57	45	50	56	189	118	Other farm overheads	51
2,583	3,226	3,392	2,447	2,471	3,328	2,821	4,068	3,791		3,137
1,117	1,684	1,235	2,282	1,664	1,013	1,637	1,011	1,411	OPERATING PROFIT/(LOSS)	2,914
ADD:										
66	86	62	77	54	88	29	114	76	Wages - Proprietors	20
1,183	1,770	1,297	2,359	1,718	1,101	1,666	1,125	1,487	FARM OPERATING PROFIT/(LOSS)	2,934



3.3.2 TOP 20% FARMERS - THE PAST TEN YEARS (PER HA)

CONTINUED

2002	2003	2004	2005	2006	2007	2008	2009	2010		2011
DEDUCT:										
388	818	834	476	429	981	711	872	797	Interest and bank charges	185
5	16	7	3	10	0	0	0	0	Interest - Crop terms	0
393	834	841	479	439	981	711	872	797		185
\$790	\$936	\$456	\$1,880	\$1,279	\$120	\$955	\$253	\$690	FARM NET PROFIT/(LOSS)	\$2,749
CROP RESULTS										
1,040.63	497.71	689.74	830.00	921.24	644.33	701.35	556.97	789.00	Hectares of cotton grown	1,124.75
10,109.94	4,917.52	6,078.29	9,676.04	9,656.56	6,666.75	6,847.50	5,451.00	8,480.00	Total yield (bales)	12,506.75
9.72	9.88	8.81	11.66	10.48	10.35	9.76	9.79	10.75	Yield per hectare (bales)	11.12
\$380.82	\$496.93	\$524.92	\$403.40	\$378.96	\$410.89	\$443.99	\$499.72	\$484.00	Value per bale	\$507.94
\$265.87	\$326.46	\$384.89	\$209.73	\$235.67	\$321.74	\$288.83	\$415.45	\$352.51	Cost of production per bale	\$282.04
\$114.96	\$170.46	\$140.03	\$195.87	\$158.80	\$97.78	\$167.74	\$103.46	\$131.48	Operating profit per bale	\$262.27
6.78	6.49	6.46	6.06	6.52	8.10	6.35	8.14	7.83	No. of bales per hectare required to cover operating expenses	6.17
7.82	8.17	8.06	7.25	7.68	10.49	7.95	9.88	9.47	No. of bales per hectare required to cover total expenses	6.54
LABOUR										
228.43	151.48	181.51	242.08	290.92	138.07	280.54	139.24	157.80	Number of hectares per permanent person (excluding proprietors)	176.43
AVAILABLE TRACTOR HORSE POWER										
425.38	938.58	461.19	567.56	470.78	503.09	399.38	520.68	612.59	Tractor horse power per 500 hectares	344.27
AVAILABLE PICKING CAPACITY										
2.86	5.74	3.48	5.16	2.53	2.07	0.00	2.39	1.69	Picker heads per 500 hectares	3.39
ROTATION										
27.88%	34.36%	76.52%	50.12%	60.95%	56.91%	39.21%	47.88%	42.25%	Percentage of the current years' crop being grown on fallow fields or new fields (developed within the last 3 years)	70.38%
WATER USAGE										
9.47	9.13	7.14	10.00	10.22	9.00	9.00	9.00	9.00	Megalitres per hectare	8.60
0.97	0.92	0.81	0.86	0.97	0.87	0.92	0.92	0.84	Megalitres per bale	0.77



