## **Organic Farming** *Statements A*

- Organic farms must be inspected every year so they can sell their food as 'organic'.
- Biological processes in soil can reduce the chance of pathogens surviving in manure. Pathogens do not reproduce quickly if there is strong competition from other harmless soil microbes.
- Many different things can affect how something tastes. For example, an apple may be a different variety, it may be riper, it may be fresher, it may have been stored better.

Conventional farmers follow legal guidelines about how they keep their animals.

- Chemical pesticides are not used on organic farms. Toxins do not build up in the soil or water where they may harm wildlife.
- Some food is transported very long distances by air, ships and lorries.
- There is already enough food to feed the world. Food is not evenly distributed and some of it is fed to animals.
- Fresh fruit and vegetables are important in our diet. They are a good source of vitamins and minerals, which keep us healthy.
- Organic farmers say that their food would be cheaper if hidden costs were included in the shelf price. Consumers would be paying the real cost of food.
  - Pollution from burning fuels is damaging our environment.
- Transporting food long distances adds to the price it costs in the supermarket.
- In 1998 a House of Lords committee decided that there is a threat to human health from over-use of antibiotics to control diseases.
- Some studies have found higher levels of nutrients in organic food, but others have not.
- Hundreds of millions of people in the Southern Hemisphere do not have enough food to eat.
- The yearly cost of removing pesticides from the water supply in the UK is about £120 million. Water companies must pay for this out of the money they charge us in our water bills.

### **Organic Farming** *Statements B*

Fields are smaller on organic farms.

Organic farmers only use vaccines and antibiotics when it is absolutely essential.

Organic farmers believe that conventional food has hidden costs. These include agricultural subsidiaries that we pay for in our taxes and the cost of cleaning up environmental pollution caused by conventional farming.

• There is usually greater bio-diversity on organic farms. This means that there is a wider range of different wildlife species living there.

Intensive farming removes nutrients from the soil, which have to be replaced with fertilisers.

The long-term effects of pesticides in food on human health are not clearly known.

Organic farming reduces the level of pathogens in animal waste by preventing over-stocking, allowing animals consistent access to water and open pasture at all times.

 Food transported long distances may be treated with chemicals to stop microbes growing on it.

 In industrialised countries surplus food is produced. Farmers are paid not to farm some land to reduce food production.

 Other scientists have not repeated many studies comparing organic and conventional farming.

The yearly cost of removing pesticides from the water supply in the UK is about £120 million. Water companies must pay for this out of the money they charge us in our water bills.

 Poorer people in the UK eat less fresh fruit and vegetables than better off people.

Intensive animal farms have more animals on less land.

• Organic farmers believe that their way of farming is more sustainable, because it cares for the soil using natural methods.

## **Organic Farming** *Statements C*

- Some people think that organic food tastes better.
- Organic farming needs more labour, which costs more. Yields are usually lower because of pests.
- Some countries use a lot of land to produce crops that they can sell overseas. These are called cash crops.
- Organic farmers add manure and other farm wastes to the soil. These contain nutrients, which are needed by new plants for growth.
- Some scientists think that it is difficult to say for sure whether differences in chemicals in food are because of the way they are grown.
- Antibiotics are sometimes fed to conventional healthy farm animals to prevent diseases.
- Organic farming relies on preventing pests, minimising the need for pesticides.
- Animals on organic farms are reared less intensively than on conventional farms, so they are less likely to pick up diseases.
- Some food is transported very long distances by air, ships and lorries.
- In 1997 a UK MORI poll found that six out of ten people would buy organic food if it were more available and did not cost more than conventional food.
- Some studies have found that organic foods contain less pesticides and fertilisers than non-organic foods.
- Pigs and sheep are moved to new ground regularly and this prevents a build up of parasites in the soil. The animals are less likely to be infected.
- Smaller fields have more hedges and dry stonewalls. These are habitats for many species of wildlife.
- There is already enough food to feed the world. Food is not evenly distributed and some of it is fed to animals.

