Farming activities

Since 1900, changes have occurred in the world's farming activities that put pressure on the Earth's natural resources. Some of these are:

- The amount of land taken up by farming has grown. Today, agriculture uses about 14 per cent of the Earth's total land area.
- Nearly 35 per cent of all the world’s forests have been cleared for farming. Forest clearing causes loss of biodiversity.
- Many farms rely on chemical fertilisers, which can poison the soil if overused.
- Consumers are usually a long way away from farms. Farm products have to be transported long distances, often by large trucks. Trucks burn fossil fuels and add to air pollution.

Pressure from irrigation and monoculture

Farming is a big user of fresh water. But sometimes there is not enough natural rainfall or local water storage. Twenty per cent of the world’s farms use irrigation. Irrigation dams and equipment are very expensive. Dams can also prevent some people along a river from using its natural flow.

Sustainable farming is also at risk from monoculture. There are fewer small family and community farms where people grow a range of products to feed themselves. Many farmers in developing countries now work on large plantations of only one crop. They often do not earn enough to feed, clothe and house their families.

Farming adds to greenhouse gases

Farming activities add to the greenhouse gases in the atmosphere. A rise in the amount of carbon dioxide, methane and nitrous oxide is believed to be one of the main causes of global warming.

Methane is a very strong greenhouse gas. It is about 21 times more effective at trapping heat in the atmosphere than carbon dioxide. Over the last 200 years, the amount of methane in the atmosphere has doubled, largely through:

- cows, sheep and pigs burping and farting
- rotting animal manure
- large-scale irrigated rice farming, which gives off gas when the dead plants rot.

Today, huge commercial feedlots are used to raise cattle for meat production in some countries. This puts pressure on a local area as methane gas is concentrated near the cattle feedlot.

Carbon dioxide is also added to the atmosphere through farming. Forests soak up carbon dioxide. When they are cut down and burnt to clear land for farms, there are fewer trees to absorb this greenhouse gas. Burning also gives off carbon dioxide.

Another unsustainable activity is too much ploughing of farming land. Ploughing releases carbon in the soil. Also, the heavy use of chemical fertilisers adds to the amount of nitrous oxide in the atmosphere.

The level of greenhouse gases needs to be limited. Farming practices will need to put less pressure on global warming and make the planet more sustainable.

What can I do?

I'm going to see if our family can buy some organic food. I've read that organic food production helps make farming more sustainable because it is produced without the use of chemical fertilisers. Organic farmers manage their land in ways that protect wildlife and the environment.
Organic farms

Most consumers want fresh and safe farm produce. Today, more consumers also want to buy organic products grown without using chemicals for fertilisers or pest control. They want local produce that has not been trucked long distances to get to the market.

Organic farmers understand their land. They look after it so that it can produce healthy crops, keep the soil rich and help natural biodiversity.

In many places, there are rules about organic farming that have to be followed. This helps consumers be certain that the products are organic. Organic farmers can register with a government authority. They are given a certificate to prove that they use organic farming methods.

Many organic farms go one step further and practise full permaculture. Permaculture is organic farming of the whole farm area. It creates a healthy, self-sustaining farm that largely manages itself and puts less pressure on the natural environment than other types of farms.

Everyone can live sustainably

Most people live in ways that could make the Earth unsustainable into the future. They can change their pattern of living to reduce their ecological footprint.

People can think about every product they buy and ask questions:
- Do I really need the product I am buying?
- Who made it and how was it made?
- Was it produced under the same working conditions I would choose for myself?
- Have natural resources been used?
- Can I be satisfied with less?

Consumers have power. They use their money to buy things, so they can ask for things. They could insist on less packaging. They could ask companies for more sustainable products.

People can buy products that will last a long time and can be repaired. They can practise the ‘5 Rs’: reduce, reuse, repair, renew and recycle.

Everyone can try to use water and energy carefully. They can turn off the tap when brushing their teeth, have a shower instead of a bath and turn electrical appliances off when not using them. They can try to use solar or wind energy and put up a water tank on their house.

People can think about the rubbish they make. They can work out ways of reducing and recycling it.

What can I do?

I’m already trying to live sustainably. I reduce, reuse and recycle whenever I can. Now I’ll start to repair and renew. I’ll fix the wheels on my skateboard and I’ll join in the local tree-planting day.