

Submission to the Australian  
Senate Inquiry into the

*Export Control  
Amendment (Banning  
Cotton Exports to  
Ensure Water Security)  
Bill 2019*

April 2019

## Executive Summary

) The banning of cotton would not reduce water use in Australia, it would simply divert water currently being used on cotton to what is perceived as the next highest value use.

) This Bill is a classic case of “Playing the man, not the ball”. It’s sponsor, Senator Rex Patrick, has openly admitted as much in the Bill’s Explanatory Memorandum;

*“The Bill is a necessary response to the failure of the Australian Government, and the governments of New South Wales, Queensland and South Australia, to respond positively to the findings and recommendations of the South Australian Murray-Darling Basin Royal Commission.”*

) The extent of Senator Patrick’s willingness to hold Australia and its cotton industry to ransom can also be found in the Explanatory Memorandum:

*“The proposed three-year timeframe will also provide the Australian Government and the governments of New South Wales, Queensland, Victoria, South Australia and the Australian Capital Territory time to reconsider and implement the recommendations of the Murray-Darling Basin Royal Commission.”*

) Further, it was the South Australian Royal Commissioner Bret Walker SC who said in his final report;

*“Cotton growers and rice farmers are acting as we, historically and nowadays, socially value them to do so. We — Australian society and our governments — positively encourage, as we should, the water resources of the Basin, so far as they should be available for irrigation, to be put to their most valuable use. In the main, that means the most efficient watering of the most profitable (lawful) crops. How could a society like ours proceed otherwise?”*

*It follows that cotton and rice should not be denigrated in comparison with, say, fodder, cabbages or permanent plantings. If it is perceived that cotton and rice ‘use too much water’, the first thing is to check that the overall consumptive take — regardless of the crop or crops — is not excessive. If not, the market does, and probably should continue to, allocate the water to chosen crops.”*

) Despite the above statement by Commissioner Walker, this Bill targets a specific crop and tries to do exactly what the Royal Commissioner advised against.

- J Cotton Australia respects the right for the governments of Australia to determine how much water should be reserved for the maintenance of the environment, and how much should be made available for consumptive use, including irrigated agriculture.
- J It is Cotton Australia's view that this determination has been made through successive government decisions, starting with the original allocation of water licences/entitlements, and culminating (for now) with the Murray-Darling Basin Plan.
- J Cotton Australia fully supports the implementation of the Basin Plan, as it was written in 2012, and agreed to at the December 2018 Ministerial Council Meeting.
- J Cotton Australia believes the recently released Productivity Commission Report into the Basin Plan offers a positive pathway forward for successful implementation.
- J Cotton Australia believes the focus should now shift to the successful finalisation of Basin Plan implementation, and a very strong emphasis of optimising environmental outcomes from the available pool of environmental water.
- J Cotton Australia supports significantly enhanced investment in complementary measures which will leverage greater environmental outcomes from the available environmental water pool.
- J Cotton Australia believes that all stakeholders should recognise that while the Basin Plan offers the opportunity to achieve many environmental benefits, it cannot make rain. Therefore, everyone should be cautious about making "knee-jerk" reactions, or claims that the Basin Plan has failed.
- J The banning of cotton would not reduce water use in Australia; it would simply divert water currently being used on cotton to what is perceived as the next highest value use.
- J Cotton Australia is very proud of its industry and believes it exhibits many of the characteristics of a first-class agricultural industry that should be celebrated and not demonised.
- J 90% of our producers are family farms, producing approximately 80% of our crop.
- J The Australia cotton industry is world-leading and is recognised by a number of international organisations as a supplier of sustainable cotton.



- J Australia has the highest cotton yields in the world, approximately three times the world average.
- J While cotton production does vary considerably from season to season (dependent on water/moisture availability), it usually contributes between \$1.5 billion and \$2.5 billion annually.
- J Cotton is a significant contributor to over 150 rural and regional communities in Australia.
- J The Australian cotton industry directly employs over 10,000 people in Australia in a non-drought year.
- J Our growers are significantly younger than the average Australian farmer.
- J Our growers, their employees, contractors and suppliers are well educated.
- J Our research investment has delivered average annual yield increases of 3% per year.
- J We have reduced pesticide use by more than 90% over the past 25 years.
- J We have improved our water use efficiency by approximately 60% over the past two decades.
- J Our Best Management Practice programme, myBMP, has been adopted by 830 (80%) of our growers, with 22% of the 2018 crop being sold as part of the international Better Cotton Initiative (BCI), which is a globally recognised certifier for brands seeking sustainably produced cotton.
- J We have the capacity to trace 100% Australian cotton from the garment directly back to the field it was grown on.
- J The banning of cotton exports would see at least a billion dollars of stranded cotton specific assets such as cotton gins, cotton pickers and seed treatment facilities.
- J The banning of cotton exports from Australia would see the loss of a hugely important livestock feed source – cotton seed.
- J We are unequivocally opposed to any sort of water theft, and fully support an effective and cost effective water measurement and compliance system.

- ) We believe the Bill is contrary (at least in spirit) to Australia's international trade obligations.

### **Recommendations**

**Recommendation 1:** Cotton Australia respectfully suggests that this Inquiry calls expert witnesses from each state jurisdiction to explain how water is allocated to irrigation, not to specific crops.

**Recommendation 2:** That the Committee recognises the absolute right of the irrigation water entitlement holder/irrigator to decide what crop irrigation water is applied to.

