# CAREERS IN AGRICULTURE



# **ACKNOWLEDGEMENTS**

#### A(KNOWLEDGEMENT OF TRADITIONAL OWNERS

The Queensland Farmers' Federation. Rural Jobs and Skills Alliance and the Queensland Government acknowledge the Traditional Owners of the land and pay respects to their Elders past, present and emerging. We also acknowledge the diverse Aboriginal peoples and Torres Strait Islander peoples of Queensland and thank them for their ongoing custodianship of the lands, seas, waterways, stories, laws and customs. Aboriginal peoples and Torres Strait Islander peoples are acknowledged as the first farmers, foresters and fishers in this country who have lived in harmony with the land, cultivated the landscape and fisheries and harvested food, timber and fibre for millennia.

#### **LICENSE**

This work is licensed to Queensland Farmers' Federation, Rural Jobs and Skills Alliance and the Queensland Government under a Creative Commons Attribution (CC BY) 3.0 Australia license. To view a copy of

www.creativecommons.org/licenses/by/3.0/au

#### **ENQUIRIES**

For enquiries or further information about this magazine, please contact Queensland Farmers' Federation:

- P (07) 3837 4720
- Eworkforceplanning@qff.org.au

This magazine was compiled by Career Motivate

- www.careermotivate.com.

#### **DISCLAIMER**

While every care has been taken in preparing this publication, Queensland Farmers' Federation, Rural Jobs and Skills Alliance and the Queensland Government accept no responsibility for decisions or actions taken as a result of any data, information, statement or advice, expressed or implied, contained within. To the best of our knowledge, the content was correct at the time of publishing.

#### **COPYRIGHT**

This publication is protected by the Copyright Act 1968. @Queensland Farmers' Federation, the Queensland Government and the Rural Jobs and Skills Alliance October 2022 Excerpts may be reproduced with acknowledgement of the Queensland Farmers' Federation, the Rural Jobs and Skills Alliance and the Queensland Government. This work was produced by the Queensland Farmers' Federation in conjunction with the Rural Jobs and Skills Alliance and the Queensland Government. Queensland Farmers' Federation has undertaken reasonable enquiries to identify material owned by third parties and secure permission for its reproduction. Permission may need to be obtained from third parties to re-use their material. Images in this publication are provided by Queensland Farmers' Federation (www.qff.org.au)

THIS IS A CLICKABLE LINK

When you see a button like the one above, you can click it to open a new tab with more information.

> Thank you to the committed and experienced working group who have provided their time and expertise to develop this resource including: Carolyn Alchin (Main Author (Career Motivate), Olivia Balderston (Graphic Design), Elysa Riedel (DAF), Shikira Kalatzis (Canegrowers), Jenny Hughes (Cotton Australia), Luciano Mesiti and Ingrid Gow (PIEFA), Louise Nicholas (Home Hill High School), Tanya Nagle and Kellie Blinco (AgForce), Colette Williams (QAWN/ Bowen Gumlu Growers Association), Jonathan Mendez, Rod Morris and Diana Saunders (QFF).

# RURAL JOBS AND SKILLS ALLIANCE



















CANEGROWERS

















#### CAREERS IN AG.

- Your Guide to Careers in Agriculture
- What does Agriculture Offer You
- Lots of Jobs to choose from
- Jobs in Agriculture
- Pathways to Agriculture
- **AgCAREERSTART**
- The Value of Experience
- Careers with Cows

#### **REAL PEOPLE**

- 16 Josh the General Manager, Conrad the Station Hand and Jemma the Engagement Officer
- 18 Felicity with Sugar Research Australia
- Droning-on about Tech in Agriculture
- 20 Emily the Agribusiness Student & Goat Farmer
- 21 Lucy the Regional Officer
- 22 Agronomy is Growing
- 23 Eduardo the Agronomist
- 24 Kaitlin the Hatchery Technician
- 25 Harry the Sheep Farmer & Business Student
- 26 Andrew the Canegrower & Banana Farmer
- **27** Extension Officer Jasmine
- 28 Agriculture is BIG Business
- 29 Harry the Field Technician

#### **CAREER PATHWAYS**

- Agriculture Education Pathways
- Scholarships in Agriculture
- Pathways to Careers in Cane
- Pathways to Careers in Aquaculture
- Growing a Career in Forestry
- Pathways to Careers in Production, Horticulture, Nursery and Garden
- Pathways to Careers in Cotton
- Decisions about your Career
- What do Employers want?
- Resources for Teachers





























# YOUR GUIDE TO **CAREERS IN** AGRICULTURE

There are so many choices in agriculture. From farm to plate, from field to fork. Agriculture is a growing and vibrant industry with diverse jobs for all kinds of people. Choosing careers is tough, but understanding the different roles and jobs that exist is one great step forward.

This guide will show you stories about real people, emerging careers, and some great tips, websites and tricks to help you on your decision-making journey. Agriculture is a vibrant, valuable and practical industry that is integral to Australia and to the world.

There are lots of jobs to explore here. Inside roles, outside roles, hands-on and strategic opportunities. Time to check out your options, and find something to suit YOU!

#### **CAROLYN ALCHIN**

CAREER DEVELOPMENT PRACTITIONER

Agriculture directly employs 72 900

state's workforce.

Total value of \$23.54 **Billion** 

across agriculture, food in 2020 - 2021. Agriculture (or "Ag") is one of the most diverse industries. The opportunities are endless. Prove it! I hear you say. There are hundreds of different roles and careers to suit people with diverse strengths, values and interests.

Queensland Agriculture produces one third of Australia's food, and it needs SO many people doing SO many jobs to do this successfully. Furthermore, the industry is experiencing record growth. There are outside jobs with amazing views, inside jobs (maybe you love air con), straight from school jobs, traineeships and university qualification level roles. Whether you want to work on a boat, in a field, in an office, or in the bush - your options are almost endless.

There are roles in the regions, and in the cities. The world is changing and agriculture is changing with it. Farms are innovating and working on their sustainability. They need farmhands, irrigation specialists, auto-electricians, welders, scientists, agronomists, and tech heads (and hundreds of other roles) to help make this happen.

#### **QUEENSLAND'S AG INDUSTRIES**

Cane

WHAT DOES

**OFFER YOU?** 

**AGRICULTURE** 

- Cotton
- Nursery and Garden
- Horticulture
- **Animals**

people or 2.8% of the

fisheries, forestry and

### More than 365 000

jobs across the supply chain.

#### **ARE YOU INTERESTED IN ALL** THINGS BUSINESS?

58% of Australian agriculture produce is exported; that's a huge market to be a part of. Maybe you want to manage people. In agriculture, there are many leadership roles available both on the farms, and in the industries that support the farms. You might love all things money. Agriculture contributed more than 23 billion Australian dollars to the state economy from 2021 to 2022. It is a BIG and bold business and it could be for you.

#### **EVER HEARD OF PRECISION AGRICULTURE?**

Precision agriculture is another field growing in Ag. Roles include developing camera technology, drone technology, AI and IT software. It will be a keystone for supporting agriculture and sustainability over the coming years.

#### **GET BORED EASILY?**

Ag is so diverse and there are careers to suit everyone.



Want to find out more about jobs in agriculture? This magazine is full of articles and links to help you better understand how Ag can be your career choice and why it would suit you. Check out this video to start you off!

#### **LOVE MACHINES AND FIXING** STUFF?

In agriculture you can work in and on some of the biggest machines out there.



# LOTS OF JOBS TO

# **CHOOSE FROM**

With so many job opportunities within the agricultural sector, it's important to choose an agriculture course that aligns with your strengths, values and interests. The range of courses and experience that can create opportunities in these careers is endless, so here is a taster.

#### Year 10, Senior Secondary Certificate of Education, or Certificate I or II

Animal Attendant	Artificial Insemination Tech
Beekeeper	Dairy Farm Hand
Farm Hand	Storeperson
Fish Farm Hand	Natural Resource Manager
Gardener	Harvesting Operator
Nursery Assistant	Weed Controller
Shearer	Slaughterer
Winery Worker	Landcare Worker
Abattoir Worker	Animal Breeder

# PROCESS FOR SUPPORTING YOUR CAREER CHOICES

- Understand your strengths, skills, values and interests
- Explore the thousands of careers available
- See what matches up and what qualifications you might need.

#### Certificate III or IV, or relevant experience

Aquaculture Technician	Beekeeper
Cheese Maker	Forklift Operator
Fish Farm Hand	Jackaroo Jillaroo
Tree Faller	Horse Trainer
Farrier	Park Ranger
Tree Surgeon	Wool classer
Saw Doctor	Shearer
Wool Classer	Stablehand
Facility Supervisor	Forester
Irrigationalist	Fisheries Officer
Weed Controller	Laboratory worker

A Certificate II, III, or IV in Agriculture helps you to enter the workforce with the confidence to succeed. It is an effective way to enter the industry (in combination with networking and applying for roles) and you can choose from hundreds of nationally recognised courses that can introduce you to the wonders of Ag. You can often complete these in just 12 or 18 months and many are available entirely online, where they are able to be completed whilst you are working and earning. Blended learning options are also available. Courses can focus on teaching the skills necessary to clean and maintain farming equipment, health and safety, and additional skills such as accurate record keeping and environmentally sustainable resource usage.

