

PIEFA CONFERENCE 2023

VIRTUAL FARM TOURS

Inspire, Engage and Educate

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THINK DIGITAL STUDIOS

YOUR HOST



JESS BIDSTRUP

XR Producer

Passionate about technology and a country girl at heart, Jess has been creating virtual farm tours for 4 years with Think Digital Studios and has led multiple student and teacher PD workshops on virtual tour creation and immersive education.

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VIRTUAL FARM TOURS

IN THIS COURSE:

- Learn what a virtual farm tour is and why they are an innovative and exciting way to teach your students about agriculture
- Discover some virtual tours we have created for clients like Woolworths, Dairy Australia, and Meat & Livestock Australia
- Gain access to tools and assets that will allow you and your students to create your own virtual farm tours
- Dive into the future of immersive education and training in agriculture

CONTENTS

PART **1**

WHAT IS A VIRTUAL FARM TOUR?

What is a virtual farm tour? What are the benefits and how can they be accessed?

PART **2**

EXAMPLE VIRTUAL FARM TOURS

See some of our example virtual farm tours that Think Digital has created

PART **3**

CREATE YOUR OWN VIRTUAL FARM TOURS

Explore different virtual tour creation platforms

PART **4**

VISION: IMMERSIVE TECHNOLOGY IN AGRICULTURE

What's coming soon in the world of VR, AR and agriculture?

PART **5**

TEACHING RESOURCES

Check out some resources to get you started creating your own tours as well as some existing classroom packs

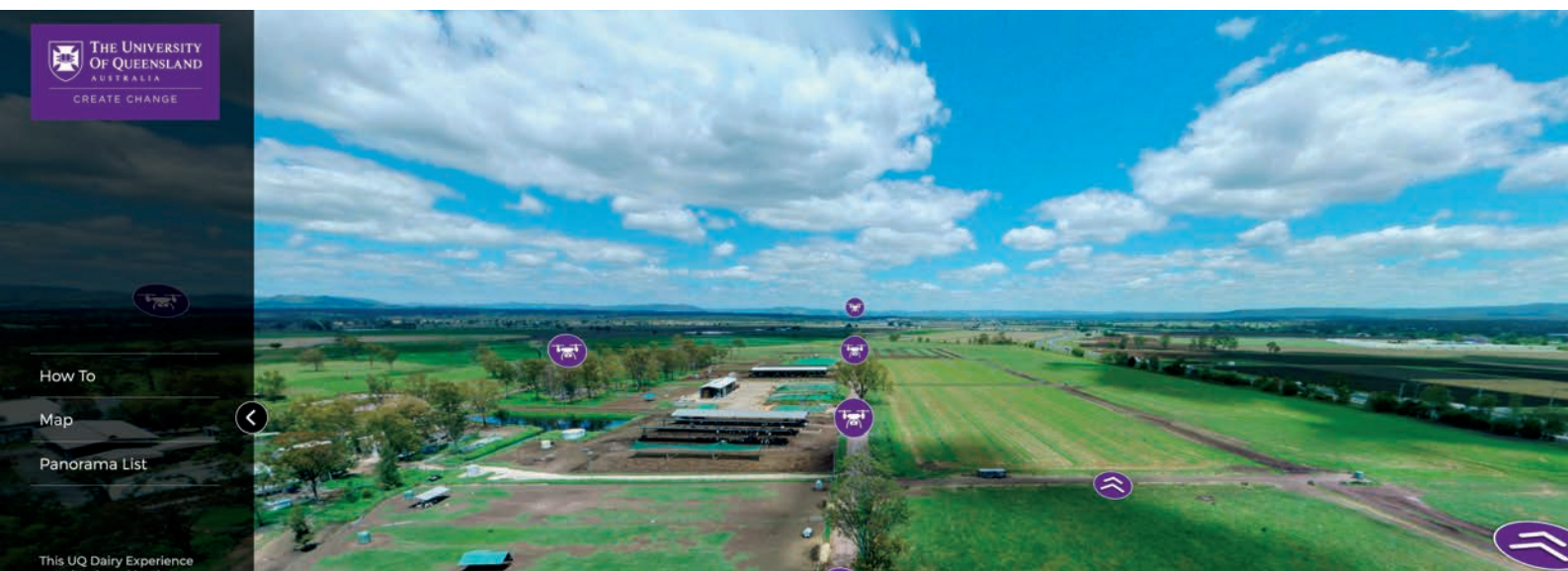
WHAT IS A VIRTUAL FARM TOUR?