**Recommendation 3:** The Inquiry seeks the advice of the Australian Commonwealth Solicitor on the legal ramifications of this Bill, specifically whether it risks putting Australia in breach of its international trade obligations.

**Recommendation 4:** That this Inquiry rejects this bill, and publicly recognises the Australian cotton industry as a leading Australian agricultural industry that delivers significant economic and social benefits to the country and the communities it operates in.

### **Senate Inquiry into the Export Control Amendment (Banning Cotton Exports to Ensure Water Security) Bill 2019**

Cotton Australia is the national peak body for Australia's world-leading cotton industry. As an organisation we represent approximately 1400 cotton farming and cotton ginning businesses.

We are disgusted that we feel obliged to submit to this ill-informed and un-Australian Bill. As an industry, we have always been proud of our credentials as being at the cutting edge of Australian agriculture, and a significant contributor to Australia's export earnings.

If this Bill was to succeed, it would decimate the Australian cotton industry, and do nothing to achieve its stated aim of a reduction in the consumptive water take in the Murray-Darling Basin.

Cotton Australia believes this Bill is effectively an attempt at "blackmail", as highlighted by these quotes from Senator Patrick's Explanatory Memorandum:

*"The Bill is a necessary response to the failure of the Australian Government, and the governments of New South Wales, Queensland and South Australia, to respond positively to the findings and recommendations of the South Australian Murray-Darling Basin Royal Commission."*

*"The proposed three-year time frame will also provide the Australian Government and the governments of New South Wales, Queensland, Victoria, South Australia and the Australian Capital Territory time to reconsider and implement the recommendations of the Murray-Darling Basin Royal Commission."*

This Bill is the worse form of a "political stunt", and it should be treated with the contempt that it deserves. With that view, it would be Cotton Australia's preferred position to simply ignore this Inquiry and give it no oxygen at all.

However, as an industry we do respect the institution of the Australian Parliament, and therefore have concluded it is our obligation to fully participate in this Inquiry, and hence we have provided this comprehensive submission.



We would also welcome the opportunity to appear before the Senate Standing Committee on Rural and Regional Affairs and Transport, should it wish to call us as a witness for this Inquiry.

Any inquiries regarding this submission should be directed to Cotton Australia General Manager, Michael Murray ([michaelm@cotton.org.au](mailto:michaelm@cotton.org.au) or 0427 707 868).

### **The Allocation of Water in Australia**

Cotton Australia, and its growers, recognises the rights of the governments of Australia to regulate the use of water. A fundamental part of this is to determine how much should be retained for the environment, how much is available for consumptive use, and what priority should be given to consumptive use.

Historically, this has been a role of state governments, each of which has had their Water Acts which have underpinned water allocations.

From at least the early 1990's, the Commonwealth has been increasing its influence and control in this area. In February 1994, the Council of Australian Government's (COAG) set out a roadmap for national water reform, this was followed by the implementation of the Murray-Darling Basin Cap in 1995 (capping extractions at levels equivalent with what would have occurred at 1993/94 levels of development), followed by the National Water Initiative (NWI) Agreement in 2004 (which built on the 1994 COAG Agreement), the National Plan for Water Security announced in January 2007, the Federal Water Act was passed in 2008, and the Murray-Darling Basin Plan in 2012.

All this reform, and the associated state-based reform, including renewal/modernisation/replacement of various water Acts, and the introduction of first generation of State Water Sharing/Resource Plans, has significantly contributed to a re-allocation of water away from extractive use and returning it to the environment.

Cotton Australia is not so naïve as to believe that it will ever be possible to get unanimous agreement on how much water should be retained for the environment, and how much should be made available for extractive use, but it does respect the right of government to make decisions in this area. These decisions must be made with good science, extensive and inclusive consultation, and full consideration of the social and economic impacts.

In reality, this Bill is about forcing the governments of Australia to reconsider this balance between the environment and consumptive use, by holding one industry to ransom - cotton. Cotton Australia believes this approach is reprehensible and un-Australian.

As outlined above, water use in the Murray-Darling Basin in particular, but across Australia generally, has been under constant reform for the past 25 years, and with very few exceptions outside the Murray-Darling Basin, all of these reforms have shifted consumptive water back to the environment.

Cotton Australia is of the view that the flagship nationally led reform – The Murray-Darling Basin Plan - should be allowed to be fully implemented, prior to any further debate giving consideration to even more re-allocation of consumptive water back to the environment.

To be very clear, Cotton Australia supports the implementation of the Basin Plan as it was written in 2012 and agreed to at the December 2018 Ministerial Council Meeting.

That is not to say that Cotton Australia believes the Basin Plan is perfect. We have strongly criticised many elements of it, in particular its heavy focus on hydrology, where we believe a much more holistic approach would have been appropriate.

Cotton Australia believes the recently released *“Productivity Commission five-year review of the Murray Darling Basin Plan,”* one of approximately 16 Inquiries/Reports into aspects of the Plan provides a positive blueprint to finalisation the implementation of the Basin Plan.

Cotton Australia supports the 605GI “Efficiency Measure” projects, but cautions they must be subject to full due diligence, including consideration of third party impacts. Cotton Australia also acknowledges that should the projects fail to deliver the full 605GI’s of environmental equivalents, then the difference will have to be made up with further water acquisitions.

Similarly, Cotton Australia does recognise that the Plan requires the acquisition of 450GI of “Upwater”. While our preferred position would have been to delay these acquisitions, until there was a demonstrated need for the additional water, we recognise that it is an integral part of the Plan. We believe this water must be acquired in accordance with the agreement made by all Ministers at the December 2018 Ministerial Council Meeting.

