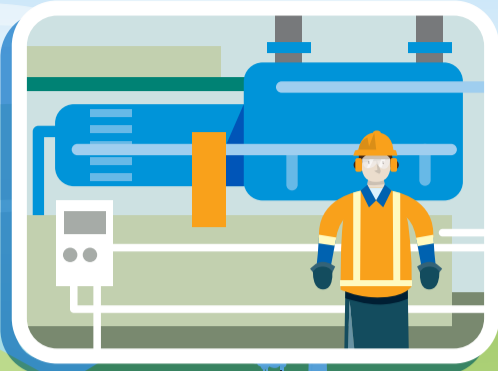


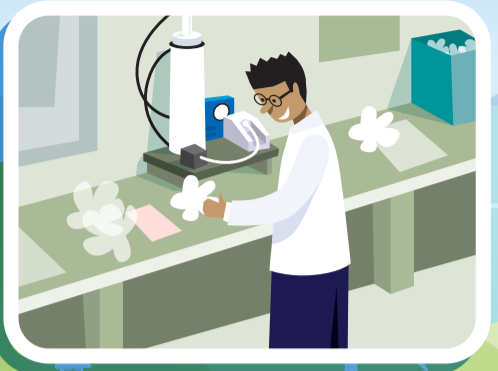
Who makes it happen?

Technologists, engineers and scientists in New Zealand's primary industries

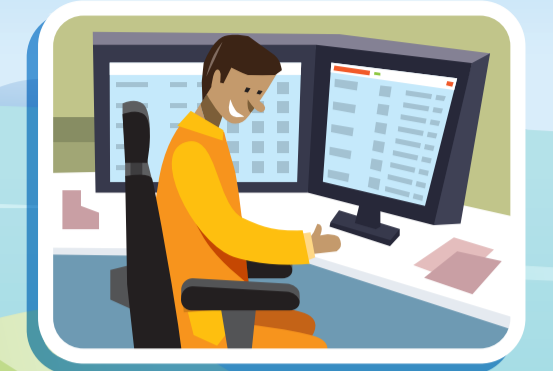
Some **CHEMISTS** and **CHEMICAL & PROCESS ENGINEERS** are involved in making fertilisers.



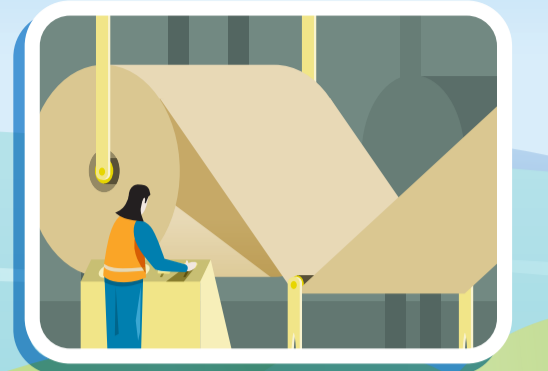
WOOL SCIENTISTS come up with new high-tech ways to use wool, such as filters in breathing masks.



CIVIL, ELECTRICAL and **MECHANICAL ENGINEERS** may work on power stations which supply electricity to farms.



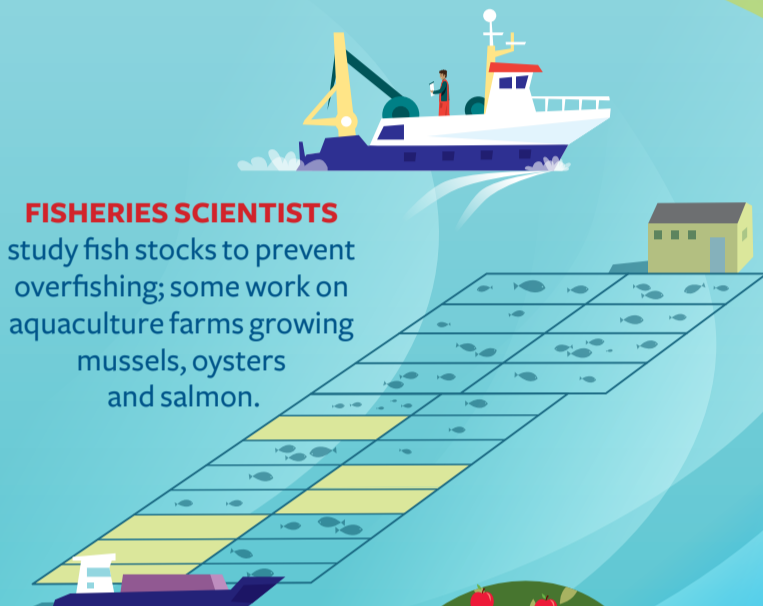
AUTOMATION ENGINEERS work on controls for big machines like those that turn logs into paper and wood products.



