



COTTON CAREERS

The story of a modern, sustainable agricultural industry that's helping to clothe the world. Cotton Australia's Cotton Education Kit provides current, authoritative information for all teachers and students, and includes:

- Targeted Australian Curriculum outcomes for Years 7-12, and outcomes for Years 11-12 from NSW, QLD, SA, WA, NT & ACT syllabi in each of its 10 chapters.
- Case studies and multimedia that are embedded in the Kit. Additional school resources, lessons and worksheets are found online in the Cotton Classroom.



Cotton Classroom

COTTON CAREERS

If you haven't yet considered a career in agriculture, now's the time to start. With the earth's population set to reach 9.7 billion in 2050, a skilled and efficient workforce needs to be ready to meet the challenges of feeding and clothing the world.

The Australian cotton industry offers people a chance to build a career in a fast-paced and dynamic industry whether they are male or female, live in the city or country, or come from a farming background or not.

The Australian cotton industry offers employment in a vast assortment of areas of the agribusiness sector. These include research and development, financial services, ginning, warehousing, marketing, classing, shipping, policy and advocacy and even growing the crop itself!

While there is diversity in the careers associated with the Australian cotton industry, by comparison to other Australian industries, cotton is a smaller sector. As of August 2019, 318,600 people were employed in agriculture, forestry and fisheries, which accounted for around 2.5% of the national workforce (source: National Farmers' Federation). Depending on the availability of water, the Australian cotton industry employs approximately 12,000 people.

This relatively small workforce has a vital role to play in farming and caring for the land, supporting rural communities, and producing our food and fibre sustainably and efficiently.

Cotton makes up only 3% of Australia's agricultural export commodities with cattle, wheat and whole milk the top three in this export category. Due to the cotton industry's

internationally recognised high quality cotton lint and sustainability credentials, unparalleled adoption of the latest technologies, its on-farm workforce, service and trade providers are all paramount to its continued success.

Opportunities exist in the world of agricultural research and development too, with scientists working to find solutions to the daily challenges farmers face in terms of managing climate change, disease, or boosting quality and production.

The Australian cotton industry encourages new people to join our industry who have a passion to innovate, work collaboratively and help feed and clothe our growing population in an ever more sustainable way. Each of the seven PERFECT cotton career opportunities have different skill sets and pathways, but all of them have strong long-term benefits and you'll be making a difference.

On-farm jobs only account for 18% of the cotton workforce. 82% of cotton jobs are beyond the farm gate and 40% are in cities.

PERFECT COTTON CAREER OPPORTUNITIES		
P	POLICIES	Policy Officer (biosecurity, energy, sustainability, water, workforce)
E	EDUCATION AND TRAINING	Teacher, Lecturer, Event Coordinator, Farm skills provider, Resource Content Writer, App developers
R	RESEARCH	Scientists/Researchers in: Entomology, Agronomy, Plant Breeding, Soils, Pathology, Weeds, Water Use Efficiency, Irrigation, Environment
F	FARMING AND FINANCE	Farm Manager, Accountant, Farm Hand, Yard Supervisor, Irrigation Managers and Irrigation Hands, Cotton Marketing (sales)
E	EXTENSION AND ADVISORY SERVICES	Agronomist, Crop Consultant, Landcare Officer, Workplace Health & Safety Officer, Bug Checker
C	COMMUNICATION	Digital Content, Public Relations, Marketing (industry), Journalist
T	TECHNOLOGIES AND TRADE	Agricultural Engineer, Machinery Operators (driver, harvest contractor, drone/plane pilot), Mechanical Trades, Cotton gin workers, Fashion Design, Cotton Classers, IT, Warehouse Manager

PERFECT adapted from Dr Hlamalani Ngwenya <https://ypard.net/2015-july-8/%E2%80%9Cperfect%E2%80%9D-opportunities-youth-agriculture-bridging-knowledge-gap-farming-through-radio>

COTTON FARM SNAPSHOT

Australia prides itself on being one of the largest and most efficient producers of cotton in the world.

There are up to 1,500 cotton farms in Australia, with the main production areas being central and southern Queensland, northern, central and southern New South Wales, northern Victoria and small but expanding areas of northern Queensland, northern Western Australia and the Northern Territory. Approximately 66% of Australia's cotton is grown in NSW and 33% in Queensland.

Approximately 90% of Australia's cotton businesses are family farms, producing about 80% of the crop. These families have often lived and worked in their communities for generations.