It is worth noting how much water is preserved for the environment across the Basin.

Prior to the Murray-Darling Basin Plan, 58% of water was preserved for the environment. That number will increase to 66% when the Plan is fully implemented in 2024.

Cotton Australia also cautions policy makers against making “knee jerk” decisions during a drought, or judging the Plan as a “fail”.

Fundamentally, the Plan is about making the Basin environment more resilient. It does not, and cannot prevent drought.



For a contemporary example, Cotton Australia recommends that the Inquiry read the recent interim Independent Report into the Fish Deaths at Menindee written by a panel chaired by Professor Rob Vertessy (<https://www.mdba.gov.au/sites/default/files/pubs/Independent-assessment-2018-19-fish-deaths-interim-report.PDF> ).

### **Cotton and Water**

This Bill is ostensibly about banning the export of cotton grown in Australia, and by doing so, it will lead to a reduction in the amount of water used for agriculture, to the benefit of the environment.

The logic of this approach totally disregards the way water is allocated in Australia. Not one megalitre of water is allocated to grow cotton, or indeed any other crop. In all jurisdictions, when water is allocated for irrigation, it is allocated to the licence holder, who is then free to decide which crop it will be used for.

### ***Highest Value Use***

In principle, the licence holder will allocate it to a crop which he or she deems will provide the greatest return, taking into account other factors such as available resources, skills, and to some degree, personal preferences.

The intent to create a water use environment that encourages the movement of water to the highest value use can be traced to the February 1994 meeting of COAG which agreed:

5. *In relation to trading in water allocations or entitlements:*
  - a. *that water be used to maximise its contribution to national income and welfare, within the social, physical and ecological constraints of catchments;*

This was continued with the 2004 National Water Initiative, which included the following objective to enhance trade and improve movement towards “highest value” use:

- v) *progressive removal of barriers to trade in water and meeting other requirements to facilitate the broadening and deepening of the water market, with an open trading market to be in place.*

Cotton Australia openly acknowledges that the cotton industry uses a significant proportion of the water allocated to irrigation in Australia each year. The volume, and the percentage compared to other crops, varies significantly each year.

The reason why a significant volume of water is used on cotton each year is that when taking all the factors into account, many licence holders deem that it offers the highest return per megalitre.

Factors include, but are not limited to:

- ) Soils, climate, and other natural assets available to the grower.
- ) Machinery, skills, and employees.
- ) Access to finance.
- ) Variability and reliability of water allocations (you would not plant permanent plantings such as almonds, if you were unsure whether you would have water next year).
- ) Markets – some crops, such as vegetables, can offer high returns, but are very reliant on the domestic market. That market could easily be flooded if there was a significant shift to that crop.

The absolute take-away is that if an irrigation licence holder no longer has the option to grow cotton, an alternative crop will be found. Given the general desire to maximise returns, that crop will, in general, provide a lower return, both to the grower and the Australian economy.

Further detail on water and its relationship to cotton can be found in the fact sheet “*Australian Cotton – Our Water Story*” (**Attachment A**).

**Recommendation 1:** Cotton Australia respectfully suggests that this Inquiry calls expert witnesses from each state jurisdiction to explain how water is allocated to irrigation, not to specific crops.

### ***Cotton a Thirsty Crop***

It is often alleged that cotton is a “thirsty” plant, the clear implication that it uses a lot of water. As acknowledged above, a significant proportion of available irrigation water in Australia is used on cotton, not because cotton uses a lot of water per se, but because it is an irrigation crop of choice.

As a plant, cotton is extremely drought tolerant, and is often described as a “desert” plant. However, it also responds extremely well to irrigation.

In Australia, cotton can, and is, grown as part of a dryland cropping system and can generally yield some 3-5 bales/hectare (227kg bale of ginned cotton). When irrigated, the crop generally yields three times that amount (10-15bales/ha).

Irrigation application required to generate that significant yield increase varies enormously. In a relatively high summer rainfall area with moderate temperatures such as the Upper Namoi or Darling Downs, application of water may be as little as 3-4 megalitres per hectare, but in more western areas, where the heat is more extreme and there is less rainfall, irrigation application may exceed 10 megalitres per hectare.

The water use of a plant is basically a function of evapo-transpiration and the length of the crop cycle. Therefore if you plant similar sorts of crops; in a similar environment, they will use very similar amounts of water.

For example, if you grow an irrigated sorghum crop, an irrigated cotton crop, and an irrigated maize crop at Moree, they will generally all use 6-7 megalitres per hectare of applied irrigation in a normal season.

**Figure 1 – Irrigated Crop Water Use in the Murray-Darling Basin**

IRRIGATED CROPS GROWN IN THE MURRAY-DARLING BASIN (MEGALITRES PER HECTARE)	
Almonds *	14
Rice **	11.5
Mature citrus ***	10-12
Maize ****	8-9
Lucerne for Hay *****	8.8
Wine grapes *****	8.2
Cotton *****	6-7
Soybeans *****	6
Sorghum *****	5.2
Fruit trees, nut trees, plantation or berry fruits **	5.1
Grapevines **	4.3
Vegetables for human consumption **	4
Sunflowers *****	3.9
Summer Mungbeans *****	3.4