#### Diploma or Advanced Diploma

Agriculture Tech. Officer	Animal Technician
Aquaculture Technician	Dairy Technician
Farmer	Farm Manager
Fisheries Officer	Forest Technical Officer
Geographic Information	Horse Manager
Tradesperson	Laboratory Worker
Resource Manager	Natural Therapist
Park Ranger Surveyor	Wool classer
Supply Chain Manager	Stablehand
Horse Trainer	Timber Production
Warehouse Manager	Logistical Managers
Weed Controller	Beekeeper
Pilot	Winery Worker

If you wish to enter the workforce above entry-level positions or want to further educate yourself beyond the basics, a Diploma can offer a more in-depth analysis of and training in the agricultural industry. Courses such as the Diploma of Agriculture teaches you more advanced skills such as resource development, management of property and the basics of running your own agricultural business. These courses can often be easily completed through both online and offline learning methods, offering differing levels of practical and theoretical knowledge. Such courses are also an excellent pathway to additional study at Bachelor level.

#### **Bachelor Degree or higher**

Agriculture Economist	Agriculture Engineer
Agricultural Scientist	Agronomist
Biotechnologist	Botanist
Chemical Engineer	Chemist
Civil Engineer	Ecologist
Environmental Engineer	Conservation Officer
Environmental Scientist	Agricultural Consultant
Geologist	Geophysicist
Hydrogeologist	Horticulturist
Landscape Architect	Marine biologist
Meteorologist	Microbiologist
Mining Engineer	Natural Therapist
Resource Manager	Surveyor
Toxicologist	Urban Planner
Viticulturist	Zoologist

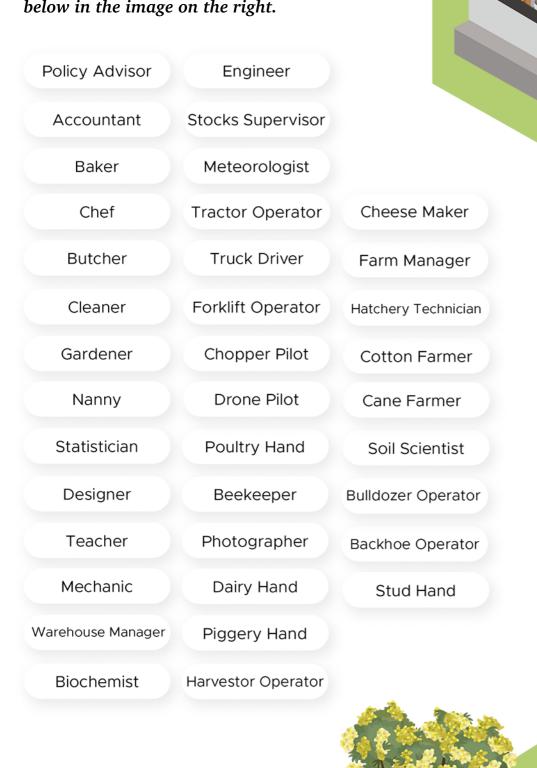
If you're serious about a career in agriculture, a Bachelor level qualification is the highestlevel undergraduate option you can obtain. Common courses include the Bachelor of Agriculture, the Bachelor of Agricultural Studies, the Bachelor of Engineering (Agriculture) or the Bachelor of Agricultural Technology and Management which provide an excellent headstart into the industry. They provide you training in advanced skills such as data mining, GPS scanning, cloud computing, livestock management, profit forecasting and more. These are highly sought-after qualifications and will also teach you valuable 'soft skills' including communication, teamwork and creative problem-solving skills, crucial for a long-lasting career. These qualifications usually take 3 or 4 years to complete and produce graduates ready to make an immediate impact.



# JOBS IN

# AGRICULTURE

See if you can find all the careers listed below in the image on the right.







Are you deciding on what subjects to study or what courses to do? There are a lot of different pathways into agriculture, some are straight from school, many need some study through Vocational Education or training (like TAFE) or University.

#### Meet Lily

the wool grader

Lily wanted to drop out of high school in year 11. She just wanted to be outside doing something practical! A Certificate III in agricultural studies was recommended to her, so she studied her Certificate III in Agricultural Studies and started checking out the job options. During her study she applied for work in sheep shearing and was successful. She then completed her diploma in Agricultural studies, and was promoted to a wool grader.

#### Meet Matt

the barramundi farmer

Matt completed year 10 and decided he wanted to work on boats. He found a Certificate II in Aquaculture, called a barramundi farm and said he was interested. They invited him for a visit, he loved it and is currently studying, and working towards his qualification. He fishes on afternoons and weekends and goes camping with his friends in his 4WD.

#### Meet Will

the agricultural technician

Will finished year 12, without any certificates or an ATAR. He applied to an agricultural equipment dealer to work and complete his Certificate II in Automobile Underbody and was successful. Once completed, he hopes to move across to do the Certificate III in order to become an agricultural technician. Will loves working on cars, enjoys problem solving and likes doing things that are practical. He hopes to become a field technician in the future and go and work with clients to fix their big machinery to help keep them moving.

#### Meet Angela

the helicopter mustering pilot

Angela decided at the end of year 12 to have a gap year as a Jillaroo. During her gap year she encountered helicopter herding methods and decided to study for her pilot licence. She successfully completed her helicopter licence. Whilst studying she continued to work on the farm, gaining experience in herding. She loves meeting different people and hopes to start her own business in the next 2 years herding from her helicopter.

#### Meet Xavier

the fitter and turner

Xavier completed year 12, and applied for a range of apprenticeships, called businesses, and shared his resume with prospective employers. He successfully accessed a Fitter and Turner apprenticeship through a company 35 minutes drive away from his home. He likes his boss, works Monday to Friday and enjoys getting things done.

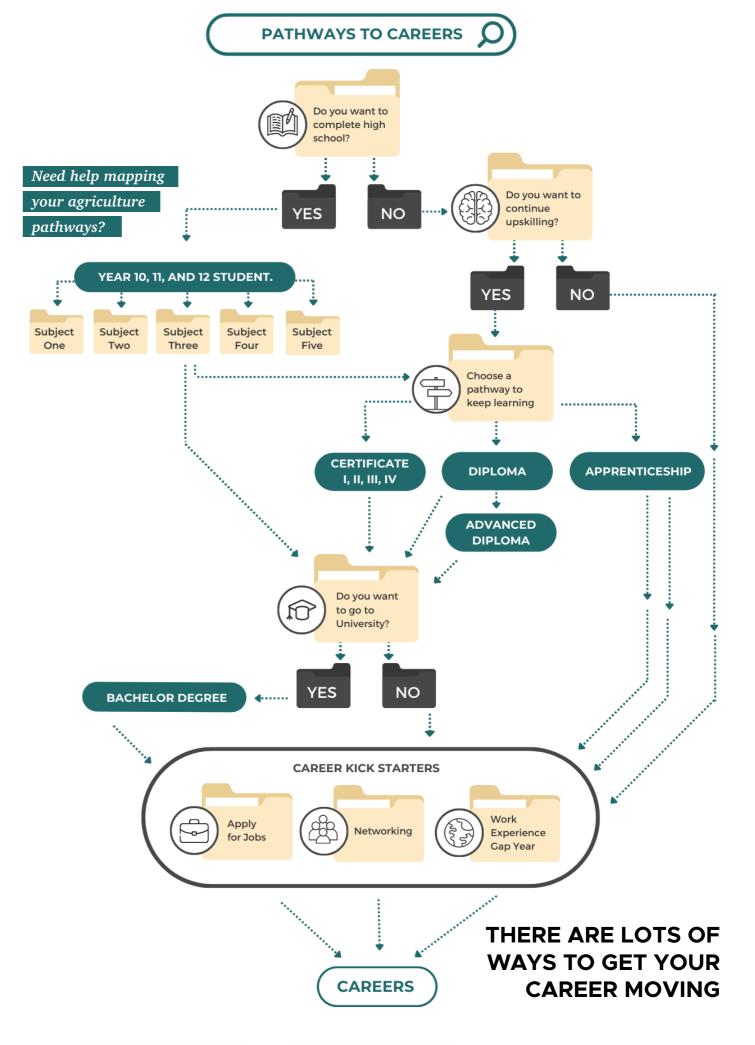
#### Meet Alex

the science and business student

Alex completed year 12 with an ATAR of 91. Passionate about the environment, Alex decided on a career pathway towards research by studying a double degree, a Bachelor of Science and Bachelor of Business. He would like to work in biosecurity, and has gotten 10 days' work experience next uniholidays.

Most of all, it is important to know that there are LOTS of different ways to get you to where you want to go. You can even change your

mind and pivot or adapt along the way.



10

WOOL GRADER

HELICOPTER PILOT

LIVESTOCK FARMER

FITTER AND TURNER AGRICULTURAL TECHNICIAN







#### AGCAREERSTART IS A 10-12 MONTH **GAP-YEAR PROGRAM TO KICK-START** YOUNG AUSTRALIANS' CAREERS IN AGRICULTURE.

This unique gap year program provides you with a paid job, training and development, not to mention the opportunity to build your networks within the agriculture industry.

Applicants can choose from a wide variety of farm types including dairy, beef, grains, forestry, cotton, sheep, horticulture, and other livestock industries such as poultry or pork. A matching process is undertaken to ensure participants are assigned to the type of farms that match their interests and skills.