The average Australian cotton farm:

- is family-owned and operated;
- directly creates jobs for nine people;
- is run by growers with an average age of 47 years;
- grows 576 hectares of cotton, comprising 10% of the total farm area;
- supplements cotton with other crops including wheat, chickpeas and sorghum; many Australian cotton farmers also graze sheep and cattle;
- includes natural areas – such as native vegetation and riparian zones – ranging from between 10 - 40 % of property area.



Prioritising people and sharing success key to growing Tuohey family businesses.

Agriculture offers a range of career opportunities. This video from the NSW Department of Education explores many of these opportunities and describes how vital agriculture is for every person on the planet.



PICTURE YOURSELF IN COTTON!

Do you possess a good attitude, a strong work ethic, are committed to adhering to safety practices, and are available for the entire season which runs from September to April? Here are some typical entry-level and seasonal cotton jobs suitable for people with little or no experience in cotton but who want to take that first leap. This is a great way to start a career in the cotton industry, or be a steppingstone before deciding on your career direction or options for further education.

FARM HAND – NARRABRI NSW

\$24.80 per hour + penalty rates.
6-month contract (5 days per week – 7.5-hour days).
Further opportunity to work on cotton harvest.
Relocation assistance.
All training provided.

Your Skills & Experience: The ideal candidates have previous experience in similar roles; however, we are keen to hear from those who have a great work ethic and are looking to prove themselves or build a great career in agriculture. You will need to be physically capable and be able to work outside in all types of weather.

SEASONAL COTTON WAREHOUSE OPPORTUNITIES – LOADER/ FORKLIFT DRIVER

We are now hiring for this year's seasonal staff roster.

COTTON GINNERS AND TRAINEES

Looking for career development, work/life balance and to be hands-on?
Flexible and safe working arrangements.
Training and career development.
You don't necessarily need experience to become a seasonal worker. Some roles require special tickets, whereas others do not require specific skills and are suitable for people from all backgrounds.

COTTON FIELD RESEARCH ASSISTANT

Salary Range: AU\$63,594 to AU\$80,937 pa (pro-rata for part-time) + up to 15.4% superannuation.
The role of Research Projects staff in CSIRO is to collaborate in scientific and technological activities with other research staff, usually by assisting with detailed planning, undertaking or assisting with experimental, observational or technology development work, and in carrying out the more practical aspects of the work.

CROPPING AND IRRIGATION GENERAL FARM HAND

Pay: \$25 p/h + free accommodation
Requirements: Car licence and fluent English language skills.
House provided on-farm and work ute available to the right applicant.
Major focus on cotton, sorghum and winter crop rotations.
Training provided.

BUILDING YOUR COTTON CAREER

Career building is the development of skills, knowledge and attitudes about work, gained through varied learning experiences, which assist students to make informed decisions about their options for the future whilst still at school, undertaking VET or in tertiary education such as TAFE or College.

These days we are more likely to have multiple careers, rather than working in the same job for decades. This means you need to be constantly learning for our future, to build your career.

Traditionally in agriculture, family members have been the main source of the on-farm and related industry workforce. However, this is evolving. Changes in the structure and organisation of agribusiness and related

industries, along with technological innovation, have flow-on consequences for the workforce - both in terms of the number of people that work in the industry and the skills they need to have, which has resulted in more reliance on a workforce from outside the family unit.

The nature of work has changed, with increased demand for skilled workers capable of operating sophisticated technologies. Business owners are needing more advanced management skills to manage larger, more complex businesses.



Cotton growers' highest level of education compared to all other jobs.

HIGHEST LEVEL OF EDUCATION (% SHARE)		
Type of Qualification	Cotton Growers	All Jobs Average
Post Graduate/Graduate Diploma or Graduate Certificate	0.9	10.1
Bachelor degree	14.4	21.8
Advanced Diploma/Diploma	15.8	11.6
Certificate III/IV	23.6	21.1
Year 12	19.3	18.1
Year 11	2.0	4.8
Year 10 and below	24.1	12.5

Source: ABS Census 2016, Customised Report. Highest qualification completed by workers in this job (in any field of study). Qualifications needed by new workers might be different from the qualifications of workers already in the job.

There are many trends changing the way Australians work, including new technologies, shifting demographics and globalisation. Discussions about the future skills needed for our workforce attracts interest from all areas of society, especially by those deciding on a career, advising on careers, or providing the jobs that build careers.