Benefits

- Deep dive into the topic
- Allow access to restricted areas
- Minimise biosecurity risks that would be created by an in-person visit
- Explore at your own pace
- Create an opportunity for the user to 'choose their own adventure' and explore what piques their interest

Features

- Access on desktop, mobile, and VR headset
- Made using specialised software programs
- Combine 360 photos and videos with other media like photos, PDFs, videos and more
- Tours come to life with 360 videos, interactivity and gamification



SECTION 2

EXAMPLE VIRTUAL FARM TOURS

Discovery Tours

Tour the fresh fruit & veg section of a Woolworths supermarket and visit an apple farm, cherry tomato farm and more.

www.farmvr.com/discoverytours



Careers in Dairy

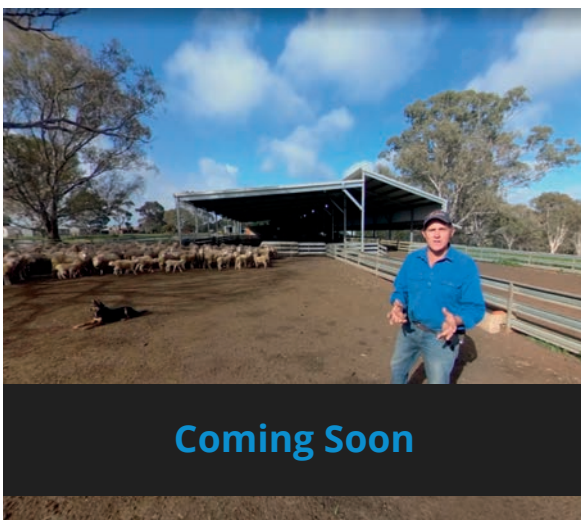
Learn about different careers in the Australian Dairy industry and hear from real farmers and industry staff about their roles.

farmvr.com/virtual-tours/dairy/careers-5



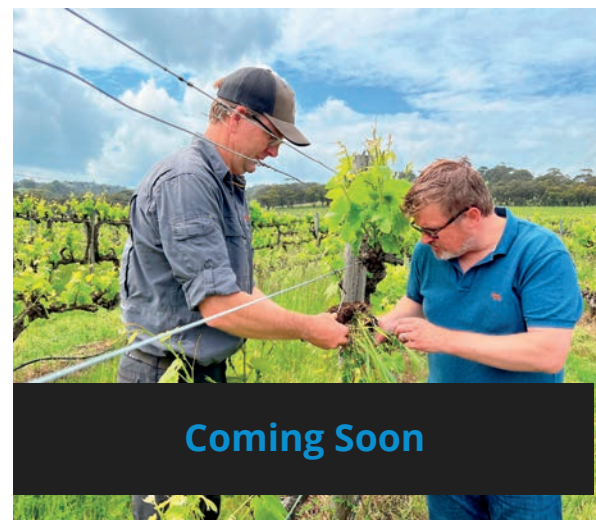
Meat & Livestock Australia

Explore the Beef and Lamb supply chain and learn about sustainability, animal welfare and more.



Wine Industry Careers

Take a dive into the wine industry and learn about different careers on farm and in production.