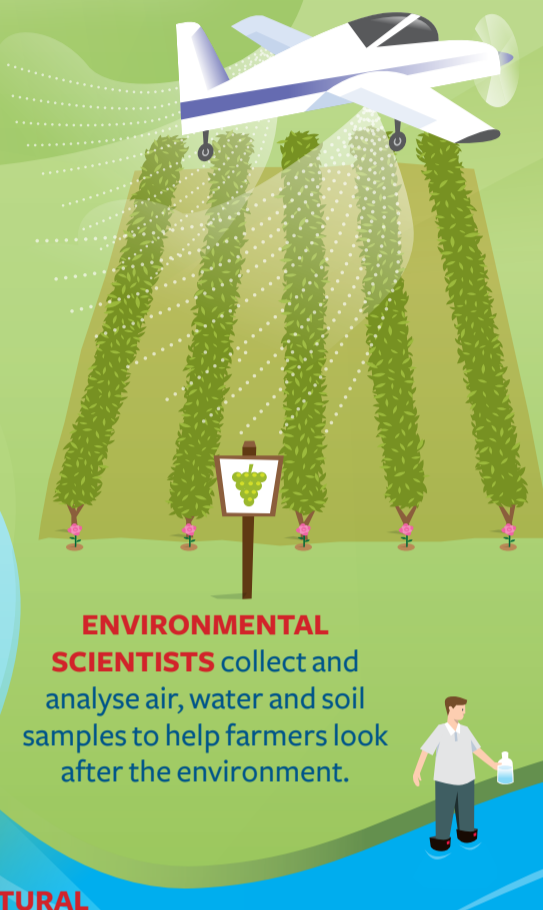
Some **CHEMISTS** and **MATERIAL SCIENTISTS** work on making biodegradable plastics from wood fibres.



FISHERIES SCIENTISTS study fish stocks to prevent overfishing; some work on aquaculture farms growing mussels, oysters and salmon.



ENVIRONMENTAL SCIENTISTS collect and analyse air, water and soil samples to help farmers look after the environment.



PRECISION AGRICULTURAL SPECIALISTS use modern technology, such as drones that can measure grass growth.



SOIL SCIENTISTS advise farmers about how to stop erosion and dispose of farm waste without damaging the soil.



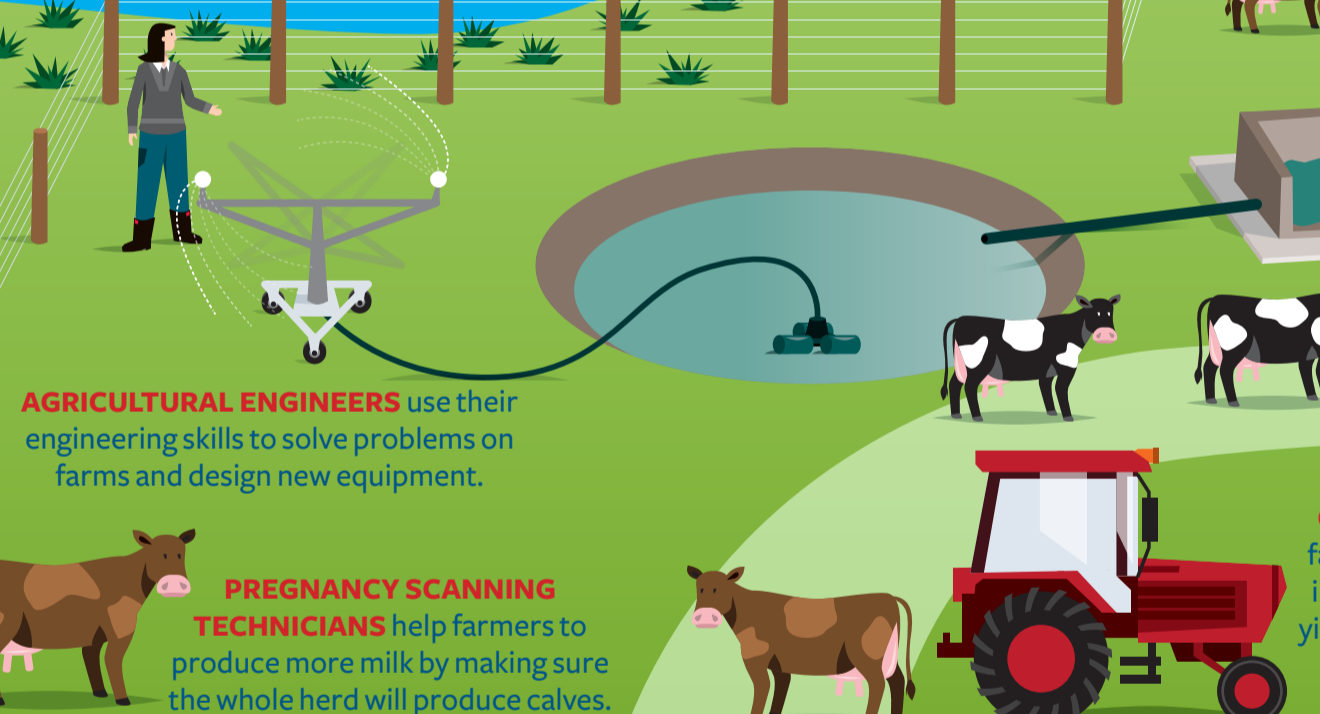
HORTICULTURAL SCIENTISTS breed new varieties of crops such as apples and kiwifruit, including ones that can resist diseases.