\* Australian Almond Board, 2018  
 \*\* Source: Water Use on Australian Farms, 2016-17 (NSW data)  
 \*\*\* NSW Dept of Primary Industries 2016 (for Sunraysia and Riverland areas)  
 \*\*\*\* GRDC Maize Grow Notes 2014  
 \*\*\*\*\* NSW DPI Farm Enterprises Budget Series, Central and Southern Zone 2012  
 \*\*\*\*\* Crop and Pasture Science 2013 (a peer-reviewed, 23 year review of cotton's seasonal water use)  
 \*\*\*\*\* Source: WATERpak – CRDC 2012  
 \*\*\*\*\* Amazing Yield Water Use Efficiency in the Murray Valley and Riverina Wine Regions 2012/13



While Cotton Australia has provided the information in Table 1 as a way of demonstrating cotton's relative water use, Cotton Australia emphasises that the decision as to which crop should be irrigated, rightfully rests with the licence entitlement holder and the relevant irrigator, and is not a decision that should be dictated by government.

All the crops in the Table (along with other crops) have a rightful and justifiable place in irrigation and the Australian economy. There are times and circumstances when all of the crops would represent "the highest value use", given the particular circumstances of the irrigator.

**Recommendation 2:** That the Committee recognises the absolute right of the irrigation water entitlement holder/irrigator to decide what crop irrigation water is applied to.

### **The Cotton Industry Should Be Celebrated Not Banned**

The cotton industry should be celebrated as an exemplar of Australian agriculture and not demonised through debate associated with this Bill.

The modern Australian cotton industry emerged during the 1960's in north-west NSW. It has now expanded across much of the eastern Australian cropping belt, with core production areas ranging from Swan Hill on the Victorian/NSW Border, through to the Central Highlands in Queensland, helping to support more than 150 communities.

In addition, we have emerging or re-emerging areas of cotton production in the Western Australian Kimberley region, Northern Territory, the Queensland Gulf, as well as other pockets of the country.

This Bill is clearly aimed at cotton production within the Murray-Darling Basin, and activity that Cotton Australia believes is entirely in keeping with the overall aim of a healthy, working Basin, contributing to social, environmental and economic outcomes.

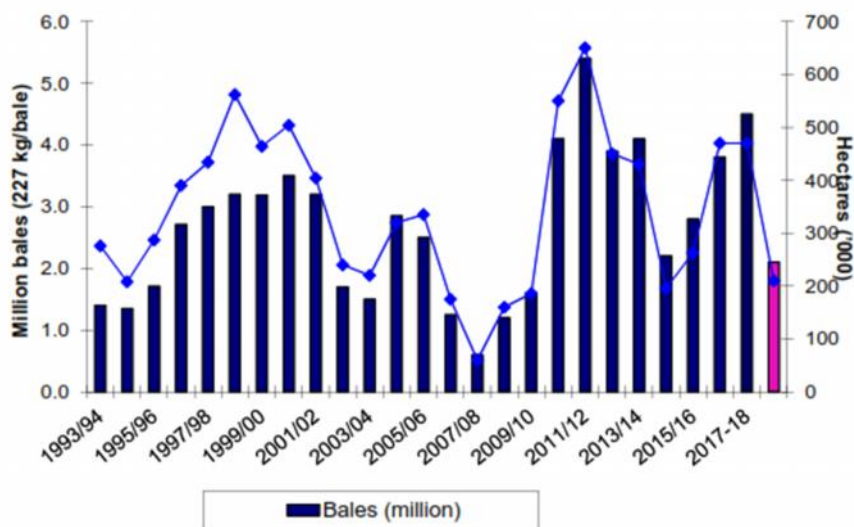
However, if enacted, this appalling, command-and-control, style Bill would also destroy the cotton industry outside the Basin, and wherever it is grown as rain-fed crop (approximately 1/3 of the average area).

Our industry produces between \$1.5 billion and \$2.5 billion (farm gate) in annual export earnings.

Our annual production does vary enormously, primarily in response to water and moisture availability. As an annual crop, growers adjust their plantings to match water and moisture availability.

Figure 2: Annual Cotton Production

### Australian Cotton Production and Area



This season, our industry has been unfairly criticised because it has managed to produce a crop during the middle of a drought, and with most water allocations being on zero or close to.

The Inquiry should consider the following:

- ) The 2018-19 crop is less than half the 2017-18 crop (total production expected to be 2.1 million bales).
- ) A significant proportion of the crop has been grown on sustainably managed groundwater, rainfall, or water carried over from previous allocations.

Cotton Australia emphasises the reasons we have dams and irrigation in Australia is to help mitigate the effects of drought. You store water when there is plenty of the resource, to sustain production during times of drought or reduced water supply.

Carry-over or Continuous Accounting rules allow irrigators to do just that: husband their water resources during good times to sustain their production (albeit reduced), during dry periods.

This is good for growers' businesses, their families, their employees, and their communities, and it is good for Australia.

### ***Our People***

The Australian cotton industry has approximately 1400 grower entities. Our internal analysis shows that 90% of these entities represent family farms, and they produce approximately 80% of our annual crop.

There is a perception that the cotton industry is dominated by large, overseas owned corporates. This is not true.

However, Cotton Australia is proud of all growers who produce a world-leading product in a law abiding manner; be they family farmers or corporates.

### ***Our growers are younger than the average Australian farmer***

The age profile of the cotton industry is younger than other agricultural industries. The cotton industry has a slightly greater proportion of people under 35 years, compared to the Australian agricultural sector on average (ABS 2016 Census).

### ***Our growers, their employees, contractors and suppliers are well educated***

A greater proportion of cotton growers have completed formal qualifications than the average for Australian agriculture (ABC Census 2016).