3.4 FIVE YEAR AVERAGE FOR TOP 20% AND AVERAGE PARTICIPANTS (PER HA)

	ALL FARMS AVERAGE	TOP 20% AVERAGE	DIFFERENCE
INCOME			
Cotton proceeds - Lint	4,123	4,464	341
Cotton proceeds - Seed	451	495	44
Ginning	-471	-528	-57
Levies	-33	-34	-2
Cotton proceeds - Hail claims	42	119	77
	4,113	4,515	403
EXPENSES			
Cartage	97	128	-31
Chemical application	140	132	8
Chemicals - Defoliants	68	69	-1
Chemicals - Herbicides	123	121	2
Chemicals - Insecticides	268	259	9
Chemicals - Others	9	6	3
Chipping	55	50	6
Consultants	54	55	-1
Contract picking	196	141	55
Contract farming and ripping	81	70	11
Cotton picking wrap and sundries	21	20	2
Depreciation	209	165	44
Electricity	33	40	-6
Fertiliser	291	257	33
Fuel and oil	230	215	15
Hire of plant	12	11	1
Insurance	120	91	29
Licence fee - Bollgard	132	106	26
Licence fee - Roundup ready	21	21	0
Motor vehicle expenses	20	15	5
R & M - Farming plant	136	107	29
R & M - Pumps and earthworks	94	71	23
Seed	79	74	6
Water charges	120	32	88
Wages - Employees	324	264	60
Wages - Proprietors	43	53	-10
Administration	43	41	2
Other farm overheads	62	49	13
	3,083	2,662	422
OPERATING PROFIT/(LOSS)	1,029	1,854	824
ADD:			
Wages - Proprietors	43	53	10
FARM OPERATING PROFIT/(LOSS)	1,072	1,906	834