#### WHO IS ELIGIBLE TO APPLY?

- Anyone aged from 17-25 can apply
- · Need to be legally able to work in Australia
- · Driver's licence preferred, but not essential
- · Previous experience in agriculture not required

#### WHAT'S IN IT FOR ME?

- Full time paid job
- · A training grant to upskill yourself
- Funding to attend industry events
- A dedicated support team

#### **HOW CAN I SIGN UP?**

Visit agcareerstart.com.au and register your interest today!

#### WHAT CAN YOU EXPECT TO **GET OUT OF THE PROGRAM?**

#### Get paid to learn

AgCAREERSTART is a unique pathway into agriculture, enabling you to get paid while you learn. Every day of your gap-year will offer exciting challenges and opportunities to learn. On top of the skills and experience you will gain working on the farm, you will undertake farm safety training and gain access to a training grant to upskill yourself throughout your placement.

#### A new network

The program provides you with access to a network of likeminded young people also embarking on their gap-years. There will be many opportunities to build your networks and attend significant industry events such as conferences, agricultural field days, and other local events, utilising your industry engagement grant.

#### Ongoing support

away from home can be daunting, so the AgCAREERSTART team will provide you with the support to ensure a safe and rewarding experience and the opportunity to move into a career in agriculture at the completion of your placement.

#### MEET ABBEY

Abbey is 21, friendly, adaptable and practical. After finishing Year 12, Abbey worked in a toy store and worked out that she enjoyed the picking and packing of goods, so she worked for Hastings Deering and got her Certificate III in Warehousing. She lost her role through COVID-19 pandemic and needed to go back to her family's Merino Sheep farm. She did get another warehousing role, but realised she loved the tools, and was successful in her application for the role working in the tooling store. She learned all the tools, and this year is working as an apprentice agricultural technician.

She loves working with people who have so much knowledge and experience and really values the diversity of the role. She is never bored these days, working on a mower one day and a cotton picker the next. She lives with her partner who is a diesel fitter, and is looking forward to the future. She enjoys earning a steady income and working around 40 hours

#### **CHALLENGES**

Her size! She says at less than 50ka she needs to be a problem solver when she needs to move heavy equipment, and she really values her communication skills and teaming up with someone who has the strength and she can bring the knowledge. The up side, she says, is that she can access parts on the machine that the bigger guys can't.

#### **FUTURE**

She doesn't know yet what the future holds, there are lots of opportunities, and she is still considering what role she can hold moving forward. At the moment she is really enjoying her apprenticeship, and she has a couple of years to think about it.

#### MEET WILL

Will has a dad who is an accountant and a mum who is employed as a property manager, but his grandparents were in trades. Will knew he wanted to work with mechanical things. He is mechanically minded and loves tinkering with motors. Heavy machinery piqued his interest, but he wanted something different to the cars he works on at home (including a 1928 Model A Ford that belonged to his grandfather).

He pulled together an application and talked to people who worked in the area. Will is now working through RDO, and is studying a Certificate II in Auto Underbody and is on a pathway to being an agricultural technician apprentice and working on heavy machinery. He likes learning about the different ways to find solutions to complex problems that come up, enjoys being mentored by the experienced mechanics around him, and is happy to put in the effort.

#### **TOP TIPS**

- Listen lots, because this is a dangerous job- for example, even knowing how to rotate massive tyres is a challenge.
- Pick up things quickly, have a good memory, and put things back after you use them.
- Get some experience, and talk to people in the role, get a job that is related to the industry and that way you can learn what you might like to do.
- Be patient, do the researchuse your initiative to work out your problems and ask for help if you need it.
- This is not a knuckle dragging job, you need a good brain to do this, and it is fun.
- Listen carefully and take it one step at a time.



#### **CHALLENGES**

There are so many vehicles and so much to learn. To be efficient, you need to remember lots of different types of transmissions, and different systems. The electric, the hybrid, the petrol and diesel, and all of the interesting new technology that can help farmers to be precise and more productive. He knows he has a lot to learn.

#### **FUTURE**

Will looks forward to being knowledgeable enough to be an agricultural field technician on the road, helping farmers to get their machines working right whilst they are still on the land.

We know that starting a new job and moving









### Maddy Wightman Executive Assistant

- Grew up in inner city Brisbane, Queensland.
- Began a Bachelor degree in Environmental Science, to realise it wasn't for her. She has now completed a Certificate III in Agriculture.
- Worked for 4 years in the Northern Territory on multiple cattle stations.
- Maddy gets to be involved in almost all aspects of agriculture as executive assistant to the owners. Her job is incredibly varied and handson, it is safe to say that no two days are the same.

 She has the opportunity to work across multiple aspects of the red meat industry such as breeding, feedlotting and processing. "I grew up in inner city Brisbane and my interest in agriculture was first sparked when I started my schooling at St Margaret's Anglican Girls School, where some of my best friends were boarders. I enjoyed spending time at their properties and my interest in and love for the cattle industry began. Post leaving school I started a degree but soon realised it wasn't for me. I packed up my bags and was off to Western Australia & the Northern Territory, which is where I stayed for 4 years."



**Resources** 



**Careers in Beef** 



**Careers in Dairy** 

# Jackson Scott Livestock Co-ordinator / Assistant Manager

- Completed Grade 12 then went on to have a gap year in WA. He had a hands-on experience on a cattle station.
- Studied a Bachelor of Veterinary Biosciences majoring in Production Systems at Sydney University.
- Met the team at the Wagga Wagga Intercollegiate Meat Judging Competition in 2020. They were offered a Graduate position in 2021 and now holds the role of Livestock Co-ordinator / Assistant Manager with Signature on Farm.

# Arthur Marais Graduate Position

- Originally from South Africa and moved to Dubbo NSW.
- Completed Grade 12 and then completed a Dual Degree in Agribusiness and Agricultural Science majoring in Animal Production.
- Currently in a Graduate Position for some time across each area of the business. He accessed the opportunity through networking at a meat judging competition in Wagga Wagga. Signature Beef was at the careers expo and had mentioned their graduate position for 2022, as well as long-time family friend Jackson Scott, giving an insight into the company and organising work experience for Arthur.

# Claire Wright Beef Supply Chain Traineeship

- Grew up in Canowindra, NSW on small family property.
- Completed grade 12 in 2021 and at the age of 18 is currently taking a gap year before commencing university. She is hoping to study a Bachelor degree of Agriscience.
- In her position within the Beef Supply Chain Traineeship program, she gets to work in the pastoral, feedlot and abattoir teams. It is pretty amazing to be able to see food go from paddock to plate all on the one station.

"This role has allowed me to develop

knowledge right along the supply chain, from

working cattle in the yards right through to

processing beef in the abattoir. I am excited

for the future of the industry and to see where

it can take many young people like myself."

#### Tanisha George Level 4 Meat Industry Worker

- Grew up in Emerald, Central Queensland.
- Started her butchery apprenticeship in grade 10 and has continued that throughout her schooling, she's now 21.
- She works in the abattoir full time as a butcher. She works on both the slaughter floor and in the boning room. She has some very valuable knowledge and skills which add value to the team.

# Tess Camm General Manager at Signature Beef

- Grew up just outside of Dalby in country Queensland.
- Completed grade 12 and has studied a Bachelor of Business Management majoring Human Resources Management.
- She has worked for Signature Beef for 8 years and been General Manager for 5 years.
- Tess is currently overseas as she was selected to participate in the Nuffield farming scholar program in 2020. Nuffield is an Agricultural Scholarship organisation that awards Primary Producers with a scholarship that allows them to travel and study.

**FARMHAND BUTCHER FOOD FARM DAIRY PROCESS PRODUCE MANAGER INSPECTOR WORKER LIVESTOCK FARMER COMMODITY DAIRY** JACKAROO/ **TRADER SCIENTIST JILLAROO** 

MILKING MACHINE OPERATOR



#### JOSH'S STORY & STUDY-PATH

Josh credits his grandad (a cattle drover) saying:

"My Grandad paved the way by building strong relationships between Indigenous and non-Indigenous peoples."

Josh says most of his opportunities have come from having strong networks with family, locals and business. He talks about there never being a shortage of work for the people in his community. There are a lot of opportunities including roles working with cattle, fencing and trucks. He enjoys supporting country and city, Indigenous, and non-Indigenous people to find work on country. He says, even if the position doesn't make him really wealthy, he and his family love the lifestyle and that is why they have stayed.

Josh finished Year 12, and has worked with cattle his whole life. From carting cattle, to mustering, working in the helicopter, he has assisted and managed different stations across Queensland and the Northern Territory. His post-school qualification is his Chopper license. He has done his learning on the job.

#### **CHALLENGES**

Josh loves helping people, but he says people also have to help themselves, and sometimes it doesn't work out that way. He finds this tough, but loves supporting his people to give them opportunities.

#### **TOP TIPS**

Learn more

about Channel

Country?

Want to hear

more about

**Indigenous** 

Agriculture?

- Have a strong work ethic. Sometimes doing good work is a great distraction from tough situations.
- Be open minded on how to do things. Some things are new and technological and others are old-school. Both have value.
- Build your self-respect and your social skills.
- Listen and LEARN. Be willing to ask questions if you do not understand.
- Remember that sometimes it doesn't work. Admit your mistakes so you can learn from them.

**ABOUT THE JOB** 

Josh is the General Manager of Mithaka Aboriginal Corporation in Windorah Queensland. Mithaka People are Traditional Owners who have social, economic, cultural and spiritual affiliations with, and responsibilities for, Mithaka traditional land and waters.