Source: <https://nci.dese.gov.au/futureofwork>



Podcast: Dr Nicole McDonald is a postdoctoral research fellow supported by CRDC to investigate the future workforce requirements for our cotton industry. 'I'm a careers researcher in agriculture. Specifically, a careers researcher in the cotton industry. I'm concerned with what motivates people to choose a career in the cotton industry, what they need to thrive in this career, and how we can help people experience meaningful and decent work. This has driven my research. On reflection of my research journey, I thought I'd write this blog about three lessons I've learned working in the cotton industry.



Career Harvest has information on what careers are available and the pathways to get there. Pathway information includes what skills and education are required for different positions and where students can find more information about education opportunities. Career Harvest also has testimonials from people working in their chosen careers.

WORKPLACES AND PEOPLE IN THE COTTON INDUSTRY

Policy



Paul Sloman, Cotton Australia Policy Officer and Matt and Fiona Norrie from Narrabri, NSW.

Policy



Adam Kay, CEO Cotton Australia being interviewed.

Education and Training



Claudia Vicary (Project Officer AgSkilled) at a Southern Cotton display.

Education and Training



Dr Oliver Knox, Senior Lecturer – Cotton, School of Environmental and Rural Science at UNE.

Research



Scientific laboratory research into cotton.

Research



Plant breeding researchers working in the field.

Farming and Finance



Cotton grower in the home office on farm.

Farming and Finance



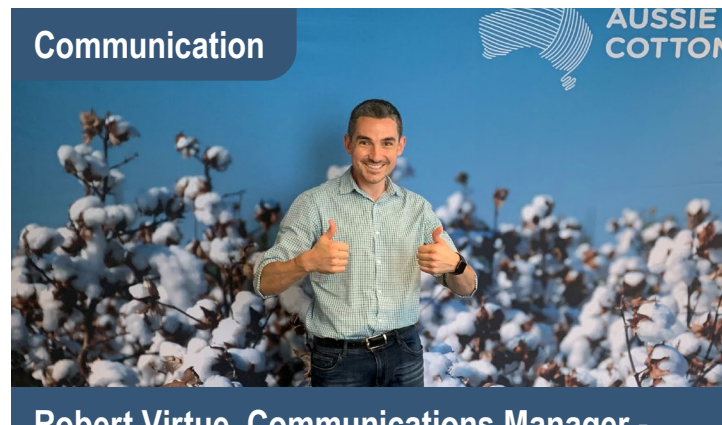
Growers manage a team of on-farm workers.

Extension and Advisory Services



Alexandria Galea. Experts in agronomy ensure successful crops.

Communication



Robert Virtue, Communications Manager - Digital Cotton Australia sharing the industry story with growers and the public.

Technologies and Trade



Workers drive efficiency through the use of technology.

Technologies and Trade



Gin staff oversee processing cotton into its final export product.

Not every job in agriculture involves working outside or in rural areas. But for those with a sense of adventure there are plenty that do, or certainly involve a good chunk of time out on farms talking to clients, which can mean living and working in some of the most beautiful parts of the country.

There is a misconception that agriculture is just for people who want to run or work on a farm. Those people might form the backbone

of the industry, but they form the heart of a much larger network. This means there are a huge number of opportunities further up – and down – the supply chain.

Are you searching for your right career in agriculture and suggested learning pathways? Investigate these useful videos and links.



Your Career in Agriculture. Queensland Farmer's Federation gives an overview of the huge variety of opportunities for rewarding work in little-known areas of agriculture.



Young Farming Champion Emma Ayliffe shares her journey from university to starting her own business at the age of 26.

Information on working in Australia's dynamic cotton industry, including career pathways, the training available and cotton as a lifestyle choice.

Dr Nicole McDonald has been researching careers in the cotton industry including what leads to job satisfaction for on-farm workers, the skills required to thrive at work for next generation workers in a number of professions, and what is needed for the future of work. Some key factors that she found that are important for people to enjoy their work in the cotton industry include feeling confident in skills and abilities and sharing the values that exist in cotton workplaces. Dr McDonald explains; one of the big influences of people feeling enthusiastic about their work and satisfied

with their job was if they felt it was important to work in a way that respected and looked after the land. These conservation values are some of the values that underpin cotton farm enterprises. If you're someone who cares about the environment and wants to work with nature, then a career on a cotton farm could be for you. The work values that exist on cotton farms flow throughout the broader industry and you'll find a range people with different skills and with different interests that share these conservation values that work beyond the farm gate as well.



