





Jobs in your lunch box

The agricultural services industry



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Lesson overview

Students will identify the network of people and activities involved in the agribusiness industry.

Australian Curriculum: Humanities and Social Sciences

Economics and Business Year 6 - The reasons businesses exist and the different ways they provide goods and services (ACHEK011)

Resources

- Ipad for research
- Supply chain cards Apple industry
- Case study Nigel Andrews A career in transport logistics
- Worksheet 1 Brainstorm
- Cards What's on your plate cards?

Tuning In

Watch 'Australian Agriculture: the greatest story never told.' This is a video on the farming industry, its size and supply chain.

youtube.com/watch?v=fFUZ_j2cCe0 Published by the Australian Year of the Farmer 2012 (Accessed 30 August 2015).

Whole class introduction

Australian farmers are supported by a large, innovative agricultural services industry. There are employment opportunities at every stage of the agricultural supply chain which, when including the food and fibre industries, employs over 1.6 million Australians. This is set to get bigger.

With the increasing world population and global demand for Australian products, farmers will need to grow more food and fibre, and will continue to provide lots of jobs and business opportunities to many different people in our community.

Student activities



Exercise 1:Read the case study on Nigel Andrews and write five interesting facts you found out about his life and five interesting facts about his career. What would it be like if we couldn't transport perishable foods long distances?

Teacher notes: In the early 1900's most foods consumed were grown locally. Now, due to improvements and increased technology in transport, food can be transported long distances. We transport food into densely populated areas where it would be impossible to grow enough food for everyone and can source out of season foods or foods grown in a specific area to provide far more choice to the consumer.

Exercise 2: Brainstorm as a class or individually, all the people who rely on farmers for work and note the sort of services that they provide.

Teacher notes: Examples of service providers include machinery salesperson, bulldozer driver, refrigeration technician, shearer, truck driver, accountant, farm advisor, computer technician, carpenter, environmental scientist, soil scientist, fencing contractor, shed builder, graphic designer, engineer, irrigation specialist, jackaroo/jillaroo, helicopter driver, landcare officer, wool classer.

Exercise 3: A supply chain is a network of people and activities that occur from the place it is grown to the consumer. It can vary in complexity depending on the product. In groups, students complete the supply chain activity cards based on apples and present their work at the end of the project.

Reflection

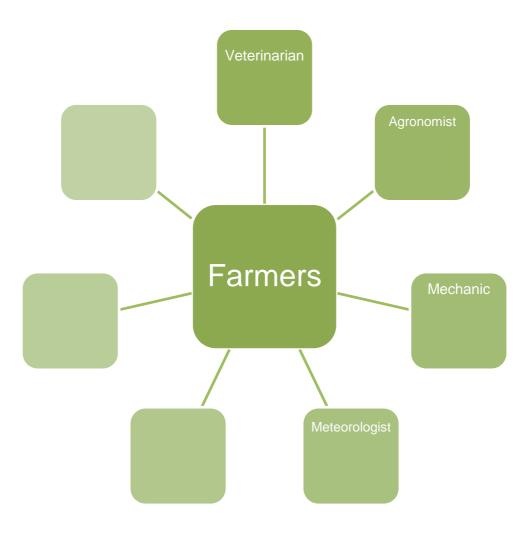
Farmers' Markets are becoming very popular in Western Australia and sell a lot of locally produced food. What are the benefits of buying food at a farmers market?

Teacher notes: Consider supporting local farmers, buying fresh picked produce and reducing the environmental and economic cost of transporting food long distances.

Work sheet 1: Brainstorming chart

Agricultural service providers

Brainstorm the different businesses and professionals that provide services to Australian farmers. Use dot points to list some of the services they provide to the farmer. Some ideas have been provided to start you off and you can extend the brainstorm to add as many as you can.



Case study



Nigel Andrews - A career in transport logistics



Nigel Andrews has built an exciting career in transport logistics. Nigel is a Kija man who grew up in Wyndham, Western Australia. As a child Nigel was impressed by the four-trailer road trains he saw around the East Kimberley region that took the station cattle to market in Perth.

His Dad worked on a station near Fitzroy Crossing and Nigel helped to herd the cows onto the road trains and would also help the driver to set up ramps and trailers. These experiences sparked his lifelong interest

in trucks and transport.



Getting an apprenticeship

When Nigel was 13, his family moved to Perth so they could experience the opportunities to be found in the city. At 14, Nigel's school organised work experience at a truck building business in Welshpool. He was very energetic and worked as hard as possible. The business owner saw Nigel's potential and offered him an apprenticeship the following year.