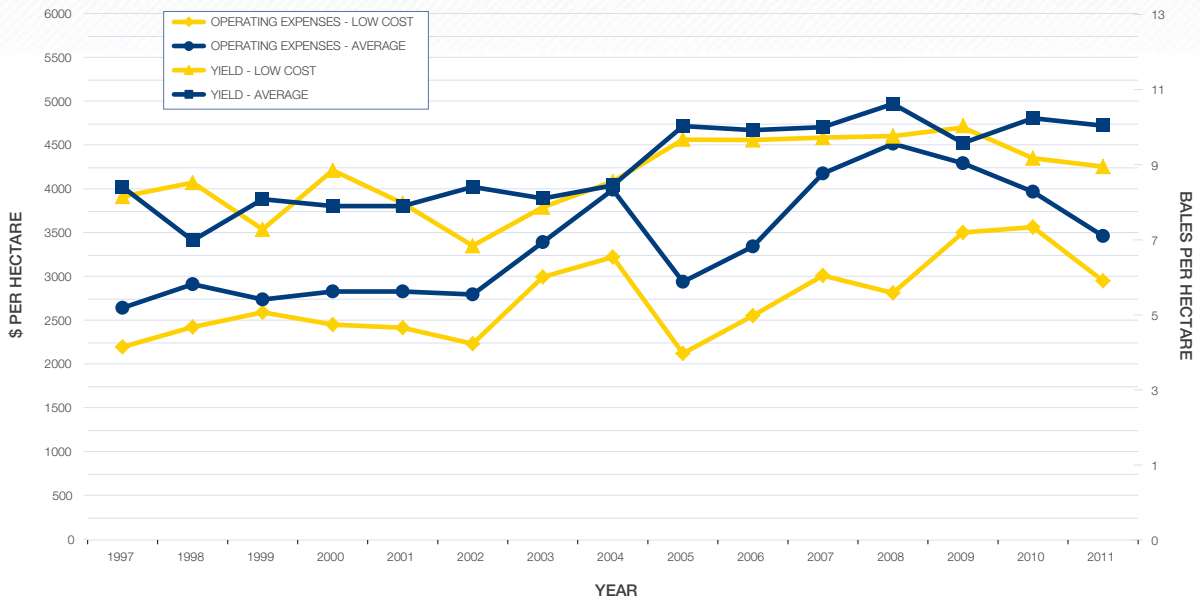
3.4 FIVE YEAR AVERAGE FOR TOP 20% AND AVERAGE PARTICIPANTS (PER HA) CONTINUED

	ALL FARMS AVERAGE	TOP 20% AVERAGE	DIFFERENCE
DEDUCT:			
Interest and bank charges	412	344	68
Interest - Crop terms	8	14	-6
	420	358	62
FARM NET PROFIT/(LOSS)	\$652	\$1,548	\$896
	(Ignore minor computer rounding differences)		
CROP RESULTS			
Hectares of cotton grown	1,074.15	1,017.99	-56.16
Total yield (bales)	10,019.59	10,462.97	443.39
Yield per hectare (bales)	9.26	10.36	1.10
Value per bale	\$438.91	\$423.92	(\$14.99)
Cost of production per bale	\$334.09	\$259.13	\$74.96
Operating profit per bale	\$108.99	\$175.61	\$66.62
No. of bales per hectare required to cover operating expenses	7.10	6.30	0.80
No. of bales per hectare required to cover total expenses	8.08	7.18	0.90
LABOUR			
Number of hectares per permanent person (excluding proprietors)	184.81	233.67	-48.86
AVAILABLE TRACTOR HORSE POWER			
Tractor horse power per 500 hectares	405.30	433.62	-28.32
AVAILABLE PICKING CAPACITY			
Picker heads per 500 hectares	2.36	3.07	-0.71
ROTATION			
Percentage of the current years' crop being grown on fallow fields or new fields (developed within the last 3 years)	56.46%	50.84%	(5.62%)
WATER USAGE			
Megalitres per hectare	9.22	9.46	-0.24
Megalitres per bale	1.01	0.92	0.09



3.5 LOW COST FARMERS

3.5.1 COMPARISON EXPENSES AND YIELD FOR LOW COST AND AVERAGE



3.5.2 LOW COST FARMERS – THE PAST 10 YEARS

2002	2003	2004	2005	2006	2007	2008	2009	2010		2011
INCOME										
2,916	3,318	4,513	4,195	3,754	3,669	3,997	4,769	4,268	Cotton proceeds - Lint	4,508
381	543	539	393	382	757	871	1,078	718	Cotton proceeds - Seed	440
(382)	(425)	(450)	(518)	(444)	(468)	(499)	(520)	(498)	Ginning	(445)
(25)	(26)	(37)	(32)	(26)	(35)	(34)	(46)	(30)	Levies	(29)
0	240	0	0	103	106	123	0	0	Cotton proceeds - Hail claims	350
2,890	3,650	4,565	4,038	3,769	4,029	4,458	5,281	4,458		4,824
EXPENSES										
53	72	54	106	123	81	125	171	91	Cartage	122
90	91	133	88	130	98	99	144	123	Chemical application	129
74	65	68	54	52	43	63	60	79	Chemicals - Defoliants	69
93	125	112	139	60	121	97	193	89	Chemicals - Herbicides	108
182	222	304	206	281	132	67	26	140	Chemicals - Insecticides	80
9	8	7	5	2	4	6	4	5	Chemicals - Others	11
71	47	25	40	71	70	38	11	14	Chipping	0
61	40	67	49	55	55	49	64	62	Consultants	57
129	155	139	131	124	302	321	339	361	Contract picking	258
69	106	192	36	91	104	126	23	29	Contract farming and ripping	64
9	11	12	20	12	6	3	38	3	Cotton picking wrap and sundries	43
163	245	248	111	126	176	208	191	332	Depreciation	141
23	41	9	13	9	12	16	29	7	Electricity	66
208	269	200	141	312	188	169	174	518	Fertiliser	296
107	201	223	222	242	356	280	272	347	Fuel and oil	201
43	8	11	1	6	0	0	1	3	Hire of plant	11
62	103	121	83	121	244	195	228	148	Insurance	141
58	52	54	72	107	110	259	310	308	Licence fee - Bollgard	315
0	16	19	2	9	19	50	60	53	Licence fee - Roundup ready	55
17	26	20	9	11	30	26	33	33	Motor vehicle expenses	18
110	130	145	132	115	89	64	110	147	R & M - Farming plant	77
76	113	66	44	59	107	70	86	88	R & M - Pumps and earthworks	58
70	73	108	68	68	85	99	114	160	Seed	101
95	274	402	17	21	9	1	26	13	Water charges	144
232	301	274	224	245	415	273	659	286	Wages - Employees	285
56	64	65	46	36	62	29	0	49	Wages - Proprietors	7
51	58	75	33	29	43	32	66	43	Administration	38
29	87	79	38	44	60	56	80	43	Other farm overheads	65
2,240	3,003	3,232	2,130	2,561	3,021	2,821	3,512	3,574		2,960
650	647	1,333	1,908	1,208	1,008	1,637	1,769	884	OPERATING PROFIT/(LOSS)	1,864
ADD:										
56	64	65	46	36	62	29	0	49	Wages - Proprietors	7
706	711	1,398	1,954	1,244	1,070	1,666	1,769	933	FARM OPERATING PROFIT/(LOSS)	1,871