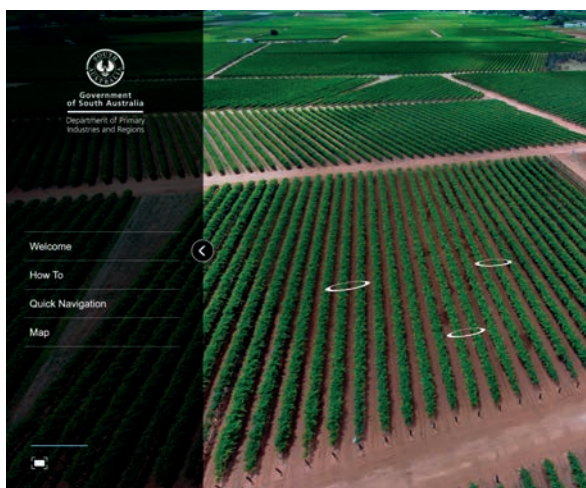
SECTION 2

EXAMPLE VIRTUAL FARM TOURS

PIRSA - Agtech

Check out PIRSA's AgTech Demonstration Farms across South Australia to learn more about technology improving productivity on farm.

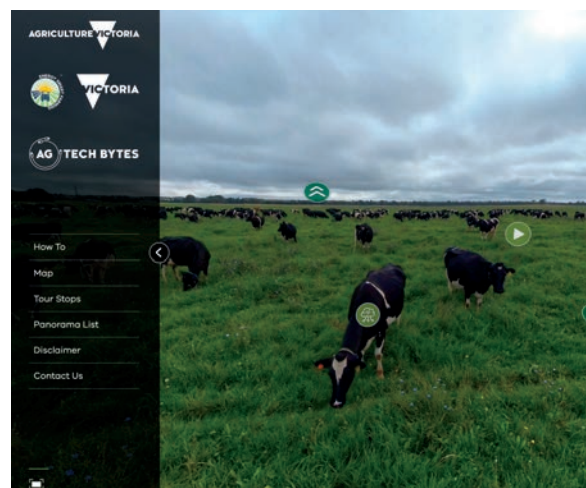
www.farmvr.com/virtual-tours/pirsa-landing-2/



AgVic - Energy Smart Farm

Visit a Victorian dairy farm using innovative technology to improve their energy efficiency, water monitoring and automation across their property.

www.farmvr.com/virtual-tours/agvic/



Hagley Farm School

Hagley Farm School captured the content to create their own tour so that students could return and explore from home.

www.farmvr.com/virtual-tours/hagley-farm-2/



Biosecurity at Bulimba

Head out to Bulimba Station in Far North QLD to learn about biosecurity practices on a cattle station.

<https://farmvr.com/virtual-tours/aha-biosecurity-1/>



SECTION 2

PRODUCING A VIRTUAL FARM TOUR



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WHAT MEDIA GOES INTO A VIRTUAL FARM TOUR?

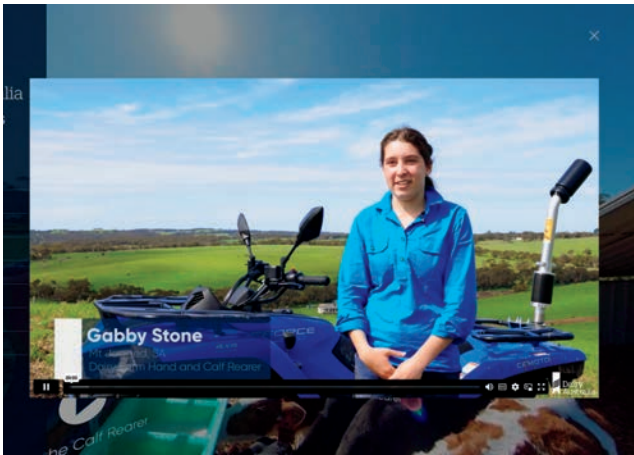
A virtual farm tour is a great opportunity to repurpose existing educational material, such as 2D videos, PDF documents, images, websites, and more.