A study published by the Cotton Research Development Corporation (CRDC) in 2017 to better understand and build the role of women and their participation in the Australian cotton industry, determined that 88 per cent of women were in an industry role, and 86 percent of women on cotton farms have a diploma, degree or higher qualification, with 71 per cent involved in making major business decisions.

Our growers value training: the 2017 Cotton Grower Practices Survey (CRDC) found that 61 percent of growers or their staff attended accredited training in the previous 12 months.

To meet some of our growers please refer to our "*Meet a Grower*" videos. **Attachment D:**



***Cotton is significant contributor to 40 rural and regional local government areas in Australia (ABS Census)***

Cotton is a major commodity and driver of the gross value of the total agricultural production in regions where it is grown, representing between 30% and 60% of the gross value of the agricultural production (2014 Australian Grown Cotton Sustainability Report). For example, in the NSW upper north west region, cotton was the most valuable crop grown in the region (Upper North West Regional Economic Development Strategy 2018–2022, NSW Department of Premier and Cabinet).

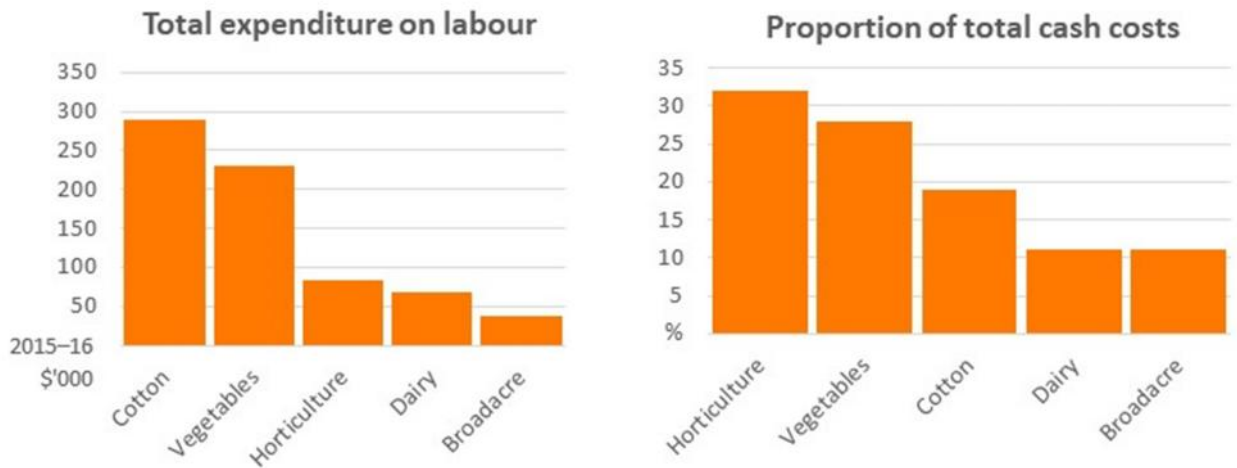
The 2017 Cotton Grower Practices survey showed growers significantly contribute to their communities. On average, 79% of grower expenses were spent in their local area, equivalent to \$0.80 in every \$1 of business expenses being spent in their local areas. Growers also strongly contribute to their communities through donations to local organisations, community causes and charities/sporting clubs, and by supporting local events. (Source: 2017 Cotton Grower Practices Survey, CRDC.)

***The Australian cotton industry directly employs more than 10,000 people in Australia***

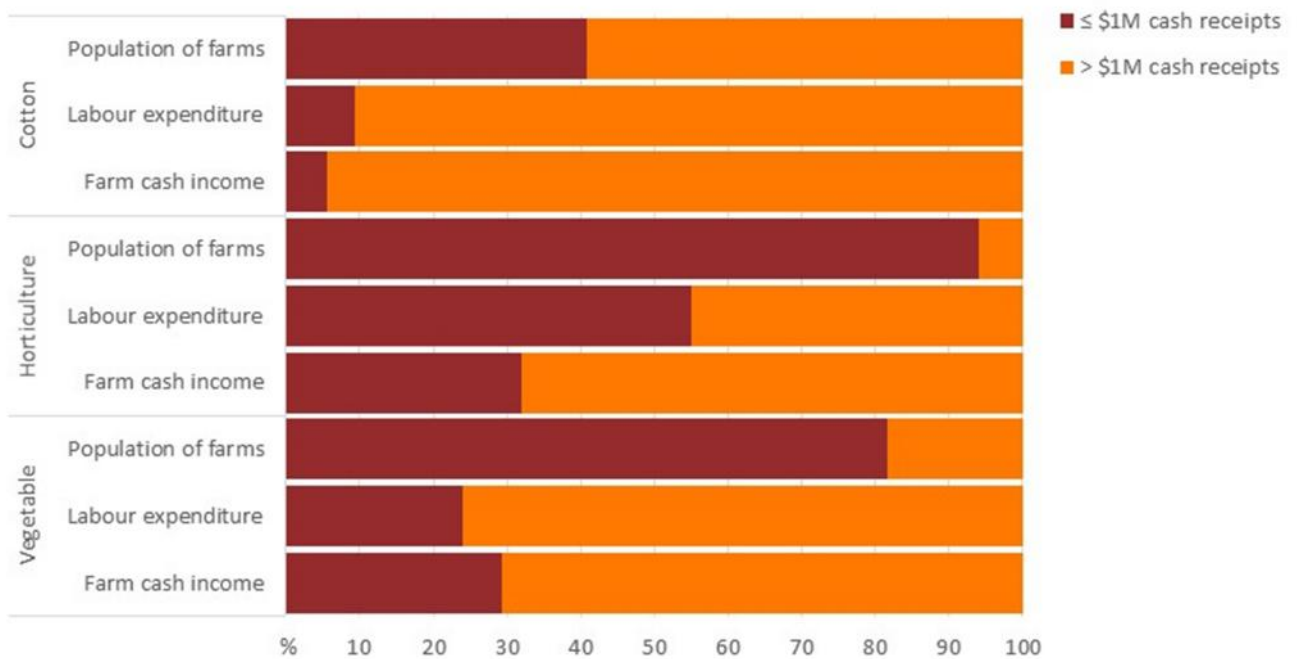
Cotton farms provide full-time and casual farm jobs across entry level, experienced and managerial levels, varying depending on size. The majority of staff are employed full-time permanent, in experienced roles. Compared to vegetable and horticulture industries, the cotton industry employs more full-time employees and Australian or New Zealand residents as *seasonal* workers (ABARES 2017).