3.5.2 LOW COST FARMERS – THE PAST 10 YEARS

CONTINUED

2002	2003	2004	2005	2006	2007	2008	2009	2010		2011
DEDUCT:										
258	654	569	389	379	976	711	76	1,418	Interest and bank charges	333
0	28	9	5	7	0	0	0	0	Interest - Crop terms	0
258	682	578	394	386	976	711	76	1,418		333
\$448	\$29	\$820	\$1,560	\$858	\$94	\$955	\$1,693	(\$485)	FARM NET PROFIT/(LOSS)	\$1,538
CROP RESULTS										
746.30	720.50	505.34	1,394.46	1,453.60	812	701	568	713	Hectares of cotton grown	1,276
5,102.18	5,671.56	4,320.17	13,481.96	14,042.00	7,886.50	6,847.50	5,676.00	6,535.00	Total yield (bales)	11,428.00
6.84	7.87	8.55	9.67	9.66	9.72	9.76	9.99	9.17	Yield per hectare (bales)	8.95
\$422.66	\$463.70	\$533.93	\$417.57	\$379.55	\$403.66	\$443.99	\$528.61	\$486.02	Value per bale	\$499.65
\$327.94	\$381.34	\$378.05	\$220.36	\$264.95	\$310.51	\$288.83	\$351.21	\$389.29	Cost of production per bale	\$330.42
\$94.72	\$82.36	\$155.88	\$197.21	\$125.28	\$104.07	\$167.74	\$177.40	\$96.73	Operating profit per bale	\$208.27
5.30	6.47	6.05	5.10	6.74	7.48	6.35	6.64	7.35	No. of bales per hectare required to cover operating expenses	5.92
5.92	7.94	7.14	6.04	7.76	9.89	7.95	6.78	10.26	No. of bales per hectare required to cover total expenses	6.59
LABOUR										
236.63	169.53	194.36	171.25	242.27	162.30	280.54	94.67	237.50	Number of hectares per permanent person (excluding proprietors)	168.91
AVAILABLE TRACTOR HORSE POWER										
291.03	716.08	545.38	604.79	393.36	514.76	399.38	510.56	561.40	Tractor horse power per 500 hectares	306.11
AVAILABLE PICKING CAPACITY										
1.22	3.47	3.17	3.07	1.83	0.00	0.00	0.00	0.00	Picker heads per 500 hectares	2.31
ROTATION										
23.53%	46.44%	60.90%	73.82%	66.72%	49.29%	39.21%	70.42%	35.09%	Percentage of the current years' crop being grown on fallow fields or new fields (developed within the last 3 years)	70.67%
WATER USAGE										
7.33	8.55	7.17	10.54	9.19	9.00	9.00	9.00	9.00	Megalitres per hectare	8.67
1.07	1.09	0.84	1.09	0.95	0.93	0.92	0.90	0.98	Megalitres per bale	0.97



4 Appendices



APPENDIX A

DEFINITION OF TERMS

TOP 20% AND BOTTOM 20% (AVERAGE)

These figures represent the average results of those farmers who achieved the highest and lowest farm operating profit (after using an average cotton price for all growers).

BEST "LOW COST" FARMERS

These figures represent the average results of those farmers who had the lowest farm operating expenses (before interest).

LARGE GROWERS

These figures represent the average results of those farmers who grew more than 2,500 hectares.

COMBINED AVERAGE OF FIVE YEARS TO 2011

These figures represent the average of the annual results of farmers in each category of the comparative analysis, over a five year period (because of drought we have use 2001, 2002, 2005, 2006 and 2011 years). We have also analysed the combined average of the top 20% of farmers for comparative purposes.

LABOUR

These figures include all permanent employees or equivalent casuals (two casuals employed for three months each would represent half of a permanent employee). Proprietors have been excluded.

AVAILABLE TRACTOR HORSE POWER (ENGINE)

Includes all field tractors used for ripping, listing, spraying and cultivating, but excludes tractors used to operate module builders.

AVAILABLE PICKING CAPACITY

Only includes pickers owned by the farmer.