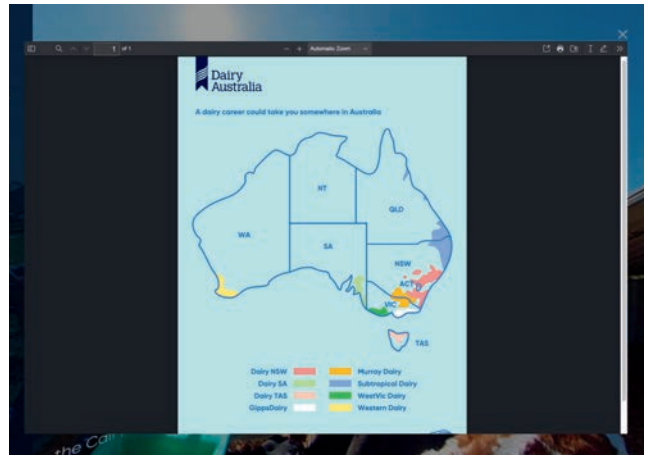
Custom pop up in a virtual tour



2D image in a virtual tour



2D video in a virtual tour



PDF in a virtual tour

SECTION 3

DIY VIRTUAL TOUR CREATION TOOLS



VRTY

Kingston - Kingston@vrty.io

<https://vrty.io/>

Web-based virtual tour creation tool with fantastic user guides and great features. Allows students to build a virtual tour and view it on the web, on their computer, iPad, or phone in VR Mode.

- Shared resource library that a teacher can set up and share with students (360 photos, icons, etc)
- Add images, text, videos, web links, and audio
- Publish to web
- Visit website for pricing



EdgedVR

Rosanna - rosanna@edgedvr.com.au

<https://www.edgedvr.com.au/>

Software-based virtual tour creation tool that is focussed on creating virtual tours for VR headsets. Lots of different content options and in-person workshops available as well as Teacher PDs.

- Students upload their own content or images to use in their virtual tour
- Add images, text, videos, web links, 3D models and more
- Publish to a VR headset or an app
- Free trial available



SECTION 3

STUDENTS CAN CREATE, NOT JUST CONSUME

Think Digital has run multiple student workshops using VRTY. VRTY provides user guides to get you started and students can create their own virtual tours with a content library that you set up.

Here is a virtual tour we created in VRTY of LT's Egg Farm: <https://pro.vrty.io/98gg1/lts-egg-farm-virtual-tour>