Josh and his team do a lot of work to support young people from both the city and the country, to get back to positive pathways through their work in the Mithaka community. Josh manages to drive an average of 78,000 km per year visiting farms, mines, sites, and people they have partnerships and connections with. He says he is very lucky to have a great team to work with and values the work that he does with communities, farms. mines, research and stakeholder management. He would love to see even more partnership between them and the land owners, to build sustainable futures on the land, and promote Beef and Indigenous Bush Foods together.

"The best thing in the world is that you do not have the negative social media impacts out here. You've got the space and time to learn who you are and find out what helps you feel fulfilled. You work hard, but it is worth it."

#### **ABOUT THE JOB**

Conrad is a 22-year-old station hand at Olivevale Pastoral in Far North Queensland. He is a Ngadjonji man from the Atherton Tablelands. He musters and feeds cattle, cleans troughs, fixes fences, does some shed building and a bit of mechanics. He got his job through a Facebook ad. He loves his job, the people he works with, the accommodation, the food, his bosses and the company.

"It's pretty chill most of the time and a great place to work. You do need to have a practical head on your shoulders though, and the focus to get the work done."



"We are all unified in working to protect and preserve our country. There is nothing more important. As a First Nations person, our unique country holds particular significance to me."

Jem feels there are so many amazing possibilities to explore within DAF to further integrate Aboriginal and Torres Strait Islander culture.

#### (ONRAD'S STORY

**Conrad the Station Hand** 

and a proud Ngadjonji man

Conrad did not start as a station hand but he has been on horses since he was 2, and near cattle since he was 7. His dad was a Head Stockman. Conrad explored a career in the mines when he finished school which he enjoyed but the contract ended. He completed most of a sheet metal apprenticeship, but then he found his favourite career so far through becoming a station hand. In future, he may think about becoming a Head Stockman himself. For now, he just wants to get his job done well.

#### **TOP TIPS**

Be practical and find solutions.

Listen and ask questions.

"I work in an incredibly

functioning team. It is a

pleasure to go to work."

Jem loves her colleagues and

supportive and high

Have a strong attention to detail.

#### **CHALLENGES**

"The heat can be a tough reality. I'd also say the stress around making sure to live up to expectations, particularly if the bosses aren't there and you are responsible."

# JEMMA'S STORY

has been well supported in her career in Biosecurity to learn and develop as a professional in the industry. She got into Biosecurity because she became more and more interested in environmental issues whilst completing her Master's in Public Health and her work in communications. In her role she engages with a diverse range of stakeholders, from local government and industry to landholders and producers. In 2020, she got an Indigenous scholarship to study public sector management. She graduated last year and is very grateful for the opportunity.

#### **CHALLENGES**

Working in Engagement is often about education, and behaviour change. This can be hard for stakeholders who are busy and have different priorities. "I love working in this space and supporting stakeholders to find ways to move forward."

#### **TOP TIPS**

- 1 Build your interpersonal skills.
- Share your culture, and help others understand you and your
- Get out there and get some experience. Volunteer or aet some part-time work.
- Talk to people who do the jobs that interest you.

17

Jem the Engagement

### Officer (Biosecurity)

and a proud Anaiwan woman

#### **ABOUT THE JOB**

Jem is currently a Senior Engagement Officer with the African Swine Fever Prevention and Preparedness Project (ASFPPP) at Biosecurity Queensland (Department of Agriculture and Fisheries (DAF)). She is proud to work on a project that enables our state and country to be prepared, and to be as response ready for emergency animal disease as it can be. She enjoys the variety of work that her role provides. In a typical week, she can go from working on developing communications materials or writing articles, to engaging with stakeholders or evaluating project deliverables. Jem is a member of the DAF Diversity and Inclusion Working Group representing Aboriginal and Torres Strait Islander colleagues.

16 TRUCK DRIVER FARM MANAGER HELICOPTER PILOT STATION HAND **BIOSECURITY OFFICER FENCER** 



#### The variety development manager and plant breeder

Enjoy getting dirty? Have great communication skills, a love of science and attention to detail?

#### **ABOUT THE JOB**

Felicity oversees and promotes one of the four selection programs within Sugar Research Australia. Their role is to breed new varieties of sugar cane that are more profitable, sustainable, and productive. They set out to increase yield, sugar content, and disease resistance. They analyse how to improve efficiency using automation or more productive varieties. She usually works 5 days per week, during daylight hours, likely 7:30am - 4pm (weather dependant of course)! You need to be able to think on your feet, change priorities and have a really strong attention to detail. She sees the skills for the role as accountability, good spatial awareness, strong attention to detail, liking data and numbers, and good communication skills.

#### **TOP TIPS**

- Do research into the organisations that you want to work for before your interview
- Get some work experience to see if something works for you
- Apply for scholarships, they can make it easier
- Do what you are interested in! Don't be too hung up on grades

"People make their careers in sugar, that longevity still exists here"



#### FELICITY'S STORY AND STUDY-PATH

Felicity has been working for this company for 22 years, but her undergrad was not even in agriculture - it was in ecology, population biology and conservation. She loved biology and it had been her favourite subject at school and got her an OP, now an ATAR, of 70 or so. Through her experience she learned she liked plants more than animals. She did her Honours Degree in Macadamia nuts before starting her career in sugarcane. Then, her PhD took 6 years part time to complete whilst she worked full time. She has moved for her role 3 times - Bundaberg, Brisbane, and then to Cairns.

Her job is diverse, for example planting trials, harvesting trials, and cross pollinating sugarcane parents, most varieties that are grown in Australia are created here. She enjoys her role, and loves finding good combinations of sugarcane parents. She supports both field and photoperiod crossing using climatecontrolled facilities, this helps them do their breeding. The plants even have a honeymoon suite to help them breed successfully.

#### **CHALLENGES**

Every season is different, and that is a challenge, but she likes challenges! They are funded by, and breeding for, the growers and millers, and varieties developed and released must meet their future needs.

Felicity says you need to have great communication skills because you work with so many diverse people, from casual field hands and research technicians to growers and harvesting contractors, all the way up to industry representatives and company CEOs. Most people in the industry are passionate about their roles and their future which is amazing.



Do you like the outdoors? Are you motivated? Do you enjoy planning and have attention to detail? Working with drones in Ag could be for you.

#### MEET LVKE

Luke grew up in farming and horticulture and never imagined his current career, but he wouldn't change it and is loving the drone business! He started as a plumber (and enjoyed it) but once he'd finished his apprenticeship, he was looking for a challenge. Initially Luke recognised an opportunity to save his partner money by getting his drone pilot licence so he could take the images she needed, and then it all grew from there. He has learnt a lot from their business. He works every day, most of his work is seasonal and often weather dependent, but he gets to drop the kids off and pick them up, and loves spending time with his family. As a small business owner, he works with lots of different people, for example agronomists, farmers, insect growers, and the industry bodies that provide the regulations and certifications necessary.

Luke was surprised to love all things "business". These days he enjoys learning, planning and being adaptable and meeting the challenges. Each job he does needs to be documented and he uses software to help him keep up with all the regulations.

He is always being challenged with new things, the chemicals to use, catchment areas, documentation required etc., it is all part of the job.

#### THE DRONES

Drones are dropping "beneficials" which are insects that help the soil, tractors can't get to the land, a drone can survey and let everyone know what's happening.

Drones can carry insects and baits, they can take images and they really widen the reach of a farmer. Technology is certainly helping farmers do their job. Drones are saving farmers money, and time. They are also helpina minimise the chemicals used by farmers on their crops which in turn helps the environment. It is a win, win, win and a growing (literally) industry.

**TOP TIPS** 

Connect with the Industry bodies around your area of

Build your communication skill communication and reliability

Talk to the people you want to work with and do what you so

Be yourself, ask questions, it is okay not to know the answers

Entrepreneur-start off small, b the best and then grow from

Learn something different from

everyone, it's important to liste

interest

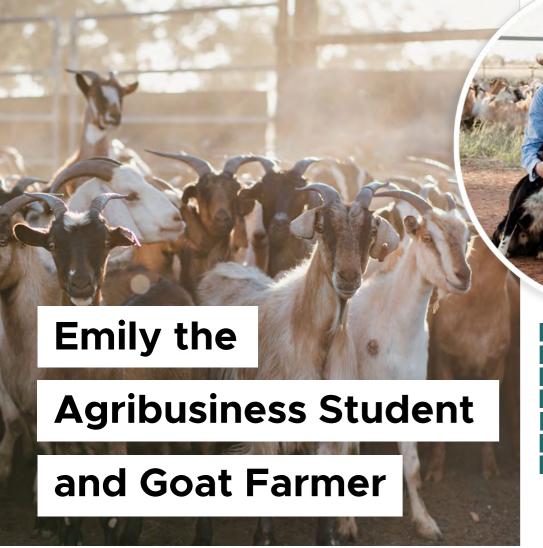
are so important

you are going to do

talk to people that do



minimises the pests and reduces the amount of chemicals growers need to use. In wet weather when



Are you an entrepreneur, love practical work, and are interested in business? Farming could be for you, and so could study and careers in agribusiness.

#### EMILY'S STORY

Emily is a modern farmer with 7000 goats on her farm. She says goats have a big future, they are low maintenance and are a great animal for Queensland. Goat farming is a new industry, and it is a growing market. She talks to lots of producers and they are all learning about how to build this newish business. She is used to being outside often, and is pretty active. She is currently studying agribusiness to help her move her farm forward. She is loving her time learning the business side of agriculture, and talking to people and hearing their experiences. She loves the stud element of the operation and is interested in bloodlines and building a quality stock. She has implemented a range of breeding technologies, and has been seeing the benefits.