The best part of the job was working with his hands, and being in a tough, hardworking environment, which reminded him of going to work with the stockmen on the station. In the truck-building workshop there were very high expectations.

Taking a different path: Trying a new job in remote Western Australia

After four years as a vehicle body builder, Nigel left this work and got a new job as a



truck driver. He spent more than ten years working in removals. Because he came from a remote community, Nigel was perfectly suited to overseeing removals in desert locations, transporting furniture for teachers and police who were being transferred to work in small Aboriginal communities.

The work took him back to the red dirt country, and gave him the chance to meet Aboriginal people from different cultural groups, who had different

languages and traditions. Some of the places Nigel visited were Oombulgurri, Kalumburu, Jigalong and Warburton.

The red dirt of the desert was a special challenge. If it rained it was easy to get bogged. The truck driver needed to be a good navigator, because at that time there were no mobile phones or satellite navigation, and it was easy to get lost in the outback.

'The company gave me a lot of management responsibility in this job and they valued my ability to engage with those remote Aboriginal Communities. I also felt at home in the isolated land of the outback, and I got along well with the people I met.'

A new career direction: Moving food with trains and trucks

Nigel's next big challenge came when he accepted a new job in general transport coordinating the movement of refrigerated food across Australia.

Moving cold foods across Australia involves trains and trucks. In Nigel's job, two trains a week would deliver agricultural goods between Sydney and Melbourne on the east coast and Perth on the west coast.

Nigel was in charge of six containers per train. Once unloaded at the depot in Kewdale, these trains were then filled with Western Australian farm products headed for markets in the eastern states. When the trains were emptied, up to 60 trucks would arrive to transport goods from the train depot to the processers and retailers who had purchased it.



In this job Nigel learned a lot about Western Australian farm produce and seafood.

Did you know that bananas can't be loaded into a container with other products, because they release a gas which makes other fruit and vegetables ripen?

Nigel often had to take care of very expensive, value added farm products, which were being sent to expensive restaurants in Sydney.

One example was black truffles. These can be worth \$1150/kg and need to be kept at the correct temperature with lots of air circulating. 'I used a temperature gun. This sent a laser down into the container to make sure the temperature was the same everywhere in the rail carriage.'

An important product exported from Western Australia is seafood. After removing the seafood from a container, Nigel had to make sure it was clean and ready to be loaded with new products. 'We always scrubbed the container carefully for food safety, and then fragranced it with vanilla essence. Sometimes we would put 20L of vanilla essence into one rail container. We could not use harsh chemicals like bleach.'

Nigel's job involved a lot of responsibility. Sometimes the trains would break down or derail in the desert, and Nigel's company had to find a way to keep the food fresh, refrigerated and safe to eat. If a train broke down, Nigel would organise refrigerated trucks to complete the journey. It can be a complex job to keep products frozen at -48 °C in the middle of a hot desert. The freezers on the trains were computer operated, and had to be filled with back-up fuel in case of an emergency.

Nigel's career began because he was interested in trucks as a young boy on a cattle station. It has seen him travel on many interesting pathways in the city of Perth and in remote Western Australia.

Supply chain cards:

Apple industry

Teacher note: These can be cut out and handed to students. There is a formatted version of these cards to download

Market researcher

Create a survey to see if your classmates prefer red apples or green apples. You may like to have samples or pictures to increase the effectiveness of your survey.

Graphic designer

Design a flyer to promote the orchard that grows the apples that are being marketed by your team.

Carpenter

Design a fantastic apple stall for your team to use at the local Farmers Market.

Truck Driver

You are hires to transport the apples to the market in Perth and the farmer wants a price.

- It is 220km to Perth.
- You can fit six pallets of apple cartons on the truck.
- The farmer wants 24 pallets delivered each week.
- You charge \$2.70/ km.
- It takes 3 hours to travel to the market. What time will you need to leave the farm to arrive by 5:30 pm?

Use this information to prove the farmer with his quote and instructions.

Radio presenter

You have been contracted to create a 30 second radio advertisement for the Apple Company. You need to make sure it will catch people's attention and give them plenty of information. Record your advertisement on an IPad.

Baker

Create a survey to see if your classmates prefer red apples or green apples. You may like to have samples or pictures to increase the effectiveness of your survey.

Packing shed manager

You need 10 people working in your shed to pack all the apples this season.

- Eight hour days
- No weekend work
- Pay is \$26/hour
- Six weeks work

Write an employment advertisement for the paper and you also need to work out the wages bills

Fruit retailer

You want to have a great range of apples on your shelf and need information on what local Western Australian apples you can buy and what is special about them. Research the different varieties of apples and write a brief description of each so the consumer knows what they are buying in your store.