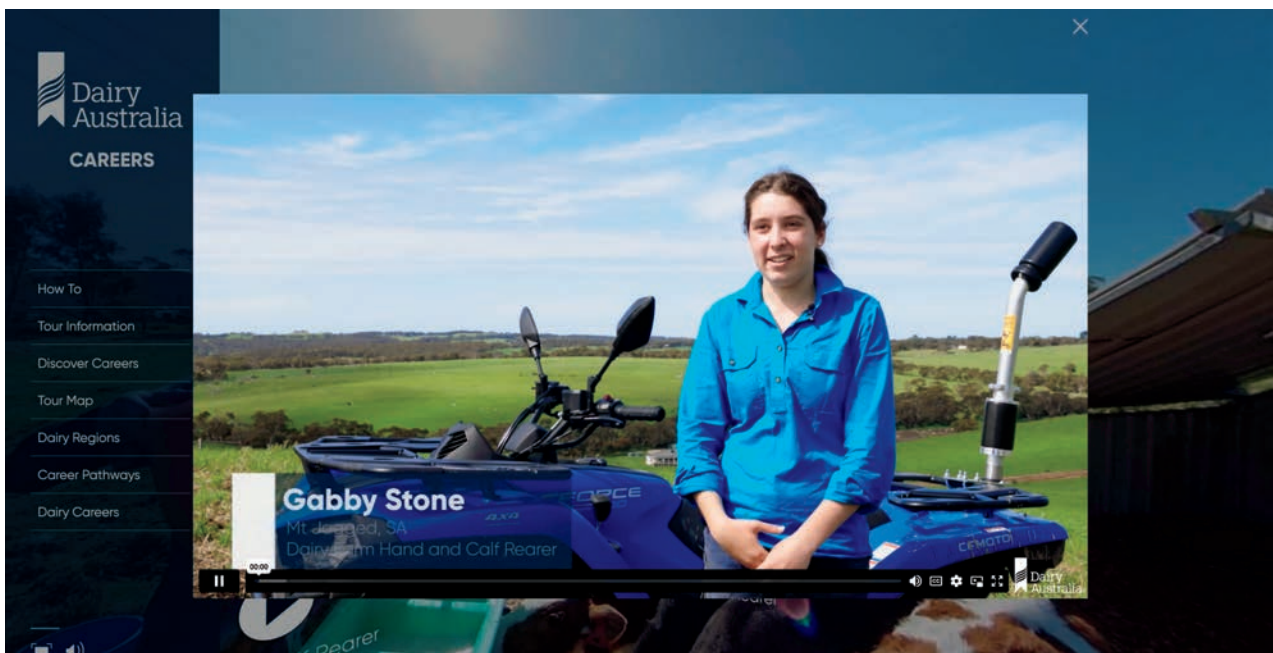


SECTION 4

VISION: IMMERSIVE AGRICULTURE

INSPIRING CAREERS IN AGRICULTURE

We are working with many industry bodies, RDCs and government organisations to create virtual farm tours about careers in agriculture - which we would like to partner with PIEFA to combine into a one-stop experience for students to learn more about the different careers in agriculture! An innovative and exciting way to create a central hub for students to become inspired about the many types of careers in ag; it's not just rubber boots and milking cows!



Check out www.careerharvest.com.au for extensive information about different careers in the agriculture industry and information you can use to inspire students to explore.

SECTION 4

VISION: IMMERSIVE AGRICULTURE

VIRTUAL TOURS IN VIRTUAL REALITY

Virtual tours are accessible by students anywhere, on their phone, computer or iPad, but some organisations like Dairy Australia are taking it to the next level by immersing students in virtual tours in a headset. This means that they can beam themselves onto the farm and feel like they are really there, to get a feel for what their career might be like, or explore topics such as sustainability and animal welfare. There is nowhere to hide in 360, increasing transparency of animal husbandry and welfare practices in the agriculture industry.



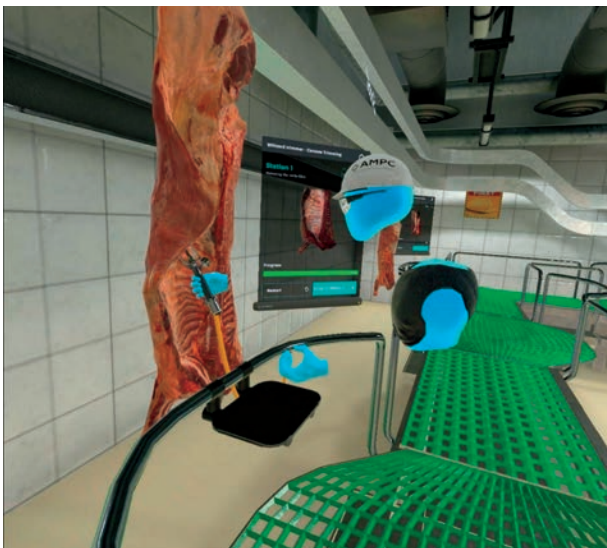
Contact Dairy Australia to gain access to their Virtual Reality Application or contact www.edgedvr.com.au for a demonstration of their VR Headset Application!