"Agriculture is changing, and it's an evolution. The

knowing how to use it and

technology is great but

apply it effectively is an ongoing challenge."

**EMILY** 

GOAT FARMER & ENTREPRENEUR

She has had plenty of practical experience on the farm, working in both commercial focus and stud operations. She has worked with some great mentors and is now passionate about stud farming and developing her goat herd. Her plan is to travel overseas next year to do more research into the genetics of goats, and to build and expand her program.

"After year 12, I knew I didn't

want to go to university straight away, so I got 5 years' practical experience, and then I knew I

would get value from the study, and I am getting value. I'm

learning a lot."

There is a lot that most people do not know about goat farming, including me. I don't think people realise how much communication skills are needed to be successful. Producers really care about their animals, and the community needs to know that.

#### **CHALLENGES**

She loves working and innovating, but sometimes she struggles to back herself, so she finds strong mentors to help. Goat farming is moderately new, so there is so much to learn, and more trends and tech to learn every day. Being able to adopt it and use it successfully is so beneficial but it is challenging. You have to make sacrifices, and it is stressful.

#### **TOP TIPS**



Apply for scholarships and bursaries, they can really help



Improve your communication skills and build your business networks



Be picky, and talk to big agriculture companies, get some experience

Are you an entrepreneur, love practical work, and are interested in business? Farming could be for you, and so could study and careers in agribusiness.

#### **ABOUT THE JOB**

"My role is to report the community sentiment that I hear, frankly and fearlessly back to the Murray Darling Basin Authority (MDBA)."

Her role is with the Department of Climate Change, Energy, the Environment and Water. She is the Regional Engagement Officer (REO) for the water division. She is the "boots on the ground" and is a conduit between community and government. She works the Condamine Balonne catchment and supports information for the community about things as diverse as implementations for the basin plan, water allocation, and the different funding or projects available to the community.

"My job is to know a little bit about a lot, but not be an expert in anything, and instead know who to direct the community to."

#### **QUALIFICATIONS**

Lucy is a third of the way through her Bachelor in Sustainability. With all her different experience she found a degree that suited all her needs across agriculture, and social justice and sustainability and she is a 1/3 of the way through it. Her major is community engagement and development. She loves the diversity of her degree- and she finds sustainability exciting. She uses the Country University Campus near her to help her in her study, it provides space, WIFI and meeting rooms to help rural and regional students connect and learn.



# **Engagement Officer**

#### **TOP TIPS**



People skills are so important, so are communication (particularly listening) and empathy.

#### **CHALLENGES**

This is a complex role, there is so much to learn and people feel very strongly about their community and rightly so. I need to help the government be aware of community perspectives around cultural, economic, environmental and social aspects of water. I love my job.

"The Government is not super scary. Everyone I have met is intelligent, passionate, dedicated to their job and just so friendly.

My role keeps exceeding my expectations, it's really cool.

#### LUCY'S STORY

After finishing high school with an OP5 Lucy did not know what she wanted to do, she knew she liked agriculture (she's from St George, attended boarding school, and has a family with a farming background). She also loved community and social equity work. She took a GAP year that stretched to 2 to think about it, working as an Agronomist's assistant, a lifequard, worked as a horse-riding instructor at a summer camp, and even having a role at St George visitor's centre. She even started an Arts degree but she missed the agriculture component.

Lucy works from home, her closest office is 2 hours away. She is often at home doing reports, planning or researching. She is usually creating and then fostering relationships, and spends around 50% of her time working away from her home office, and the rest doing the relevant reports, emails, research and paperwork. She works with everyone, from farmers, to fisheries, first nations people, schools, politicians and industry.

20 AGRIBUSINESS SPECIALIST GOAT FARMER SUSTAINABILITY 21



Agronomy is a low and high-tech industry that uses satellite systems, computer databases and spreadsheets, biotechnology and many other innovations to increase efficiency, sustainability and profitability for farmers. It is an outdoor role, with lots of indoor work too.

#### MEET BILLIE

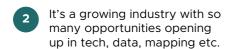
Billie studied a Bachelor of science majoring in Agronomy, and through her study Billie did 30 days work placement across 2 companies in different parts of Queensland. She was offered a job at the second! She says employers and the industry are crying out for "Agro's"

In her career thus far she has worked with cane, grain, horticulture, pasture but mostly cropping. Her growers call her a "dirt doctor", and her hands get dirty regularly! She is a scientist that helps farms by working with them on their economic and environmental sustainability. She spends about half her time in the office, and half her time on the farms, and she does a lot of driving. Usually, she does farm visits in the morning, and paperwork in the afternoon.

She helps farmers use less pesticides (so they save money) and be more environmentally friendly making farming more sustainable.

#### **AGRONOMY**

You get to spend time outside, meet lots of people, support the environment and help farmers build their businesses.



We can help improve profitability, and sustainability for our food, farmers and future. Check this job out. It is great.

#### **CHALLENGES**

As a practical person, Billie finds the paperwork a little tedious, but knows it is a necessary part of the role. She works a lot in soil management, nutrient management, irrigation management, and pesticide management. Evidence and data are really important. This role and all of farming is very weather dependant, so you have long days, short days and plenty of the in between.

#### **ABOUT THE JOB**

There is a lot of tech in my job, precision Agronomy: TSM mapper, precise management systems, satellite imagery, drones, and more.

"We get satellite images every couple of days so I can track cropping at a distance. I get to do a lot of walking, and see lots of different fields and farms.

My job is also affected by the weather very regularly so I need to be adaptable, and sometimes spend the day in the rain."



# **Eduardo the**

**Agronomist** 

Eduardo loves Cairns and his team. He has short days, and very long days, and enjoys the diversity of roles and jobs he needs to do. He has held a diverse career so far, and enjoys learning and building his skills and relationships with lots of different people. He loves his social life with his family and 2 young children.



#### **TOP TIPS**

"Good communication and a smile are the best tools you can have in a job working with people. Science and agriculture have so much value as careers and are not going anywhere,

people will always need to eat.

Agriculture connects the whole world; it is a career that can

travel."

**Eduardo** Agronomist

#### MEET EDVARDO

Eduardo is now 33. He grew up in Sao Paolo in Brazil and after his Bachelor degree worked in Sugar Cane farms there as an agronomist. Then the big journey onto Australia where he learned English for 6 months, and then studied horticulture for 2 years, whilst working as a Barista, Strawberry farmer, Farmers market seller, Nursery Horticulturalist, even a gardening business owner. While he was studying, he and his wife worked hard to pay the bills.

Through his coffee networks (Go Barista!) he was offered a second in charge farm hand role at a dairy farm in Victoria. He loved this role, it's diversity (Cows, Tractors, tech, irrigation, feeding) and how much he learned. He got a promotion to farm manager during his years there. He wanted more sunshine though and has now returned to Queensland and is working in Cairns as an Agronomist with Farmacist.

#### **CHALLENGES**

Eduardo discussed how challenging English has been, the specificity of the language, particularly in the sciences and how much he has had to learn in order to be clear in his explanations. He discussed the constant need for staff in agriculture, and the necessary paperwork and expectations to ensure success and transparency. He loves the challenge though. He talked about the need to be flexible, to keep learning, and to keep up with the technology, the science and the networks. He said it can be tough for immigrants if they cannot find someone willing to sponsor them.

#### **TECHNOLOGY**

Eduardo has his drone license and sees the future of drones in agriculture as HUGE, helping with oversight of crops, minmising the need to use tractors and travel, dropping baits for caterpillars in a precise and efficient way, even herding. He also sees Agronomy and working in agriculture as his opportunity to make change and be a changemaker for the better in the environment and for the health of people.



He said Cane farming had changed a lot in the 5 years he was working in different areas of agriculture and now that he is back, he is inspired by the developments that are increasing productivity, and improving sustainability.



A Bachelor of Science majoring

in Marine Studies was her study

university on a trout and salmon

it, and she surprised herself and

decided aquafarming was for her.

With her degree completed she

decided to move to Queensland

and started to apply to fish farms,

but without success. However,

by emailing the farm manager

farm. She was not sure she would

like it, but it was available. She liked

decision. During Covid she got

work experience through her

#### KAITLIN'S STORY & STUDY-PATH

Kaitlin is 24 and loves her life working 5 days a week as a part of a team of 32 at Coral Coast Barramundi. She gets lots of independent work time, and she knows she is making a difference! After finishina year 12 with an ATAR under 60 Kaitlin decided to take a gap year, save some money and travel overseas. She worked at a bakery and managed staff, and then travelled for a couple of months through Europe and took some time to work out what she was keen to do moving forward.

#### **CHALLENGES**

- When animals do get sick, and the strong motivation to get them better and fix the issue.
- Continuing to learn and develop her skills.
- Putting herself out there as she was not from farming and she needed to build relationships in the industry

#### **TOP TIPS**

- Get some work experience to better understand what you want to do.
- You do not have to have qualifications, but it does help.
- Ask questions, be accountable and communicate clearly, it will make everyone's time better.

