# Securing Food Futures teacher resources
# Further learning: Fieldwork

After using the Securing Food Futures loans kit there is an opportunity to apply what the students have learnt from the artefacts and discussions in project style activities. Fieldwork is an important aspect of geographical investigation and learning and provides a wonderful opportunity for students to engage with key skills, curriculum knowledge, and their broader community.

Watch: Invisible Farmer introduction (Museums Victoria)

- Discuss the purpose of geographical and historical research.
- How does Geographical fieldwork overlap with historical investigations?
- Consider why researchers investigate 'gaps in current knowledge'. What are researchers 'adding' to society?
- How does the Invisible Farmer project present a 'gap in current knowledge'?

***Research question and hypothesis:***

Teacher watch: Developing research questions - brainstorming (Museums Victoria)

- What is a research question?
- Not all questions are equal. Discuss.

Brainstorm questions students have about farming, food security, and future of farming or Invisible Farmer project. As students write down their ideas continue to inquire:

- Why are we asking these questions?
- Why are we interested in these questions?

Develop one class research question. The question should be open ended and be achievable for students to answer in the allocated time.

Consider:

- What is the topic of interest?
- What do we already know?
- What do we need to know more about?

Example questions:

- *How do modern food systems impact people and place?*
- *How might anthropogenic changes to the environment impact future food security?*
- *How does local produce increase the sustainability of food production?*

As a class, write an educated guess answering the final research question. Use students' prior discussions to form this response.

Example hypothesis:
*How does local produce increase the sustainability of food production?*

*It allows for a reduction in emissions and an increased focus on local environmental, economic and social longevity and connectivity.*

***Developing an understanding of people and place:***
A traditional research report contains an introduction, outline of methods, discussion of results, and concluding statements. Completing preliminary research and writing an introduction or summary of existing knowledge is helpful for students to put their research question into context and practice using reliable secondary sources for information.

Students may summarise existing ideas, knowledge and data on the following:

- Local farming region characteristics and change over time.
- Roles of farmers in modern society, how roles have changed over time and what implications these changing roles have had on food security.
- Current farming practices and comparisons with historical techniques and sustainability of produce.
- Current understanding of how anthropogenic activities and natural shifts have altered environments over time leading to changes in productivity or food security.

***Methods and collecting data:***
In Geography, surveys and interviews are often used to understand community perspectives and gain information on personal experience and connection. Surveys tend to be based around **quantifiable** data, or numerical data that we can later graph or map. For example, researchers may ask 50 community members how they would rank availability of locally produced fruits from 1 to 5. Interviews, like 'Oral Histories' are examples of **qualitative** evidence, data that cannot be defined by numbers but are still vital for gaining an understanding of processes and the connection between people and place.

Create a list of survey questions which help answer the class research question. Ideally the survey would be short and contain a series of simple multi-choice questions which are available for all community members or targeted groups for your research. Encourage students to discuss the importance of each question and justify why and how it will help inform their research question.

NB: Consider your sample size. If all students carry out the same set of questions, to different community members and then share and analyse the data as a class, your sample size will larger and gain a broader community perspective.

Review: Interview questions (Museums Victoria)

- You do not need to live in a farming region to interview farmers or agriculturalists. As the recent pandemic has shown us, technology allows us to connect with others no matter what the distance.
- If physically interviewing farmers or agriculturists is not practical, use https://invisiblefarmer.net.au/ as a secondary source for students to read existing interviews and gain evidence for their research.

***Virtual tours:***
If physically visiting farms to interview participants is not practical, a range of virtual tours are available online which allow students to explore different farms to understand land use, land cover, infer agricultural practices and ideas for further research or questioning.

For example:
Australian Eggs virtual farm tour
Farms 2 Schools

***Informing others:***
After collating data, creating graphs, tables or editing footage, students can prepare a written discussion or analysis which uses the evidence to form a conclusion or answer to the research question. Students may consider the following questions in their analysis:

- How have the characteristics of people and place shaped our current agricultural practices? What is sustainability? How can technology and research improve our sustainability (environmentally, economically and societally)?
- What are our modern food systems and how do they compare to historical models? How have they changed over time? What evidence is there of this change? How do these systems impact people and place? What are the outcomes of these impacts?
- What are the changes that are having a significant impact on farming and food security? What are the associated impacts? What evidence of these impacts are there? How are these impacts overcome?

You may wish to extend students by asking them to reflect on the success of their research methods in collecting suitable data to answer the research question. Try and avoid statements about personal enjoyment or learning, but instead guide students to critically reflect on what questions were/were not informative, how they would improve their survey techniques, what other data would have been useful or even what other questions were raised for future research throughout the project.

The purpose of research and collecting data is to fill gaps in current knowledge. This can only be achieved if results are collated, analysed and shared. As students work towards VCE, you may wish to encourage them to write a formal fieldwork report. However, AVDs can be just as informative and can allow students to also participate in peer teaching or oral presentations reflecting on their ideas, experiences and results.

**Additional resources:**
VCE Geography advice for teachers
Untold education project: Invisible Farmer additional resources (Museums Victoria)