Labour use (measured by total expenditure and wages as a proportion of total cash costs) is greater in the cotton industries than in vegetables, horticulture, dairy and broadacre agriculture (ABARES 2017).

**Figure 3: Total expenditure on labour by industry, 2014–15, average per farm (ABARES 2017)**



**Figure 4: Proportion of employees, by type of work and industry, 2014–15**



Note: Labour expenditure includes imputed labour. (Source: ABARES Australian vegetable-growing farms survey; ABARES survey of irrigation farms in the Murray–Darling Basin.)

Cotton farms employ on average six full-time permanent staff on farm, but support a much larger contracting and seasonal workforce.

Average total number of staff employed on farm varies by farm size, but on average:

- Small-sized farms employ an average of four staff.
- Medium-sized employ an average of seven staff.
- Large-sized farms employ an average of 27 staff.

On average, 31 percent of growers were looking to recruit more staff in the next 12 months (Cotton Grower Practices Survey CRDC 2018, CRDC).

A higher proportion in cotton are owner-managers of an enterprise, compared to the Australian agricultural workforce as a whole (42.3% vs 37% for the agricultural sector) (Source: ABS 2016 Census).

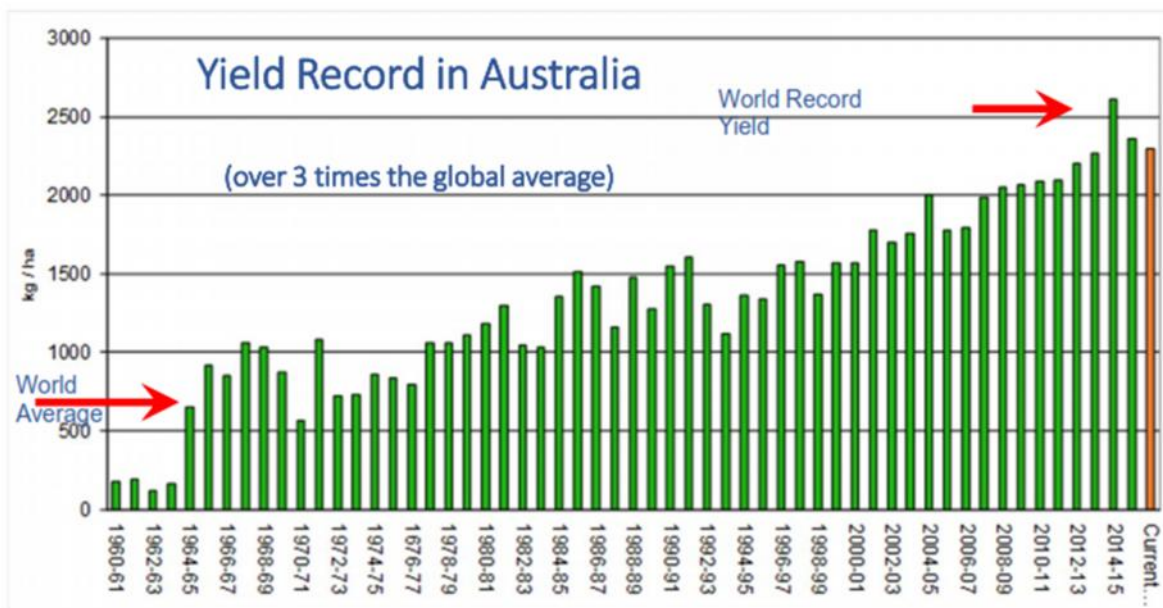


**World-leading yields**

The average Australian cotton yield per hectare is approximately three times the world average, and is also significantly in front our international peers, such as the USA and Brazil. Only Israel, who has a tiny cotton production industry, has yields that come close to Australia’s yields.

**Figure 5: Australian cotton yields**

## Australian Yields Continually Improve and lead the world



***Our research investment has delivered average annual yield increases of three percent per year.***

A partnership between the Commonwealth Government and cotton growers, the Cotton Research Development Corporation (CRDC) invests in world-leading RD&E to benefit Australia’s dynamic cotton industry, and the wider community.

An average annual increase in yield for the last five years of the 2013-2018 strategic plan was maintained at three percent per hectare per year despite reduced yields in 2016-17 (CRDC 2013-18 Investment. Innovation. Impact report on the last Strategic Plan of CRDC).