Cotton Career video with Sharna Holeman.

Podcast – In this podcast, CottonInfo's Sharna Holman interviews University of Southern Queensland researcher, Dr Nicole McDonald about her research into the cotton industry workforce.



Queensland Farmers' Federation showcases the huge variety of careers in agriculture.

Hear these three young agri-professionals explain their work applying science to agriculture – a career that can take you anywhere in the world!



Meet a Cotton Grower Series



Join The Ag Revolution. NSW Gwydir Valley Irrigators' Association page promoting cotton careers.

REBUILDING TRUST IN AUSTRALIAN AGRICULTURE AND WHY IS THIS IMPORTANT?

If you are not in the agricultural business, you may have never heard of the rebuilding trust strategies being implemented by most Australian agricultural industries. You may wonder why.

When looking for answers, people often go to social media for their information; and across many of these digital platforms, it is often an industry's detractor's posts with sensational headlines that grab our attention. Without further research from local industry sources, the answers we arrive at are often extremely limited or polarised conclusions.

Agriculture is important in our daily lives to feed and clothe us, however little is known about its workforce. The stereotype of a farmer

ploughing up the ground wearing overalls is outdated. The truth is that farmers care deeply for the sustainability of our land and strive to produce the best quality product possible by drawing from research using innovative technologies and a passionate workforce who are the lifeblood of rural and regional communities.

When considering a career in agriculture, it is important to look beyond the stereotype of a farmer and investigate the vast array of engaging and innovative jobs available. If you're someone who wants to make a difference and contribute to the future of sustainable fibre production, then a career in cotton could be for you.





Amy Kirke is the 2020 AgriFutures Rural Women's Award NT Winner and a marine biologist who is keen to take her knowledge and passion about science to the next level.



myfuture provides resources to explore career pathways and tools to develop self-knowledge to help with career decision making.



jobactive is the Australian Government's employment service to help Australians into work and help employers find the right staff for their business.



Rural Skills Australia (RSA) is a not-for-profit organisation that has worked over many years in conjunction with the National Farmers' Federation, its member bodies, and related industry bodies to foster improved rural and related industry involvement in structured education and training, with a view to enhancing the skills and capabilities of new entrants, existing workers and primary producers alike.



Use the career profiles on Job Outlook to learn about the future outlook, pay, main tasks, and physical and other demands of careers that interest you. Find out about the skills, knowledge and abilities you may need to get and keep a job. When you are ready to take action, follow links to job vacancies and related courses.



Career Harvest has some great case studies, pathways and career videos to explore all focusing on agriculture.



Farm Ready Hub - Take the first steps in your agricultural journey.



THEMES AND AUSTRALIAN CURRICULUM
OUTCOMES FOR SECONDARY SCHOOL

The Cotton Education Kit has been linked to the Australian Curriculum for Years 7-10, and targeted outcomes for Years 11 -12 from all state & territory curriculums across Australia. A list of themes is provided for teachers as a quick guide to assist linking the content to their unit of work or syllabi in their state or territory.

A full list of the individual syllabuses that have been mapped against the Cotton Education Kit can be found in the Cotton Classroom.



CHAPTER TEN THEMES

● Cotton Careers

CHAPTER TEN
CURRICULUM OUTCOMES

Curriculum	Course	Chapter 10: Cotton Careers
Australian Curriculum	Year 9 Science	ACSHE160 (new careers)
Australian Curriculum	Year 10 Science	ACSHE160 (new careers)
New South Wales (HSC)	Primary Industries (VET) (2020)	AHCWRK204
	Textiles and design (2013)	P5.2
Queensland (QCE)	Agricultural Practises (Applied) (2019)	C2.2 C5.2
	Business studies (Applied) (2019)	BF4
	Economics (2017)	Unit 1b: Economics

KEY LINKS



Cotton Australia.



360-degree digital film of a cotton farm, the latest addition to Cotton Australia's suite of educational resources informing city and country residents about the Australian cotton industry.



Google Arts & Culture



Australian Cotton



Cotton Research and Development Corporation



Cotton Seed Distributors



CottonInfo



Primezone: Primezone provides teachers and students with access to the latest quality primary industries education resources

