# Overview Unit 1 Change and opportunity

**Sarah:** [00:00:04] Hi, my name's Sarah, I'm here with Caitlin, to talk to you about the Agriculture and Horticulture Study Design. We're just going to go through each unit and have a chat about what they are entail for you and your students.

**Sarah:** [00:00:14] So, Caitlin, can you give me a brief overview of the Unit 1.

**Caitlin:** [00:00:18] Yes. So Unit 1 is Change and opportunity. It has two areas of study, food and fibre production and also food and fibre industries. Students look at the history of agriculture in horticulture, from indigenous practices to European first settlers. It looks at the major food and fibre produced across Australia. It looks at the drivers of change that agriculture has produced and also careers that associated with each of these changes.

**Caitlin:** [00:00:52] So let's focus on the first area study 'Food and fibre industries'. Can you tell us the key skills and key knowledge that the students need to know?

**Caitlin:** [00:01:00] So these students develop skills in considering the land uses in food and fibre. So indigenous practices to European first settlers. For example, indigenous practices, they looked at biodiversity and symbiotic relationships within the agriculture and horticulture.

**Caitlin:** [00:01:21] While European first settlers, it's more intensive agriculture and high managed systems.

**Caitlin:** [00:01:31] So, students need to identify key agriculture and horticulture industries in Australia and develop an understanding of past and present deceptions, cultural, social, economic roles of Australia's agriculture and horticulture industries. In addition, students need to know about the key sectors and industries in Australia's food and fibre industry.

**Sarah:** [00:01:56] Can you explain the outcomes of climate, soil equality and sociocultural factors?

**Caitlin:** [00:02:02] Yes. So students develop skills in identifying the relationship between food and fibre and land use and regions of Australia.

**Caitlin:** [00:02:12] So, for example, coastal areas have more grazing vineyards, dairy as their high rainfall than areas of inland Australia.

**Caitlin:** [00:02:23] Students also analyse the changing nature of employment and sociocultural factors such as lifestyles, values and attitudes.

**Sarah:** [00:02:34] Change is a significant concept in Australian agriculture. What key knowledge and key skills do students investigate?

**Caitlin:** [00:02:44] So students investigate. Get the drivers of change in agriculture and horticulture, such as markets like factory farming, sustainable land management and draw conclusions for long term influences. To gather further knowledge in this area, students can attend field trips and scientific trials both in the classroom and outside. If they've got space.

**Sarah:** [00:03:07] Moving onto area study two, food and fibre production, can you tell me the main outcomes of that?

**Caitlin:** [00:03:14] Yes. So in food and fibre production, students look at the inputs and outputs of agriculture and horticulture production. They look at health and safety. They look at soil characteristics. And it's economics, environmental, social and ethical considerations.

**Sarah:** [00:03:32] With the area of study, food and fibre production. Can you tell me the key skills and knowledge?

**Caitlin:** [00:03:38] So students are able to describe the best practices in production cycles of food and fibre and plants and animals. For example, running a grain enterprise, and if irrigation is reduced, then the option of hay making. Students learn how to apply suitable health and safety to each production system and the importance of supporting mental health.

**Sarah:** [00:04:00] Caitlin, can you explain to me the content relating to soil health?

**Caitlin:** [00:04:04] Yes. Students look at the suitable soil conditions for plants and animals, including how to test for soil quality and apply techniques for improved soil health. Students also analyse a range of growing media such as perlite and aquaponics. Students evaluate data using scientific methodology and teachers can click on the separate link that explains the scientific methodology. To gather further knowledge in this area, practical tasks such as field trips, data collection on experiments can be gathered. So teachers can take students out on a excursion. Just to say, a hydroponic to modify compared to tomatoes grown in a hothouse.

**Sarah:** [00:04:49] Great. Thanks, Caitlin. That's it for Unit 1. And you can click on the further links for more information.

[Copyright Victorian Curriculum and Assessment Authority](https://www.vcaa.vic.edu.au/Footer/Pages/Copyright.aspx) 2020