SECTION 4

LEARN BY DOING - TACTILE TRAINING

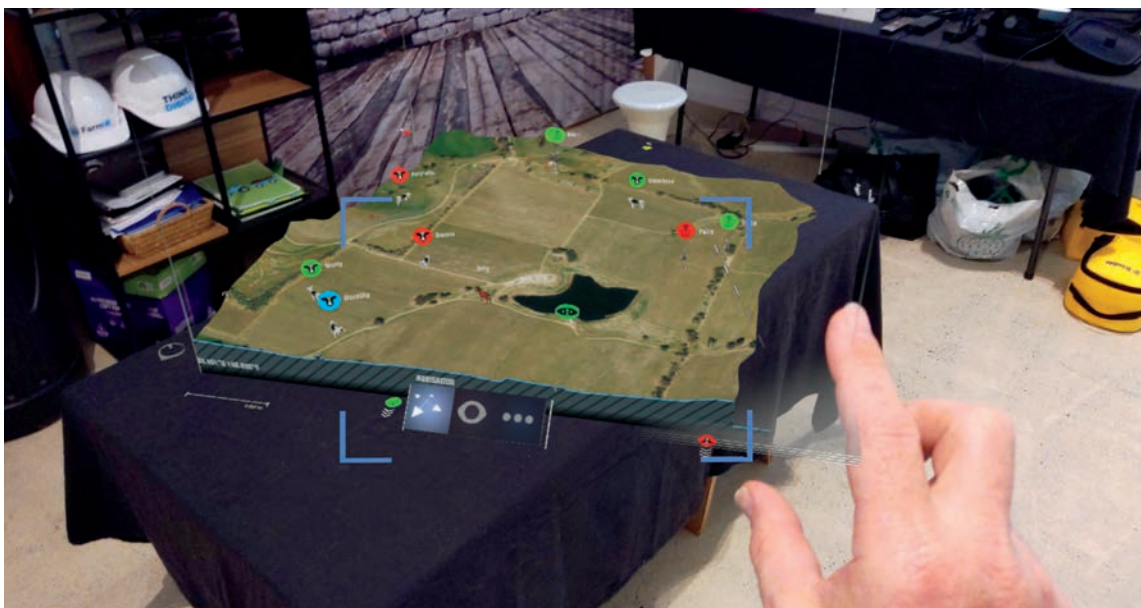
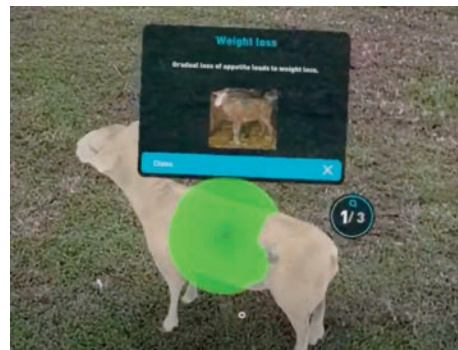
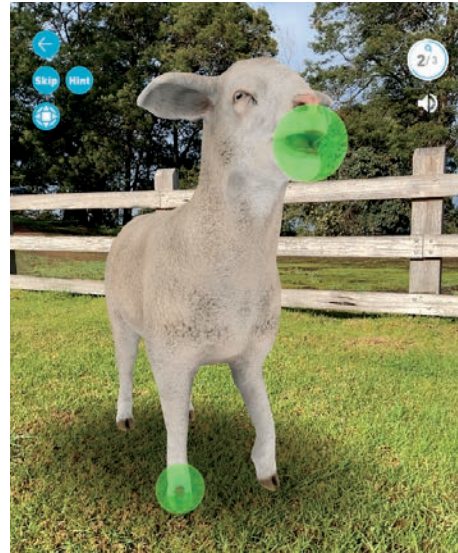
VIRTUAL REALITY TRAINING SIMULATORS

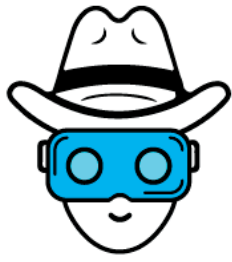
A first person experience in which the user must complete tasks is an engaging way to learn and allows the user to fail safely, without endangering themselves, others, or animals. AMPC (Australian Meat Processor Corporation) have built a suite of VR experiences that allow their users to complete training using dangerous equipment and learn techniques that are used in the meat processing industry. Their interactive VR simulators also cover topics such as correct usage of PPE. Australian Eggs have also created a biosecurity VR training tool.



