

# Explain the consequences of the use of a dairy farm on people and places.

LOOKING AT THE ROLE OF DAIRY FARM MANAGEMENT PRACTICES IN A WIDE CONTEXT.

## ESSENTIAL QUESTION

### What do juggling and dairy farming have in common?

#### WHAT ARE WE LEARNING?

- Understand how people interact with natural and cultural environments.
- Understand that this interaction has consequences.
- Investigate the social, environmental and economic impacts of the dairy industry on New Zealand.

#### TRY THIS WITH

- Year 11 Geography students
- Students who have good research skills.
- Students who love working collaboratively.

## FIND

- Classify
- Infer
- Rephrase
- Recognise
- List
- Express

Order [DairyNZ](#) publications (no cost) that relate to your local region.

Watch [‘Girls in Education’](#) and [‘Lord of the Rings’](#).

Use the [impact diagram](#) to have students identify the types of impact they observe.

Introduce key [high-level facets](#) of Environmental Impact.

Watch [Water](#), [Soil](#), [Pollution](#) and [Causal Relationships](#).

In groups have students create a [Ted-Ed Flipped Classroom](#) on one of these videos.

Swap creations and have students complete each others’ flips.

Utilise your Science Dept. to explain the relevance of [Nitrogen and Phosphate](#) cycles.

Establish a record of class opinions on the dairy industry.

As a class work to define a single question that when asked, will summarise the social impact of the dairy industry on your region.



## APPLY

- Discover
- Investigate
- Research
- Examine
- Correlate
- Question

Use [iMovie](#) to create a [‘50 People, 1 Question’](#) film.

Extend this project to your farm visit and even to the community in which the farm sits.

Remind students that [dairy farming requires a lot of water](#).

[Calculate how much water](#) your farm visit dairy farm needs.

Ask students to identify how dairy farms interact with water and soil.

Understand what type of [pollutants dairy farms produce](#).

Collect information available in wider media and publications regarding the environmental, social and economic impacts of dairying.

Create two Pinterest boards - one each for [positive and negative](#) media related to dairy farming in New Zealand.

Collaborate across the classroom to verify claims made in both positive and negative media representations.



## PRODUCE

- Develop
- Appraise
- Conclude
- Reframe
- Construct

Stay mindful of looking at examples from inside NZ as opposed to statements about ‘high input’ farming in USA etc.

Use [back-channelling](#) via [Today’s Meet](#) to support every student to give their own feedback to a subset of items pinned to the Pinterest board.

Reflect on differences between students predictions vs. actual findings.

Create a [Thinglink](#) that provides rich examples of the fact sheet statements.

Create a negative-positive continuum.

Summarise issues students encounter in their research.

Group issues into natural themes. (e.g. water, pollution, financial, employment etc.)

Create summary statements along the continuum.

Use the [Farm EnviroWalk](#) and support students to choose individual themes.

Use [Popplet](#) to summarise why the [Farm EnviroWalk](#) asks the farmer to focus on each aspects.



## SUCCESS CRITERIA

Students can check they have successfully completed the task by:

- Flipping a nominated video for the class and completing another class flip.
- Contributing to the creation of the class 50 People, 1 Question video.
- Creating a Popplet on one key environmental impact identified in the Enviro Walk Guide

PRINCIPLES	VALUES	KEY COMPETENCIES	LEARNING AREAS	WORD BANK	KEY CONCEPTS
Learning to Learn Coherence	Integrity Ecological Sustainability	Critical Analysis Critical Evaluation	Change Sustainability	1. Transience 2. Milk Solids 3. Nutrient Management 4. Algae Growth	1. Perceptions 2. Viewpoints 3. Sustainability 4. Causal Relationships