

DT - Wednesday 3rd March 2021

WALT: develop our understanding of
food miles and it's impact



Key Terms: Match the definition

Seasonality

The distance food has travelled from where it has been grown to where it is consumed

Import

The processing or gathering of crops

Food miles

Send goods to another country for sale

Produce

The times of year when the harvest or the flavour of a certain food is at its best

Harvest

Bring goods in from another country for sale

Export

Four divisions of the year, marked by particular weather patterns, daylight hours and the earth's position to the sun (spring, summer, autumn, and winter)

Season

Farm produced crops, including fruit and vegetables



Key Terms: Answers

| | |
|-------------|--|
| Seasonality | The times of year when the harvest or the flavour of a certain food is at its best |
| Import | Bring goods in from another country for sale |
| Food miles | The distance food has travelled from where it has been grown to where it is consumed |
| Produce | Farm produced crops, including fruit and vegetables |
| Harvest | The processing or gathering of crops |
| Export | Send goods to another country for sale |
| Season | Four divisions of the year, marked by particular weather patterns, daylight hours and the earth's position to the sun (spring, summer, autumn, and winter) |



What are some benefits of importing food?

Importing foods means we have a varied, healthy diet so people get less ill.

Importing food protects us against the effect of a poor UK harvest.

Importing food provides a market for foreign farmers' produce, boosting the foreign economies.

Importing foods means supermarkets can negotiate lower prices, which means we pay less for our food.

Foods that only grow in certain seasons in the UK are available all year round.

Carbon footprint

The total greenhouse gas (GHGs) emissions caused directly and indirectly by a person, organisation, event or product.

Greenhouse gasses include carbon dioxide and methane.

Greenhouse gases can cause climate change by trapping heat, and they also contribute to respiratory disease from smog and air pollution.

Extreme weather, food supply disruptions, and increased wildfires are other effects of climate change caused by greenhouse gases.



Environmental impacts of food production



- Increasing land use for agriculture involves destroying important natural habitats such as the rainforest.
- Some rare species lose their habitats, e.g. the Sumatran tiger.
- Agriculture also contributes to climate change.
- Agriculture uses a lot of water.
- Transport of food throughout the world burns fuel, increasing food's carbon footprint.



Social and economic impacts of food production



- Not everyone in the world has enough to eat – as the world's population increases we are struggling to produce enough food to feed everyone
- Food produced in the developing world is sold to the developed world – but they can't feed themselves
- Working conditions are often poor in developing countries
- Indigenous people have been displaced as plantations spread into their lands
- Large plantations require fewer workers, increasing the rich/poor divide



Social and economic impacts of food production



- Agriculture is often central to the economy of developing nations
- In many developing countries a high proportion of the labour force have jobs in agriculture
- Improvements to local infrastructure, such as roads for transporting food for export, have benefits beyond the farming community



Can you think of possible solutions?



Possible solutions

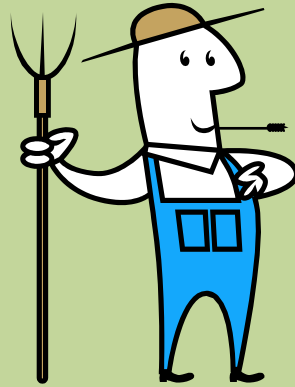
- Conservation projects
- Restriction on land use
- Optimise efficient farming methods
- Crop improvement. Research into high-yield or resistant crops
- Develop less damaging pesticides and herbicides
- Use renewable energy
- Look for/develop alternatives to palm oil or soya (often labelled vegetable oil or fat) in food such as chocolate
- Advertise accurately where food comes from
- Buy food from countries closer to the UK to reduce food miles



Who is involved in delivering the solutions?



Scientists



Farmers



Consumers (you!)



Supermarkets



Factories



Government



Using the groups of people from the previous slide, who do you think is involved in delivering each of these possible solutions?

You don't need to write them down!
Just think about it.

Develop alternatives to palm oil

Advertise accurately where food comes from

Buy food from countries closer to the UK to reduce food miles

Optimise efficient farming methods

Crop improvement. Research into high-yield or drought resistant crops

Environmentally friendly pesticide and herbicide development

Conservation projects

Restrictions on land use for farming

Development of renewable fuels

Answers:

Develop alternatives to palm oil

Scientists, Manufacturers

Advertise accurately where food comes from

Manufacturers, Supermarkets

Buy food from countries closer to the UK
to reduce food miles

Supermarkets, Consumers

Optimise efficient farming methods

Farmers, Scientists, Government

Crop improvement. Research into high-
yield or drought resistant crops

Farmers, Scientists, Government

Environmentally friendly pesticide and
herbicide development

Scientists

Conservation projects

Government, Consumers (Charities)

Restrictions on land use for farming

Government

Development of renewable fuels

Scientists

Activity:

Using all of your learning from today's lesson, and your examples of different food and their food miles last week, answer the following questions in full sentences.

1. What does food miles mean? Explain why some foods are sourced from abroad and why some might have higher food miles than other food.
2. What are some of the impacts of exporting and importing food (food miles)?
3. What are some possible solutions to reducing food miles and their impact on the world and environment?
4. What can you do to help reduce food miles?

food miles
produce
consumer
export
import
environmental

crops
damaging
harmful
reduce
increase
season