Cotton was the first agricultural industry to develop and document its performance against social, economic and environmental sustainability indicators. The 2014 Australian Grown Cotton Sustainability Report, led by Cotton Australia and the Cotton Research Development Corporation (CRDC) benchmarked 45 key indicators for the industry (<http://www.crdc.com.au/publications/australian-grown-cotton-sustainability-report>).

CRDC's 2018-2023 Strategic Plan report highlighted:

- ) The benefit-cost ratio of CRDC's investment in water-use efficiency RD&E: \$8.3 in benefit to growers for every \$1 invested by growers and the Government through CRDC.
- ) The benefit-cost ratio of CRDC's investment in the industry sustainability RD&E: \$2.50 in benefit to growers for every \$1 invested by growers and the government through CRDC into this RD&E.
- ) The benefit-cost ratio of CRDC's investment in the collaborative industry myBMP program: \$9.10 in benefit to growers for every \$1 invested by growers and the government through CRDC into this RD&E.
- ) The investment by farmers in rural R&D continues to show a range of significant social and environmental benefits which are distributed broadly to the Australian community.

Examples of public benefits include:

- improved biodiversity and increased carbon sequestration
- reduced soil erosion and improved water quality
- a reduction in food-borne infectious diseases
- increased efficiency in water use, together with improved water quality for many rural industries
- improved biosecurity
- more sustainable use of natural resources
- increased adaptability of rural industries to climate change

In addition to the joint funded grower/Commonwealth Government CRDC investment programme of approximately \$20 million per year, a similar amount is invested in research by private industry, and the highly successful CSIRO/Cotton Seed Distributor joint venture Cotton Breeding Australia (CBA).

CBA ensures the Australian industry has an ongoing pipeline of high yielding, high quality cotton varieties.

***Australia is recognised internationally as a sustainable supplier of cotton***

In the mid-1990's the Australian cotton industry initiated an Australian agriculture first when it launched its Best Management Practice programme (BMP).

Re-launched as an online version early this decade, myBMP (<https://www.mybmp.com.au/>), has in excess of 300 practices that growers need to demonstrate compliance with if they wish to be fully accredited.

These practices are over 10 modules, covering areas such as Water Management, Energy and Input Efficiency, Pesticide Management, and Human Resources & Workplace Health and Safety.

To be fully accredited, growers must undergo an extensive independent audit. Accreditation allows the cotton produced to be recognised by the following international organisations:

- )] Better Cotton Initiative (BCI) – Cotton Australia (CA) is a strategic partner. The myBMP Standard has been mapped and aligns with the BCI Standard: <https://bettercotton.org>
- )] CottonLEADS™ – CA partnership with the US Cotton Foundation: <https://cottonleads.org>
- )] Partnership for Sustainable Textiles – myBMP is Accredited by the Partnership: <https://www.textilbuendnis.com/en>
- )] International Trade Centre (ITC) Sustainability Map, first published 28 March 2019: <https://sustainabilitymap.org/standard-details/712>
- )] The Textile Exchange: <https://textileexchange.org> – myBMP data is included in Preferred Textile reports.
- )] Forum for the Future, CottonUP Guide. A practical guide to sourcing more sustainable cotton (myBMP included as a sourcing option): <http://cottonupguide.org/sourcing-options/cotton-sustainability-standards-and-other-programmes/#1521007688222-02c8805f-3b26>

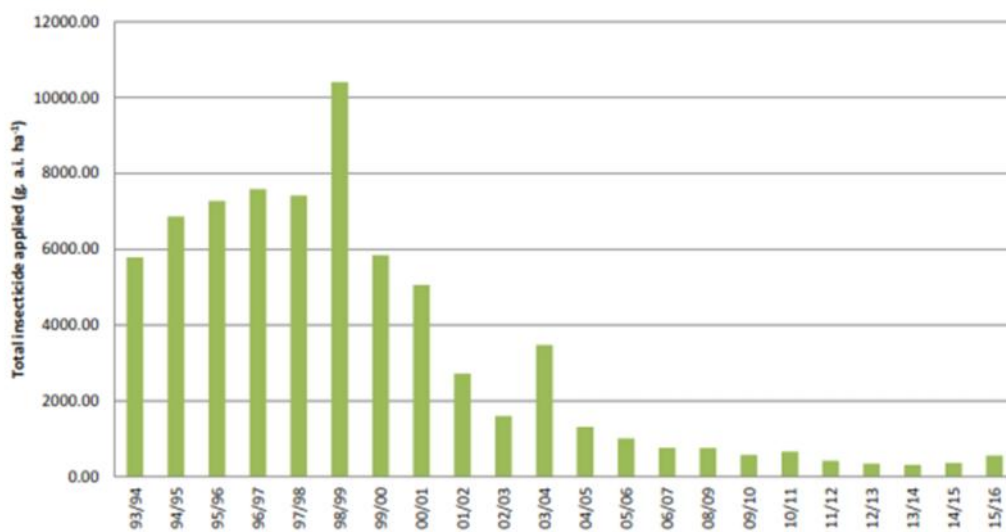


Our Best Management Practice programme, myBMP, has been adopted by 830 (80 percent) of our growers, with 22 percent of the 2018 crop being sold as part of the international Better Cotton Initiative (BCI) which is a recognised certifier for brands seeking sustainably produced cotton.

***The Australian cotton industry has dramatically reduced its pesticide use and improved its water use efficiency***

**Figure 6: Reduction in pesticide use**

## Huge reduction for insecticide use



Source: Crop Consultants Australia survey, CRDC, 2016

The Australian cotton industry once had a reputation as a very large user of pesticides. However, since the 2000's the Australian industry has reduced its pesticide use by more than 90 percent.