#### SUSTAINABILITY

Kaitlin discussed how far fish farming has come, and how little people know about it and how valuable it is as a risk minimisation strategy to help avoid our oceans being overfished. She talked about the feeding methods (including feeding the fish algae), their waste disposal and the care everyone takes to ensure best practise. She is very focused on sustainability and loves that she works somewhere that has a true care for the environment, as well as the animals.

Kaitlin said her parents had always told her that the squeaky wheel gets the oil, and to just keep trying. The farm manager contacted her, she got an interview and today she is bringing up baby Barramundi, 1000's at a time. They get harvested when they weigh 3Kg and that takes a couple of years. Like any great farm, they love their livestock, vaccinate, and watch their animals carefully to check for illness or disease.



#### **FUTURE**

She is very much looking forward to building on her experience at the farm and likes the idea of trying to make it to manager in the coming years. She is also really keen to be a part of the many research activities they have on the farm so she can help maximise success, minimise environmental impact and better understand the fish.

wheat, and barley depending on the season and on the weather.

#### **CHALLENGES**

Harry says farming is not easy, but that challenge is part of the fun.

Harry has had some mental health issues in the past couple of years, and the outside time, and different jobs to do each day have been a real help to him.

helps him stay focused. He loves the diversity of his roles, including the study, he is a practical person and he loves learning. He has worked in Brisbane as a welder for some time, but prefers being out on the farm because on the farm he is not doing the same thing every day.

#### **CAREERS IN AG**

There are also lots of jobs that people don't know about in agriculture, people don't think about commodities broker, or large animal vets. Most people don't think about how good it is not to be in hours of traffic every day, and to be responsible for your own success.

SHEEP FARMER

#### **TOP TIPS**

- Take the time to try different things and get experience
- Find a career that is fulfilling
  - Make sure you are good at all your basic maths, not the complex stuff, but know that it is all necessary regardless of the job you do







"Running a farm is so much more that planting a field. There are so many diverse responsibilities around technology, paperwork, staffing, environment, and building strong people culture in the businesses. Every day is

different."

#### ANDREW'S STORY

Andrew's great grandfather came out from Northern India and started his cane farm and it has been in the family ever since. After doing his degree Andrew worked for a couple of years off farm working as an Agribusiness manager for Westpac and he learned a lot. He was keen to return to the farm though.

Andrew started Banana farming simply because the opportunity arose. Great soil, good water, and I knew the previous owner who was retiring. The only downside is the distance from the other farm. He supplies Banana's to Coles, Woolworths, Aldi and other stores. Banana farming has an intense crop, greater yield from a smaller crop, but also more work- it is a fulltime role. The finance and HR elements of my degree have really helped me in managing workers.

He uses GPS guidance in both Banana and Cane for their planting and ground preparation and can really see the potential in technology in spraying and harvesting technology. He knows he is only touching the tip of the icebera. He has enjoyed being a part of the reef rescue project and building his understanding of technology and sustainability that can be used. He would love to expand further, maybe some further lease farmina etc. You need to be at scale because the machinery is expensive, so you want to be able to use it. He also wants to delegate more to others within his business in order to get to spend more time with his young family.

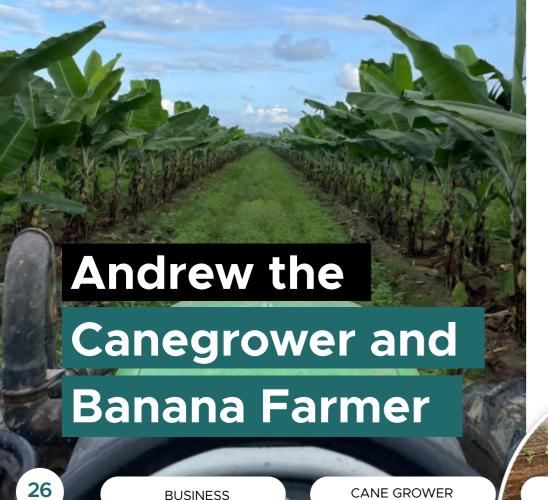
#### **TOP TIPS**

- 1 For those from a farming background get some experience through Vocational Education and Training e.g. TAFE, University or a Trade and get that qualification
- If you haven't been exposed to agriculture, get out there and get some experience on the farms or in other industries that feed agriculture
- Not all days are easy, but that is true for any job. Having motivation for your industry is really important

#### THE ROLE

**CROP FARMER** 

Andrew is a 38-year-old farm manager, of both a sugar cane farm and a banana farm. His dad still manages the cane and he helps, but the banana farm is all his. He does all the operational management for the bananas, the environment paperwork, accounting, book keeping, staff management etc. He goes to the banana farm most days; they have 110 hectares. He has around 30-40 staff. There is fruit packing every week, I supervise the packing shed, he uses a lot of seasonal workers from Samoa and Tonga. His supervisory staff are more experienced.





#### JASMINE'S STORY

Jasmine studied Zoology, Ecology and Conservation at university, despite not getting an ATAR. She had appendicitis in Year 12, and was unable to complete her exams. At university she started a degree in Marine science, and then decided that her job prospects would improve with Zoology, conservation and ecology so she changed her major. This was her pathway into agriculture. She did some work experience through a banana farm, and worked hard to build her networks.

She is a strong listener, and has a lot of empathy. She does not come from a farming background, and she finds listening to be her greatest skill to find common ground and build relationships.

#### **CHALLENGES**

In her industry everyone wants instant results, and working with people to develop their time management, and to research solutions that suit the growers she works with.

"I needed the networks and the knowledge so I had to learn fast and listen hard." She is not from the country so she needed to build her knowledge quickly.

ogy

Jasmine applied for anything and everything near the end of her degree, and was really flexible on where she wanted to live. She says there is Ag everywhere, but be open to opportunities that you may not have considered before. She does a lot of driving in her role, there is 80,000 (80 square kilometres) hectares of cane in the Burdekin. She works about 50 /50 in the office or out in the field. She gets to work pretty independently, but she also needs to show initiative, a good attention to detail and meet her timelines. She needs to be a good time manager.

"I love a strong people culture and a healthy workplace where people get along. There are lots of future opportunities for people like me and farming is continuing to diversify. I like learning and am interested in a Masters in Entomology too, it is a growing

CONSERVATION OFFICER

part of agriculture."

#### **ABOUT THE JOB**

As an extension officer for Burdekin Productivity Services, Jasmine works predominantly with cane growers and researchers to help make connections that improve farm productivity and sustainability. She helps cane farmers benchmark where they are and supports them to meet and exceed industry standards. Jasmine works to support these groups to access accreditation and can also help farmers access more funding for sustainability initiatives etc. She is often the middleperson in between researchers and farmers helping be a conduit from one to the other.

#### **TOP TIPS**

- Get some great mentors, they help soooo much, be open minded with the people that you work with
- Science and Agricultural degrees are a great start, and you need a good work ethic. It is not a Monday to Friday role, and sometimes you work early, or late



ZOOLOGY



#### **ABOUT THE JOB**

Agribusiness roles include all activities that support the production, processing, marketing, distribution, financing and development of agricultural commodities and resources. This includes food, horticulture, natural resources, and agricultural services.

Kate works with business customers with millions in loans and lending. She works with them, their accountants and their solicitors, and they all add value to the client's business. She helps them run efficiently, and support their growth through equipment and property finance. Kate spends a lot of time being invited into homes and businesses and also does lots of paper work to help make things happen. She has set targets, KPI's and sales targets that she needs to meet. These targets lead businesses towards financial growth, but also support Kate's customer value-add and how she works with people and culture.

#### **TOP TIPS**

- Growth comes to those that do a good job and those that are seen in the community.
- Regional and Rural opportunities can really give you big opportunities to shine and step up, maybe more than city or urban opportunities.
- Treat everyone the same, the world is smaller than you think, and you are best off being the best you can. Ambition is important, and you can learn from every interaction.
- 4 Back yourself and be brave.
- Working for a big bank can really provide some great opportunities.

**ECONOMIST** 

#### KATE'S STORY

Kate finished high school in Rockhampton with an OP 6 (ATAR 90). Whilst completing her Bachelor of Economics; she got her role at Suncorp at the end of her second year in her degree. During her degree she also worked as an assistant to a financial advisor. It tauaht her a lot. She worked in Rockhampton, and then moved to St George. She has been at Suncorp for 6 years and has come up from the bottom. She says she is meant to be out of the office and working with clients 3 days per week, and she loves this aspect of her role.

Kate loves to be busy and also volunteers with the local Chamber of Commerce, the Cotton Growers Association, and the local Water Sports Association. She loves primary production, and she loves her job. There are a lot of opportunities out there and she sees herself adding value in this space in the future, and maybe studying some more too.

#### **CHALLENGES**

Seasons and markets! The weather is not reliable, and if my clients struggle, it means I struggle too. Having dry seasons is tough and sometimes there are a range of really tough conversations. Day to day she is challenged by client expectations, and personally her greatest challenge is that some people do not expect what they get from her. She is a 27 year old petite blonde. She also knows she is so lucky to have a lot of clients who help and support her and help her grow.

She is an empathetic person and sometimes it is challenging to watch people and need to work with people who are struggling.

....

# Harry the Field Technician

Are you hands-on, a practical problem solver? Do you love tech?

#### **ABOUT THE JOB**

Harry is a 21-year-old field technician with RDO equipment in Toowoomba. He mainly works with cotton pickers in the cotton industry. He travels a lot for his role, all the way from the Northern Territory and down to the Victorian border. He is a 4th Year Apprentice in Agricultural technology.

