

Is animal farming wrecking the planet?

What we eat has a huge impact on the state of the planet and the survival of species all over the world. Rearing animals for food is one of the chief causes of environmental problems such as climate change, rainforest destruction, pollution and food and water shortages.

Climate Change The Earth is facing an ecological catastrophe due to a warming climate. One of the main causes of this environmental disaster is animal farming.

According to the United Nations, farming animals for food is responsible for 14.5% of all global greenhouse gases, which is more than is produced by land, sea and air transport combined (13%).¹

Animal farming is the number-one source of methane (CH₄), a gas that is 25 times more powerful in terms of climate warming effect than carbon dioxide (CO₂).² The majority of methane is produced in the stomachs of sheep, cattle and other ruminants and is released through burping and farting, or else it is released from their manure.

Animal farming also creates more than half of the nitrous oxide (N₂O) produced by human activity. This is an even more powerful greenhouse gas than methane, although it is produced in much smaller quantities.² Nitrous oxide gas is released from nitrogenous fertilizers used on animal feed crops.

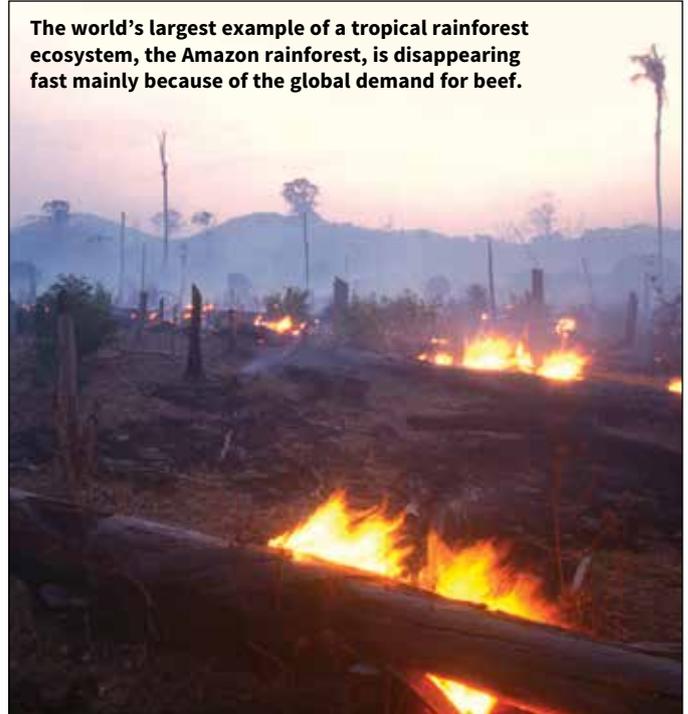
Deforestation Animal farming is the biggest threat facing the world's tropical rainforest.

The most diverse ecosystem that has ever existed on planet Earth is being cleared to create pasture for cattle and cropland to grow animal feed. Global consumption of beef is responsible for 80% of Amazon rainforest destruction.³ Cattle ranching accounts for around 70% of this loss, while the growing of animal crops such as soya accounts

Cattle ranching in the Amazon



The world's largest example of a tropical rainforest ecosystem, the Amazon rainforest, is disappearing fast mainly because of the global demand for beef.



for a further 10%.³ In 2018, 14,000 square miles of tropical rainforest were lost – that's an area nearly twice the size of Wales, or equivalent to nine football fields every minute.⁴ In the Amazon alone, 3,000 square miles were destroyed.⁵

The world's rainforests are home to around 50% of all plant and animal species on Earth.⁶ If their habitat disappears, these species will be lost forever.

If the current rate of destruction continues, all rainforests will disappear in less than 100 years.⁷ That's four billion years of evolution brought to an end, largely for the sake of our meat-eating habit.

Water use To produce meat, water is needed to grow the crops that animals eat; vast amounts of water are also needed to process their bodies into meat at the slaughterhouse; and this is in addition to the quantities that animals drink themselves. It's not surprising then that livestock production is responsible for 70% of global freshwater consumption.⁸

The water footprint of a 150g soya veggie burger is 158 litres, compared to 2,350 litres for a 150g beef burger – that's 15 times more water.⁹

The world's freshwater supply is diminishing. Already, approximately a quarter of the human population is suffering from water shortages.¹⁰ The more fresh water we use for animal farming, the less will be available for people to drink, or to use for growing crops.

Pollution

Animals reared for food produce lots of waste – globally, the amount is over 3 billion tonnes of manure per year.¹¹ Liquid manure (slurry) containing high levels of nitrogen and phosphorus leaks into waterways, polluting rivers and lakes.

These nutrients cause algae to grow in abundance, creating an algal bloom. When these plants die, bacterial decomposition uses up the oxygen in the water. This process, called eutrophication, kills fish and other aquatic creatures.

Slurry from farmed animals causes water pollution



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Emptying the oceans

Over-fishing is driving many fish species to the brink of extinction. Many non-target fish get caught in trawlers' nets (known as by-catch) and are simply thrown back dead into the sea. An estimated 300,000 whales, dolphins and porpoises also die in fishing nets every year.¹²



An albatross caught on a fishing line

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One third of fish caught in the world's oceans are converted into fishmeal, which is used as animal feed – often to feed fish on fish farms.¹³

Fish farms make matters worse – on average, it takes three to five pounds (1.36 to 2.27 kg) of fishmeal to produce one pound (0.45 kg) of farm-raised fish.¹³



Farming animals wastes the world's food resources

Global food shortages

Fattening animals is a very inefficient way of producing food because only a fraction of the calories they consume is converted into food that people can eat.

Beef cattle are the most inefficient food converters. They need to eat 20kg of crops to produce just a single kg of meat - wasting a staggering 95% of what they are fed.¹⁴

36% of the world's crop calories are fed to animals, but three-quarters (75%) of this is wasted due to the low efficiency with which animals convert crops to meat. 27% of global food production is therefore wasted by being fed to livestock.¹⁴

We would be able to feed at least four times as many people by using the available land to feed people directly, on a plant-based diet, than by using it to fatten animals.

If we are going to feed the world's growing population we cannot afford to waste food on such a scale.



Food for thought

Changing to an animal-free, plant-based diet is one of the most positive steps that we can take to protect the environment. A vegan diet has other benefits as well as being environmentally friendly. Studies have shown it to be a healthy diet, and of course it also reduces animal suffering.

You can make a difference

- Eat less meat, go vegetarian, or better still go vegan - visit our website to order a free Go Vegan info pack.
- Ask your geography teacher or citizenship teacher if a speaker from Animal Aid can visit your school to give a talk on the environmental impact of animal farming.



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