AGRICULTURAL SCIENTISTS research ways to grow better crops, pasture grasses, and farm animals like cattle, sheep and deer.



AGRICULTURAL ENGINEERS use their engineering skills to solve problems on farms and design new equipment.



PREGNANCY SCANNING TECHNICIANS help farmers to produce more milk by making sure the whole herd will produce calves.



FARM VETS specialise in large animals like cows and sheep, and help with farm productivity and animal welfare.



FOREST SCIENTISTS research forest growth, wood processing, conservation and different types of trees.



FOREST MANAGERS plan and direct the planting, protection, growth and harvesting of trees.



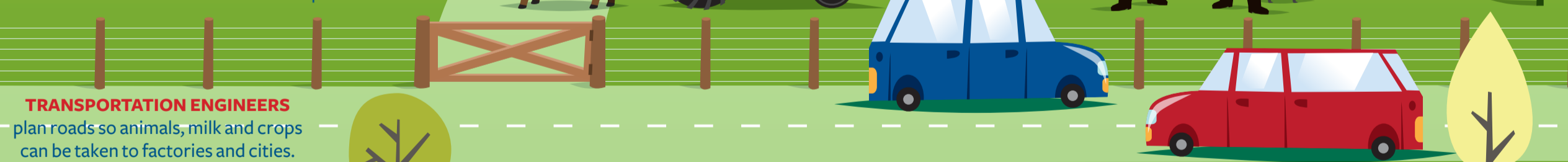
AGRICULTURAL CONSULTANTS provide farmers with advice about improving the quality and yield of crops and livestock.



FARM MANAGERS need science, technology and business skills to plan, manage and run farms.



TRANSPORTATION ENGINEERS plan roads so animals, milk and crops can be taken to factories and cities.



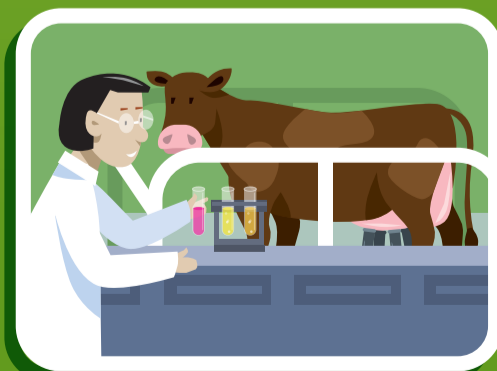
FOOD TECHNOLOGISTS figure out the best ways to turn milk into new food and drink products.



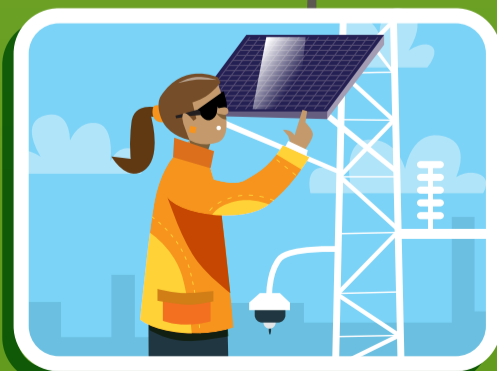
LABORATORY TECHNICIANS and **MICROBIOLOGISTS** test dairy products, for example to ensure they are safe to eat.



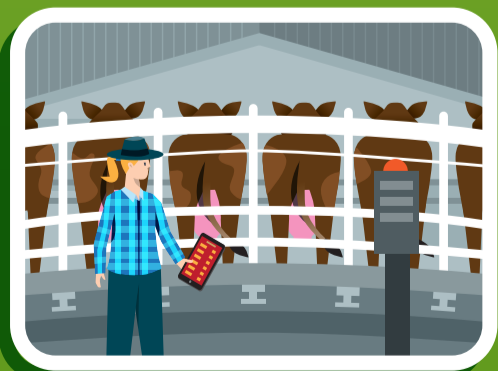
BIOSECURITY OFFICERS protect our farms, forests and fisheries by dealing with pest animals and plants, and diseases.



GENETIC SCIENTISTS analyse DNA samples to help farmers decide which animals to use for breeding.



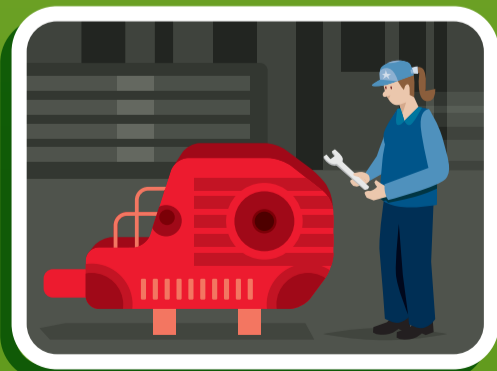
CLIMATE SCIENTISTS study the effects of human activities, such as farming. **METEOROLOGISTS** forecast the weather.



ELECTRONICS ENGINEERS develop new technologies for farming, such as electronic ear tags and high-tech milking sheds.



SOFTWARE ENGINEERS write code that controls high-tech equipment and software for farm management.



MECHANICAL ENGINEERS develop machinery for forestry and farming.