SECTION 4

AR - COMBINING REAL WITH DIGITAL





FarmVR

VIRTUAL REALITY FARMING EXPERIENCES



bit.ly/FarmVR-PIEFA

Scan the QR code and submit your details to access our new VR application!



FarmVR is a collection of 100+ 360 experiences spanning agricultural industries such as sheep and wool, beef, horticulture, pigs and more. Our mobile application is available for download on iOS and Android, or visit our web app - app.farmvr.com



SECTION 5

RESOURCES TO GET YOU STARTED

Create Your Own Virtual Farm Tours

We have set up a library of 360 images and icons that you can download and use to get you started creating virtual farm tours. The library includes images from farms across Australia in a range of agricultural industries such as pigs, fruit and vegetables, broad acre cropping, and more.

Please scan the QR code or visit bit.ly/PIEFA-2023



Resources to use in the classroom

Here is a list of some great virtual farm tours and educational VR resources:

Forest Learning - ForestVR

<https://forestlearning.edu.au/forestvr.html>

ForestLearning's development of the virtual reality (VR) toolkit for schools, ForestVR, showcases various forest environments and processing mills for forest products.

Australian Eggs Virtual Farm Tour

<https://www.australianeggs.org.au/farming/tour>

Take this interactive 360 degree tour to see how eggs are produced in Australia. Visit three farms, in New South Wales, Tasmania, and Western Australia.

Woolworths Discovery Tours

<https://woolworths.com.au/discoverytours>

Get a free classroom kit and start a Fresh Food Kids immersive Discovery Tour adventure with your class. The kit includes lesson plans, activity guides, and everything you need to bring the experience to life with your class!

SECTION 5

RESOURCES TO GET YOU STARTED

Australian Pork Virtual Tour

<https://australianpork.com.au/virtual-tour>

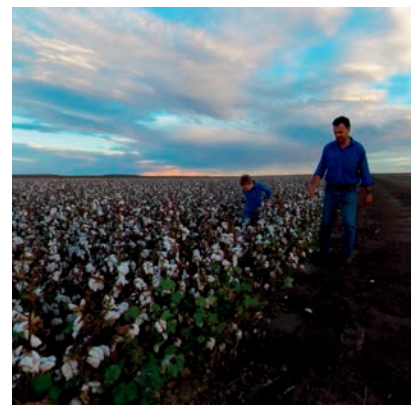
Our Virtual Tour is an interactive experience that explores locations throughout the pork supply chain. It includes two types of farms - indoor and free range - an abattoir, and a supermarket.

