

SDG2: Future of Food

MM5: The Food We Eat



Micro-Module 5: The Food We Eat

Exploration
Experimentation and

Lesson 2: How Do We Produce Food?

Subjects: Agricultural Science, CPSE, Geography, Home Economics, SPHE

Lesson Title and Summary: How Do We Produce Food?

In this lesson, learners will begin to understand the different systems and elements of agriculture and primary food production. This lesson includes key terms and words associated with food systems to help the learners to develop vocabulary that will aid them as they continue to explore the topic of food.

Vocabulary: Aquaculture, Agriculture, Agroecology, Biodiversity, Cultivation, Ecosystems, Geography, Globalisation, Local, Organisms, Polyculture, Production, Research, Supply-chain, Systems, Technology

In this lesson, the learner will:

- Understand agricultural systems
- Learn about the history and trends of agriculture
- Learn about the different people involved in food production
- Develop a basic understanding of food systems
- Practice notetaking

Materials

- Worksheet: Glossary
- Worksheet: How Do We Produce Food?
- Teacher's Notes: Glossary
- Internet access
- Markers/pens/pencils
- Paper

11 SUSTAINABLE CITIES AND COMMUNITIES



12 RESPONSIBLE CONSUMPTION AND PRODUCTION



13 CLIMATE ACTION



15 LIFE ON LAND



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ACTIVITY INSTRUCTIONS

Activity 1: Glossary (20 minutes)

1. Divide learners into groups of 2-4.
2. Have each group write their own definitions for the words from the glossary in the WORKSHEET: Glossary.
3. Briefly discuss their definitions. See teacher's notes for glossary definitions.

Activity 1: How Do We Produce Food? (30 minutes)

1. As a class watch the video How Do We Produce Food? Crash Course Geography #43 (11:39 mins).
 - a. Allow the learners to read through the questions and prompts on the WORKSHEET: How Do We Produce Food? independently (5 mins). They will each need to complete this worksheet while watching the video, taking notes about what they are hearing and seeing along the way. Learners will also need to revise their glossary as they watch the video.
2. When everyone is ready, play the video. NOTE: the video moves very quickly and there is a lot of information for the learners to digest. Please pause the video regularly so the class can take notes and grasp the content steadily.
3. Facilitate any questions from the class along the way.
4. When the video has ended, allow the learners extra time to complete their worksheet and add any final notes. Ask the learners to revise their glossary definitions based on the video as well.
5. Then ask the class to discuss what they've learned about food production, following their worksheet as a talking guide (see teachers notes for glossary definitions).

REFLECTIVE EXERCISE: 3-2-1 (10 mins)

- Three things they feel they have learnt from the tasks.
- Two things they found most interesting and would like to explore more.
- One – their opinion they have about the tasks.

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EXTENSION / REDUCTION ACTIVITIES:

Reduction: For a shorter lesson, ask the learners to do activity 1 at home, in advance of the lesson. This should reduce the learning curve and the amount of time required to view the video in class.

Extension: For a longer lesson, spend more time discussing the video and the various terms.

MEDIA BOX: (materials, online video links, extra resources, case studies etc)

Video: How Do We Produce Food? Crash Course Geography #43 (11:39 mins)

https://youtu.be/xx_Cu7Le3ZY

National Geographic: The Art and Science of Agriculture

<https://education.nationalgeographic.org/resource/agriculture/>

Bord Bia: Agriculture and Food & Drink Sector (Ireland):

<https://www.bordbia.ie/industry/irish-sector-profiles/irish-agriculture-food-drink-sector/>

Bord Bia: Irish Vegetables – What's In Season

<https://www.bordbia.ie/whats-in-season/vegetables/>

Climate Ireland: Agriculture

<https://www.climateireland.ie/#!/tools/sectors/agricultures>

LOCAL TRIP / EXPERTISE / ADDITIONAL WORK AND ASSESSMENTS

Visit your local community garden, farm, or production facility to learn how food in your area is produced. E.g. Can you visit a dairy farm or talk to a dairy farmer about milk production? Or can you observe fishers bringing fish and seafood off the boats to sell to local mongers or chefs?

MM5: L2 WS GLOSSARY

2 ZERO HUNGER



GLOSSARY

Aquaculture:

Agriculture:

Agroecology:

Biodiversity:

Cultivation:

Ecology:

Ecosystem:

Geography:

MM5: L2 WS GLOSSARY

2 ZERO HUNGER



Globalisation:

Organisms:

Polyculture:

Supply-chain:

MM5: L2 TG GLOSSARY

2 ZERO HUNGER



Aquaculture: the breeding, rearing, and harvesting of fish, shellfish, algae, and other organisms in all types of water environments.

Agriculture: the science or practice of farming, including cultivation of the soil for the growing of crops and the rearing of animals to provide food, wool, and other products

Agroecology: farming that works with nature, the application of ecological concepts and principals in farming.

Biodiversity: the variety of plant and animal life in the world or in a particular habitat, a high level of which is usually considered to be important and desirable.

Cultivation: to promote or improve the growth of (a plant, crop, etc.) by labor and attention.

Ecology: the study of relationships between plants, animals, people, and their environment - and the balance between these relationships.

Ecosystem: all the organisms and the physical environment with which they interact.

Geography: the study of the physical features of the earth and its atmosphere, and of human activity as it affects and is affected by these, including the distribution of populations and resources and political and economic activities.

Globalisation: the process by which businesses or other organizations develop international influence or start operating on an international scale.

Organisms: an individual animal, plant, or single-celled life form.

Polyculture: the practice of growing more than one crop species in the same space, at the same time.

Supply-chain: the sequence of processes involved in the production and distribution of goods.

MM5: L2 WS HOW DO WE PRODUCE FOOD?

2 ZERO HUNGER



Complete this worksheet while watching the accompanying video.
There is lots to learn so take your time!

Why did humans domesticate food?

List 3 things that make up an agricultural ecosystem:

1. _____
2. _____
3. _____

What method of agriculture is used to farm fish?

Why was industrial agriculture created?

List 2 different organisms that might exist in a polyculture:

1. _____
2. _____

What type of subsistence system are the Filipino Rice Terraces (tick one):

- Extensive subsistence system
- Intensive subsistence system

Is industrialised food typically more or less cost effective? Tick one.

- More cost effective
- Less cost effective

In your own words, why is commercial agriculture bad for communities?

List 3 types of people who are involved in producing food:

1. _____
2. _____
3. _____