#### **CHALLENGES**

There is a lot of money lost when machines aren't working, it is all about speed so the customers can get back to work. Sometimes machines might break down 500 kilometres apart, and how you prioritise is tough. The people are great though and always so welcoming.

#### HARRY'S STORY

After growing up on a cotton farm, he did work experience with RDO, and really enjoyed the work with the John Deere equipment. He said he wasn't an A student at school, but he said he did alright. He got into university but decided he wanted something more hands-on, and so it was an apprenticeship for him. RDO like to build their talent from the ground up, and they have 29 branches. He says you get to work on everything from tractors, to lawn mowers. He goes to TAFE and has TAFE training blocks, and gets his skills assessed as he goes through his study.

He is one of 9 field technicians at RDO. Usually in the morning they go in and do their paperwork, and then they are out and about. He had 5 months last year when he only had 4 weeks at home though- he was working on machinery for a wide range of farms mainly through NSW. He supports everything from engines, to helping customers understand the precision agriculture technology that is part of their equipment. He is not only working on the engines; he also works on the many different computers on the pickers.

**FUTURE** 

He is living in the moment and "the opportunities are endless". He hasn't thought too far ahead yet, but he enjoys what he's doing and wants to keep doing it. Harry says the tech that is coming through is very exciting, it is more fuel efficient and better for the environment and has improved self-driving technology. He feels lucky to be in the industry.

#### **TOP TIPS**

- Enjoy the travel, the experience and the people you meet
- Learn and listen to the people with experience
  - Agriculture is an industry driven by people that know what they are doing, have a can-do attitude and you'll get a job that is different every day and you'll meet people you can learn from





**COTTON FARMER** 



The students interviewed come from Home Hill High school, a high school half way between Townsville and Airlie beach. Each of the girls is in Year 11 and works casually whilst studying in high school at different retail and grocery stores. They demonstrated strong communication skills, a great attitude, and a real interest in agriculture.

#### WHY DID YOU (HOOSE TO STUDY A4?

Elayna, Rina and Jasmine all agreed that they wanted to learn about animals and plants, in a practical way and studying agriculture in years 11 and 12 is certainly helping them do that. They discussed enjoying the hands-on activities, and learning about the aquaponics and the hydro elements of agriculture that they had been unaware of before. Two of the girls had agricultural backgrounds. coming from farms so they knew it was an area of strength and interest that they could build on.

#### **CAREERS AFTER HIGH SCHOOL?**

The girls mentioned careers in farming, fitness, and agronomy, but they are still researching.

#### WHAT DO YOU **ENJOY ABOUT** STUDYING AG?

"You get outside, you're touching nature, it's fun."

They want to support food security, and learn about biosecurity, and better understand the risks that exist to crops and animals and how to minimise them. They are enjoying bringing up the crayfish as part of their study, conducting research and writing reports, AND they like their teacher. The girls discussed the different jobs that they had heard about:

Commodities trader, Farmer, Fertiliser sales representative. Aquafarmer, Biosecurity Officer, Horticulturalist, and Agronomist.

The girls also talked about the other subjects they are studying. Here is one student's SET plan for Year 11 and 12.

- General Maths
- **Essential English**
- Legal Studies
- Agriculture
- Certificate II in Horticulture
- Accounting

#### **TOP TIPS**

- Get some experience. It is fun and practical and you get to meet people in agriculture.
- Be open minded, keep learning, and do your research into areas you haven't considered.
- Improve your communication skills as they are important, no matter what you do.

# Scholarships in Agriculture



Looking for more scholarships? Here's one site to help





academic, or the high performing students. There are many types of performance, and equally many different scholarships. There are scholarships that suit all different kinds of people, not just those that are really academic.

Scholarships often help minimise your costs, but they also offer the opportunity to meet people and build your networks for your future, and this is really helpful because most jobs are accessed through social and professional networks.



**UNISQ RURAL** AND REGIONAL **SCHOLARSHIP** 



**UNISQ RURAL** AND REMOTE **SCHOLARSHIP** 



**UQ UNDERGRADUATE SCHOLARSHIPS** 



COTTON **AUSTRALIA** 



CQU **SCHOLARSHIPS** 



**UNISQ FARM SCHOLARSHIP** 



**UNISQ WEIS SCHOLARSHIP** 



**AGRIFUTURES** 



TIMBER **QUEENSLAND** 



**CEF SCHOLARSHIP** 

**SCHOLARSHIP** 

# Pathways to Careers in Cane

Sugarcane is big business in Queensland and there are jobs all the way from farm to plate. Approximately 85% of the raw sugar produced in Queensland is exported, generating up to \$2.0 billion in export earnings for Queensland each year. This industry is practical, innovative, technologically connected, and growing- Literally!







The Australian sugarcane industry is made up of 4,500 farming businesses. They are family farms, partnerships and corporations. The average farm size is 100 hectares.



Sugarcane farming in Queensland provides more than 9,800 direct jobs and more than 23,650 value chain jobs in regional towns and cities.



Around 30 million tonnes of cane harvested and crushed annually in Australia to produce 4.3 million tonnes of raw sugar.



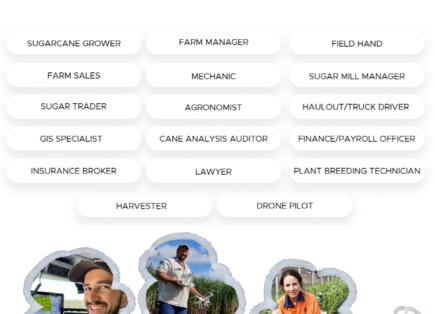
22 sugar mills process the sugarcane into raw sugar. 85% of the raw sugar is exported from six bulk shipping ports



Australian sugar is sustainably produced. 80% of the cane farm area is in the best management practice program called Smartcane BMP.

# THERE ARE SO MANY INTERESTING (AREER PATHS IN QUEENSLAND'S SUGAR INDUSTRY

Whether it's working on a farm, using the latest technology to grow crops, working in the mill producing sugar crystals and bioproducts, working in the lab developing new breeds of cane and fighting diseases, or pounding the halls of power, working with government to get better outcomes for the industry....





# Pathways to Careers in

# Aquaculture

Do you love being outside and working near water? Do you have a great attention to detail? Are you practical? Aquaculture is the fastest growing primary industry in Australia and it is helping to fill the gap between wild-harvest fisheries supply and the growing global demand for seafood. The industry accounts for more than 3 billion dollars in production.





BARRAMUNDI























CRUSTACEANS



#### LEARN MORE ABOUT AQUA(ULTURE

See the technology, science and big leaps forward that aquaculture is making. Pay attention to the roles and careers that you can see.

Aquaculture - CSIRO

(HE(K OUT THE JOBS AVAILABLE IN AQUA(ULTURE

**Aquaculture Jobs** 

BETTER UNDERSTAND THE DIVERSITY OF ROLES IN AQUACULTURE

**Aquaculture Careers** 

# Growing a

# Career in

# **Forestry**

From school leaver, to certificates, through to university graduates, forestry has jobs in all areas. Forestry has it all. Love a job that would give you inside, and outside time at work? Enjoy producing something that helps millions of people? There are a lot of very diverse careers in forestry from the plantation, to making paper, all the way to timber sales and scientific research.

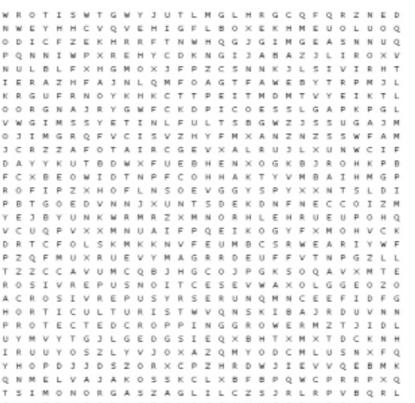
you need a hand, click on the QR codes for each.







Maybe you are interested in mowing or growing? Maybe you're interested in food security. Maybe you have the seed of an idea for your career? Got a passion for plants and enjoy outside time and rich soil? Check out the word search below and the hyperlinked careers. Have a think about what skills, strengths, or values would be required by these roles?





AGRONOMIST	BIOSECURITY OFFICER	COLD STORAGE MANAGER
FARM MANAGER	HORTICULTURALIST	IRRIGATION MANAGER
LOGISTICS MANAGER	MACHINERY SUPERVISOR	NURSERY SUPERVISOR
PEST MANAGEMENT OFFICER	PRODUCTION SUPERVISOR	PROTECTED CROPPING GROWER
QUALITY ASSUR		CLIDEDVICOD

QUALITY ASSURANCE MANAGER

SECTION SUPERVISOR

# Pathways to

# **Careers in Cotton**

From farm to hanger cotton employs a lot of people across a wide range of industries and the industry is big on technology. The Australian cotton industry is a fast-paced and dynamic industry, supported by a skilled, cohesive and diverse workforce. Check out the image below for a wide range of these PERFECT jobs that span from school leaver to University graduate.

PERFECT



Do you know how cotton goes from the plant to being the thread used to make clothes?



Check out this video and see how cotton is harvested and how the cotton gin works.