This has been achieved through the introduction of genetically modified (GM) cotton, and a strong commitment to Integrated Pest Management (IPM).

With GM cotton providing excellent control of heliothis, growers and their consultants have been able to concentrate on IPM, constantly assessing the balance between beneficial insects and pests, and only spraying where there is a very compelling reason to do so.

In addition to the massive reduction in pesticide use, this century has seen a 60 percent improvement in the industry's Water Use Efficiency. For every unit of water applied, 60 percent more cotton is produced today than at the turn of the century.

For more information on our industry's sustainability credentials please refer to "*Australian Grown Cotton 2014: Sustainability Report*". **Attachment C.**

### **The economic impact of banning cotton**

Cotton Australia acknowledges that should the export of cotton be banned, the Australia economy would not lose between \$1.5 and \$2.5 billion (farmgate) in export earnings. As we have explained throughout this submission, the irrigation licence holders would redirect their water resources to what would be their second-best crop choice, whatever that may be.

We can only surmise what that might mean in export earnings, and also what it might mean for additional capital expenditure to support the growth, by way of required assets specific to the other crop.

However, what we know is unless there was a massive revival in Australia's domestic textile industry, which at the moment is so tiny it is virtually nonexistent, that there would be over \$1 billion of stranded "cotton" specific assets.

Australia's 41 cotton gins (with conservative replacement value of \$30 million each), would be idle and effectively worthless.

There are approximately 600 specialised round-module John Deer cotton pickers in Australia, worth over \$1.2 million each new, but at \$600,000 each representing \$360,000,000.

Cotton Seed Distributors (CSD) has only in the past 18 months invested \$100 million in a state-of-the-art cotton seed business in Wee Waa, with much of the facility cotton-specific.

The above estimates does not pick up the plethora of other cotton-specific machinery on-farm, or the specialised equipment to service the industry scattered across the towns of the cotton growing areas.

Nor does it assess the value of the hundreds of small businesses that in one way or another support the Australian cotton industry with specialised skills and equipment.

Sometimes reform comes at an economic cost. The past 20 years of water reform, including the Murray-Darling Basin Plan, has significantly reduced the Australian cotton industry's potential; growth.

Yes, the industry has continued to grow, but that is not because of water reform, but in spite of it. As an industry we have, and we will always continue to, become more water efficient. We have expanded into non-traditional areas, and we have improved our yields.

The travesty of this Bill, if it was enacted, is that it would decimate our industry and so many of the communities that rely on cotton. It would do nothing to meet its stated aim of making more water available to the environment.

### **The damage to Australia's international trade obligations**

Cotton Australia openly acknowledges that it is not an expert in international trade rules. However, we contend that the proposed ban would be in contravention of the spirit of World Trade Organisation rules, if not the letter of the rules.

We understand these rules do allow countries in some circumstances to apply export bans if they believe they are necessary to deliver environmental protection.

This does appear to be the "hook" that this Bill is trying to use, based on the very flawed premise that if you ban the export of cotton, you would reduce the take of water and therefore improve the environmental outcome of the Murray-Darling Basin.

However, as we demonstrated in the earlier part of this submission, the notion that banning cotton will reduce water use is flawed; the water will be used on the second-best returning crop.

**Recommendation 3:** The Inquiry seeks the advice of the Australian Commonwealth Solicitor on the legal ramifications of this Bill, specifically whether it risks putting Australia in breach of its international trade obligations.

### **Conclusion**

This Bill is a dangerous piece of legislation that seeks to destroy an industry and blackmail the governments of Australia, while not offering a credible pathway to its stated aim of reducing the take of irrigation water and increasing the amount of water to the environment.

The Australian cotton industry is an industry that should be celebrated and not derided.



The Australian cotton industry recognises the collective rights of the governments of Australia to manage the water resources of Australia, and as an industry we will operate within those lawful frameworks.

However, Cotton Australia also submits that there has been over 25 years of water reform, and the concentration now should be on delivering the Basin Plan; and maximizing the environmental benefits by investing in complementary measures.

**Recommendation 4:** That this Inquiry rejects this Bill, and publicly recognises the Australian cotton industry as a leading Australian agricultural industry that delivers significant economic and social benefits to the country and the communities it operates in.

**Attachments:**

**A:** “Australian Cotton – Our Water Story”.

([https://cottonaustralia.com.au/uploads/publications/Australian\\_Cotton\\_Fact\\_Sheet\\_-\\_The\\_Australian\\_Cotton\\_Water\\_Story.pdf](https://cottonaustralia.com.au/uploads/publications/Australian_Cotton_Fact_Sheet_-_The_Australian_Cotton_Water_Story.pdf))

**B:** Cotton Australia’s “Meet A Grower” videos.

([https://www.youtube.com/playlist?list=PLSINIel13u0BPSwaGkgE9zVsroPI\\_4Ys9](https://www.youtube.com/playlist?list=PLSINIel13u0BPSwaGkgE9zVsroPI_4Ys9))

**C:** “Australian Grown Cotton 2014: Sustainability Report”.

([http://www.crdc.com.au/sites/default/files/pdf/CCC14003%20Sustainability%20Report\\_LOW%20RES\\_0.PDF](http://www.crdc.com.au/sites/default/files/pdf/CCC14003%20Sustainability%20Report_LOW%20RES_0.PDF))