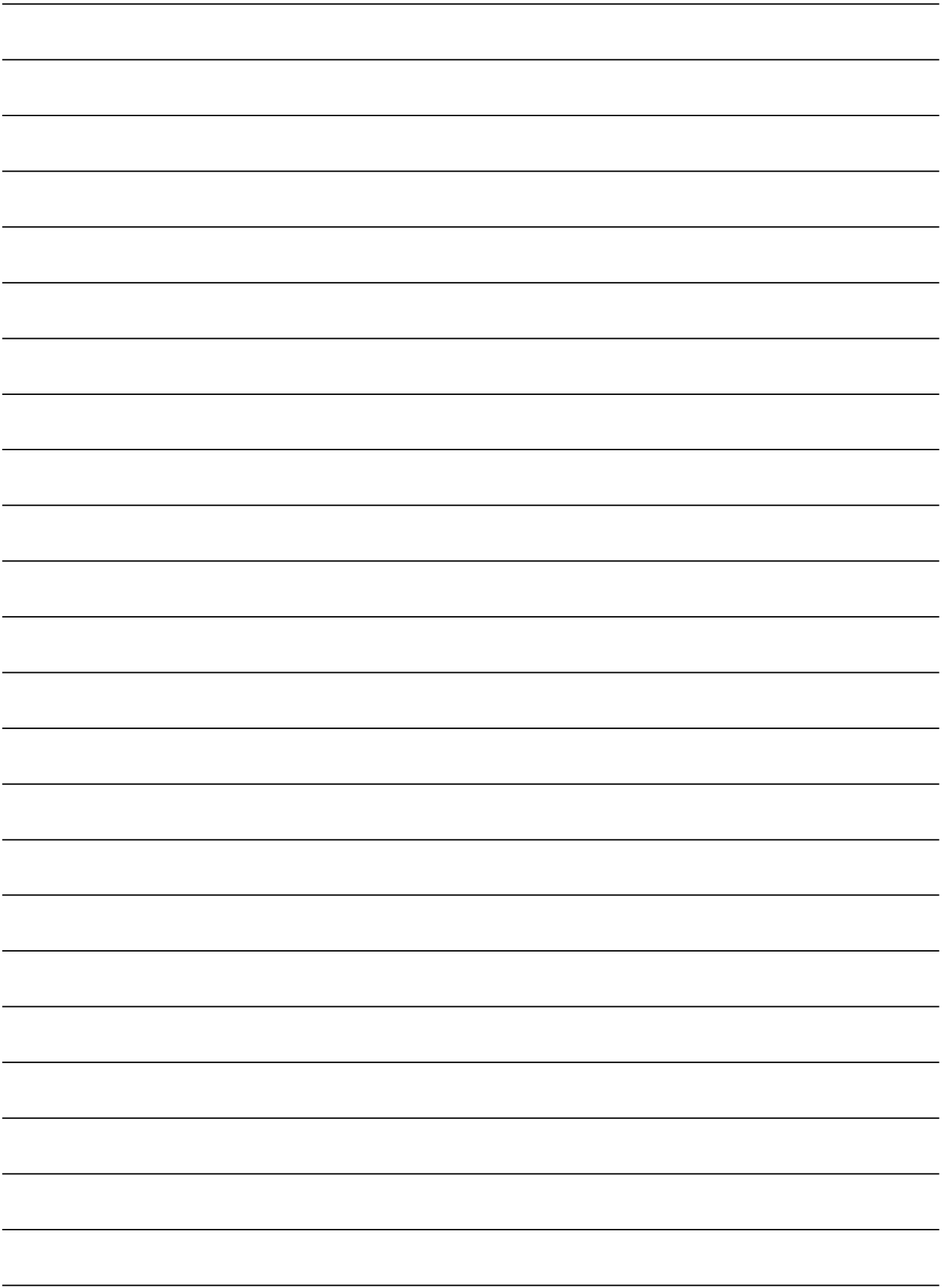
The Virtual Tour showcases the animal welfare, technology, sustainability, and food safety and quality measures that go into producing pork.

Cotton Australia - Cotton Education Kit Chapter 5 - VR experience

<https://cottonaustralia.com.au/education-kit>

Designed for all teachers and high school students, the 10-chapter digital Cotton Education Kit is linked to dynamic resources such as video, websites, research, and case studies. This kit has been mapped to the Australian Curriculum for Years 7-10, and targeted outcomes for Years 11 -12 from all state & territory curriculums across Australia.





THANK YOU!

For any questions or further information regarding any material covered in this course, please contact jess@think.digital

Follow these links for more inspiration around immersive technologies in agriculture:

www.farmvr.com

www.think.digital

www.farmxr.com

www.primezone.edu.au

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