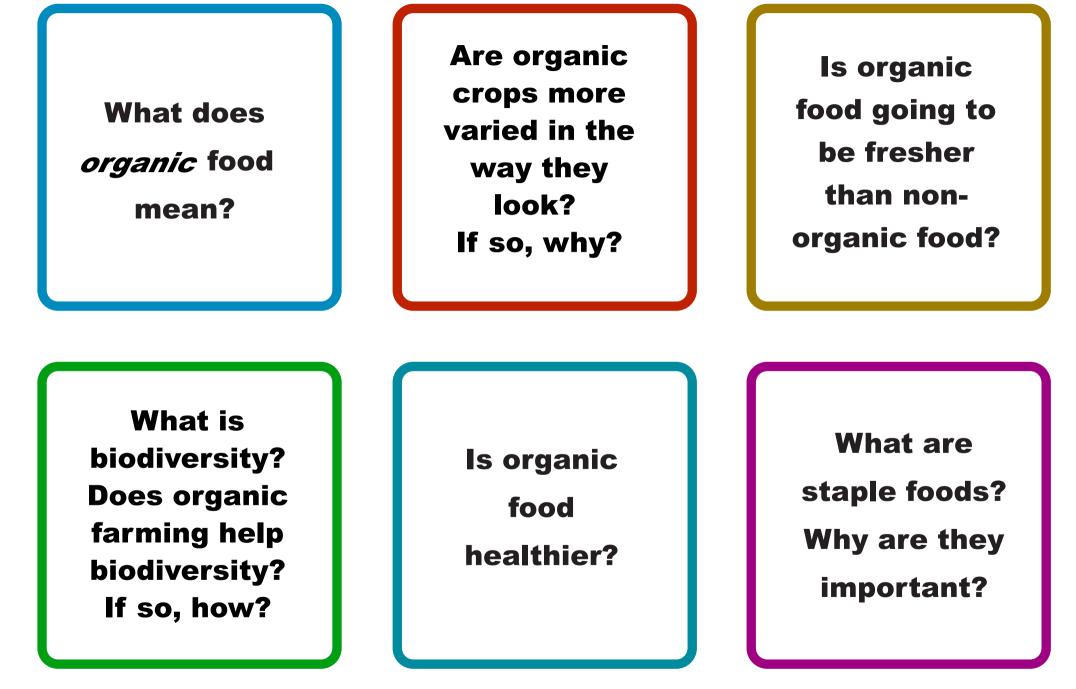
### **Organic Farming** *Statements D*

- More people are buying organic food, but they are usually people who are better off.
- Countries that produce cash crops may have little land left to grow crops to feed the people living there.
- Conventional farms have larger fields because it is easier to use machinery on them, and more land can be farmed when hedges and walls are removed.
- The yield per hectare of an organic farm is unlikely to be as high as on a conventional farm.
- In the UK 70% of all organic food is imported.
- In 2001 a House of Commons committee decided that more work needs to be done to test whether organic food is better for us.
- Conventional farmers believe that we cannot produce enough food to feed everyone in the world unless we use fertilisers and pesticides to get high yields.
- Using manure as fertiliser may carry the risk of carrying pathogens from the animal waste to people on the food. A MAFF report published in 2000 decided that there was not enough evidence to say whether this was more likely in organic food than conventional food.
- Rotating farm crops helps to break the life cycles of weeds and pests that can reproduce very quickly if only one crop is grown over a large area of land.
- Crop rotations, organic animal feed, more space for animals and having smaller fields all mean that organic food is expensive to produce.
  - Organic farmers make use of natural predators to kill off pests. For example, ladybirds feed on aphids.
  - Agriculture is unlikely to be able to feed the world's growing population over the next few decades if yields are not improved, pest damage reduced and crop damage after harvesting is not reduced. Organic farming seems far less likely to be able to do this.
  - Over-use of antibiotics encourages the development of antibiotic resistant microbes.
  - Organic farming requires animals to be kept in more natural, free-range conditions.

# **Organic Farming** What questions have you got?

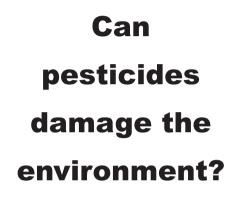
- Write down any other questions you have about organic farming:
- What does 'organic' food mean?
- Is organic food healthier?
- Why do farmers add fertilisers to the soil?
- Are organic crops more varied in their appearance? If so, why?
- What are staple foods? Why are they important?
- Why is organic food more expensive than non-organic food?
- Is organic food going to be fresher than non-organic food?
- Why don't more people buy organic food?
- Do organic crops have more nutrients than non-organic?
- What is biodiversity? Does organic farming help biodiversity? If so, how?
- How fast is the world population growing?
- What do farmers use herbicides and pesticides for?
- Can pesticides damage the environment?
- Are pesticides in non-organic food a health risk?
- Does organic food make better use of our land?
- Does organic food taste better?
- Are pathogens in animal waste fertiliser a health threat?

Write down any other questions you have about organic farming:



Why don't more people buy organic food? How fast is the world population growing? Why do farmers add fertilisers to the soil?

Why is organic food more expensive than nonorganic food? Do organic crops have more nutrients than non-organic? What do farmers use herbicides and pesticides for?



Does organic food taste better? Are pesticides in non-organic food a health risk?

Are pathogens in animal waste fertiliser a health threat?

Does organic food make better use of our land?

ASE CD ROM Resources - Can we; should we?