POLICIES (2) Policy officer (biosecurity, energy, sustainability, water, workforce) EDUCATION & TRAINING Teacher, Lecturer, Event coordinator, Farm skills provider, Resource content writer, App developer icientists/Researchers in: Entomology, gronomy, Breeding, Soils, Pathology, Weeds, Water Use Efficiency, Irrigation, Environment AND FINANCE Farm manager, Accountant, Farmhand, Yard supervisor. Irrigation manager, Cotton marketing (sales) nomist, Crop consultant, Landcare officer. COMMUNICATION Digital content producer, Public relations, Workplace health & safety officer, Bug checker Marketing (industry), Journalist TECHNOLOGIES
AND TRADE Agricultural engineer, Machinery operator (driver, harvest contractor, drone/plane pilot), Mechanical trades, Cotton gin worker, Fashion designer, Cotton classer, IT, Warehouse manager



logistics

accountant

Working

Working with practical, hands-on problems and solutions biotechnologist

agronomist

scientist



#### Conventional

Working with data and details, following set procedures

# Matching

# your Skills





Investigative

Working with ideas,

searching for facts and

discovering new solutions

#### Enterprising

Starting up and carrying out projects, leading people, business focused

farm owner

business owner

agricultural consultant



#### Artistic

Working with design and patterns, self-expressive and creative

journalist

photographer

#### Social

Communicating with and teaching people

designer

agronomist

teacher

landscape architect



**COTTON AUSTRALIA** 



# What do

# **Employers Want**

"My job is to ensure they are supported both in work and socially as many of them move to be here."

#### **DANIELLE**

Tassal

What skills, values or strengths do you look for in staff for agriculture?

attitudes or points that would put you off hiring someone?



Attitude



Agility and flexibility



Communication



Commitment and accountability



Alignment with our values



Problem Solvers



A desire to learn and give the industry a chance

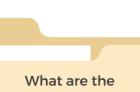
"We need people who can see that all clients have wants and needs.

We need people who understand systems and how to use them with

a people focus. "

**DANIELLE** 

Tassal





Unreliability



**Entitlement** 



Lack of communication skills



Inflexibility



People who cannot build relationships



A lack of accountability

"With communication we can work with most limitations to

find ways to support legitimate

barriers to communication such as language or digital literacy.

It is more if people choose not to

communicate, details around nonattendance, safety incidents,

general responsibility and

respectful communication."

Tassal



#### TASSAL

Australian Salmon Farming

Danielle, the National Learning and Development Manager shares her thoughts.

Tassal has a commitment to bring sustainable financial stability and jobs to regional and rural areas where aquaculture is an important part of the area's economy. We place a strong emphasis on employing people from these local communities and to enable people to live and work locally. All this is done in conjunction with sustainable environmental outcomes.

Aquaculture/agriculture is a diverse industry that can accommodate a variety of skill sets that may not always be immediately considered as options. In a company as large as ours there can be a pathway for most interests form tertiary qualifications in Aquaculture, marine science, environmental science, Engineering, technology streams, mechanical and electrical trades, manufacturing, supply chain and logistics, sales, legal, human resources, marine logistics and business. As a vertically integrated company there are entry level roles through to specialised functions with clear pathways for development and growth especially in a tight market.

For those that have not obtained tertiary qualifications, we have offered, school-based apprenticeships, traineeships, apprenticeships, scholarships, internships and supported further education. We have an internal focus on leadership development with foundations in neuroscience and psychological safety.



#### FARMA(IST

**Precision Agronomy Solutions** 

Thoughts from Jayson, Director and Agronomist.

Farmacist is an agronomic solutions provider based in Mackay, the Burdekin, and Far North Queensland. They are constantly on the search for great staff across agronomy, Geo-spacial services, and Data management. Their recommendations for farmers are based on what is best for the crop, environment and for profit. Farmacist have supported the Queensland Agricultural Extension Work Placement Program (AEWPP) which connects agricultural extension graduates, trainees and early career professionals with employment and training opportunities with host organisations and they have had areat success.

# I don't care about a GPA; I can train skills but I can't train personality.

"In a company like ours reputation is everything.

I want people with drive, aspiration, not clock
watchers. Some days are early and some days are

late. Harvest waits for no one."

#### **JAYSON**

Farmacist

This can be anything from showing them fishing and camping spots, to helping them connect with social and community groups that align with their interests. It is about more than pay, and enjoying time is so important.



# What would you say to parents or carers about recommending agriculture as a career to their children?

"There is a great deal of potential in the
Aquaculture/ Agricultural sector. As long as the
population continues to grow we will need to
produce sustainable food sources."

The use of technologies and increased automation has seen a move to an Agritech focus. Smart farming technologies, the increased use of data and business intelligence to inform decisions and drive performance. Drones, electric vehicles, robotics, Al programming to name a few of the areas. For those living in remote areas the industry can offer an alternative that is close to home.

#### DANIELLE

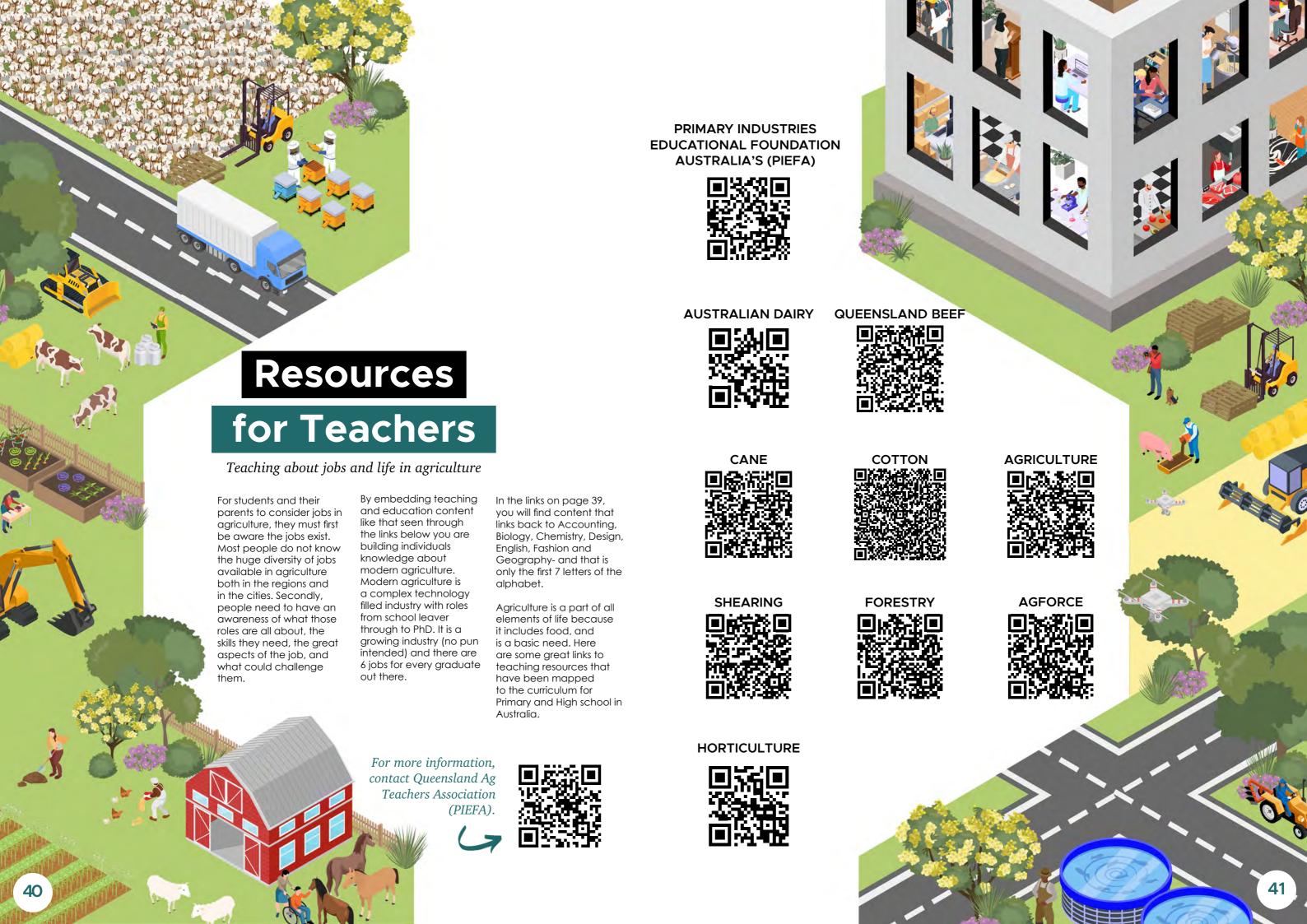
Tassal

If they work in Ag their day will never be dull, they can build relationships, it's heaps better than people imagine. They can work in things from marketing to machinery, from drones to irrigation or aquaculture, and from cane to cattle or cotton. There is an incorrect perception that exists around agriculture.

"People often think it's about working in the dust, that's just a tiny bit. Now there is tech- data, science, weather, GIS, drones, there is so much work around sensors, web based- and AI, not to mention the business opportunities."

#### JAYSON

Farmacist



# How can you make decisions about your career?

This magazine is designed to support students, parents/ carers, and teachers to work through career decision making.

# TIPS FOR QUALITY (AREER DECISION MAKING

- Understand your strengths, skills, values and interests So you can choose careers to suit YOU
- Explore the thousands of careers available To ensure you have all the information
- See what matches up using tools like the ones below So you can know what you have to choose from

You can use these websites below to help you in your decision making.

My Future Career Information Service



Your Career Quiz



Training.com.au
Career Quiz



Career Harvest
Careers in Ag