ROTATION

The portion of the current year's crop grown on fields fallowed in the previous year, or developed over the past three years, expressed as a percentage.

WATER USAGE

Includes the total megalitres of irrigation water used to grow the crop as well as the impact of beneficial rain. Rainfall figures during the growing season have been converted to megalitres after excluding light falls and a portion of falls over 100 mm per month.

APPENDIX B

GUIDE TO INCOME AND EXPENSE ALLOCATIONS

COTTON PROCEEDS

The “Cotton Proceeds – Lint” is net of premiums and discounts.

For farmers who received hail insurance claims, the amount received has been shown separately in the analysis. Where possible the hail claim has been grossed up to reflect the bales lost due to hail and the costs saved or additional costs incurred have been added or subtracted to reflect comparable figures.

EXPENSES

Cartage	cartage (cotton module cartage, general cartage)
Chemicals - Application	application by aircraft, application by ground rig
Chemicals - Defoliants	all defoliants and conditioners
Chemicals - Herbicides	herbicides used in field and on ditches, channels etc
Chemicals - Insecticides	all insecticides
Chemicals - Other	growth regulants (pix) and all other chemicals
Chipping	chipping (chipping contractors, chipping wages), row weeders
Consultants	consultants (external and internal agronomist, bug checkers, marketing consultants)
Contract picking	contract picking (net of contract picking income on a swap basis, ie. hectare for hectare)
Contract farming and ripping	contract farming, contract ripping, contract stalk pulling, stick picking
Cotton wrap and picking	cotton wrap and sundries (tarps and ropes, repairs to tarps)
Depreciation	depreciation
Electricity	electricity (electricity for bores, general electricity)
Fertiliser	fertiliser, gypsum
Fuel and oil	fuel and oil (net of diesel fuel rebate)
Hire of plant	hire of plant
Insurance	crop insurance, general insurance
Licence fee - Bollgard	licence fees paid to Monsanto for the Bollgard licence
Licence fee – Roundup Ready	licence fees paid to Monsanto for the Roundup Ready licence
Motor vehicle expenses	motor vehicle expenses (registration, motor vehicle insurance, R&M motor vehicle)
R&M - Farming plant	R&M pickers, R&M plant, R&M tractors, R&M small tools and hardware, R&M motor bikes

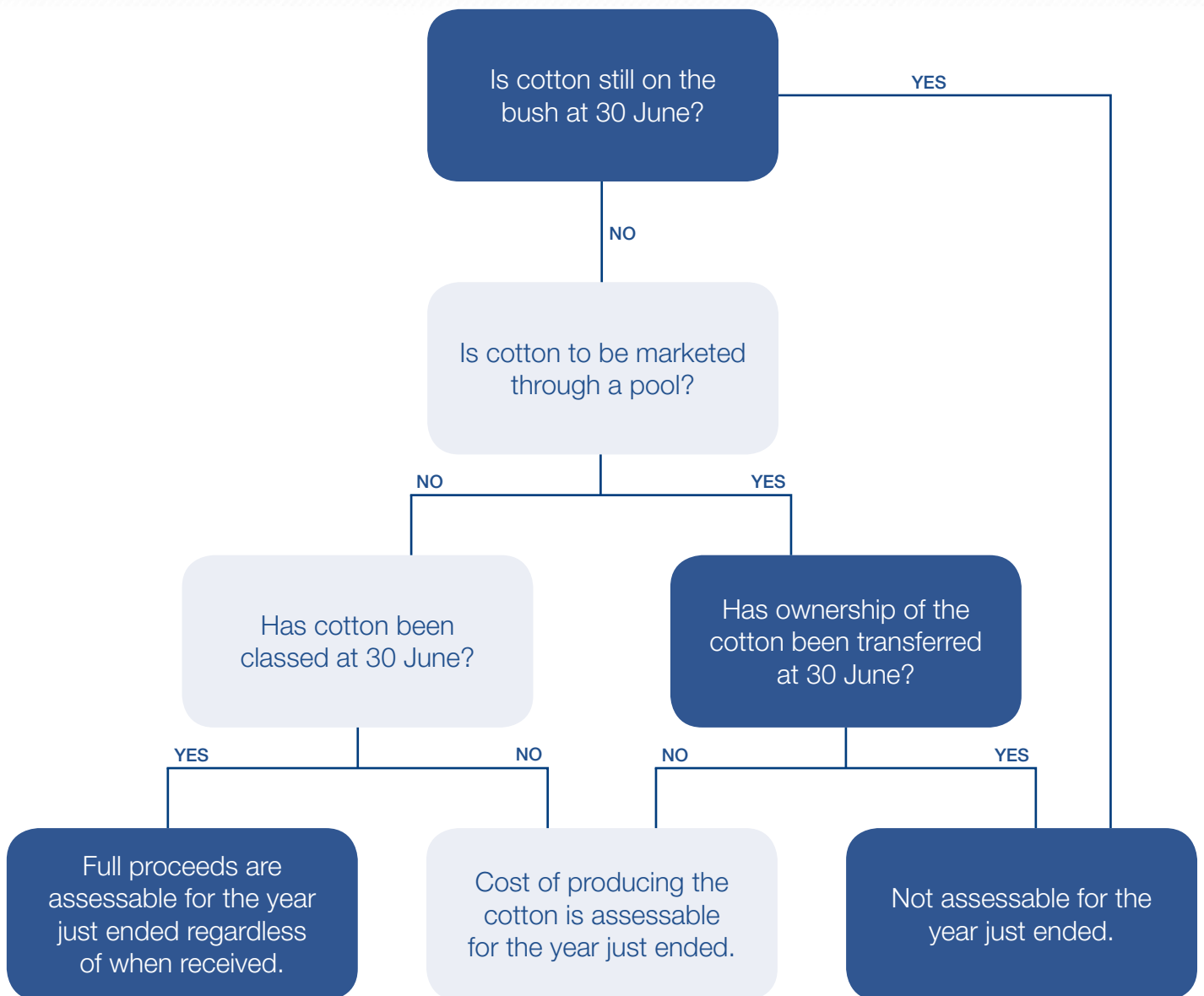


R&M - Pumps and earthworks	R&M irrigation earthworks, R&M irrigation pumps and motors
Seed	seed
Water charges	water charges (charges from a state body, charges from a local water scheme, water purchases)
Wages - Employees	external wages (excluding chipping), payroll tax, secretarial fees, superannuation, workers compensation insurance, FBT
Wages - Proprietors	wages paid to a proprietor. If no wage is paid a notional amount, based on their involvement in the operation, has been included for each working proprietor. If the farm has more than one enterprise, the proprietors wage is split in accordance with normal allocation criteria.
Administration	accountancy (all general work), administration, advertising, computer costs, computer processing, entertainment, filing fees, licences permits and fees, medical supplies, newspapers and periodicals, printing stationery and postage, protective clothing, seminars and conferences, staff amenities, staff training, subscriptions and donations, telephone, travel and accommodation
Other farm overheads	special accountancy work, audit, legal, rates, rent, R&M homestead, R&M employees' houses, R&M farm buildings, R&M fences, shade and shelter trees
Interest and bank charges	bank charges, borrowing expenses, bank interest, leasing, and hire purchase interest charges
Interest - Crop terms	interest on crop term finance (chemical suppliers and cotton merchants etc)



APPENDIX C

CHART ON ACCESSIBILITY OF COTTON PROCEEDS



NB. The guaranteed minimum price of a GMP pool is assessable as cash. The balance is treated as a pool. The marketing of cotton is a complex issue. The taxation treatment relies on the wording of a particular contract. This schedule is designed to provide general advice only. If you need specific advice, please contact us. On this basis, we accept no liability for any errors or omissions.

APPENDIX D

COMMON SHAREFARMING AND LEASING ARRANGEMENTS

Below are some details of common practices.

i. Sharefarming (80% - 20% deal)

80% of income to the sharefarmer.

20% of income to the landholder.

Sharefarmer pays all operating costs.

Landholder pays landholder's costs (rates) and costs to deliver water to the head ditch (pumping, water charges, and main channel maintenance).

ii. Sharefarming (82% - 18% deal)

82% of income to the sharefarmer.

18% of income to the landholder.

Sharefarmer pays all costs except rates.

iii. Leasing

A starting point is generally 4% - 6% of the value of the full watered developed area.



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