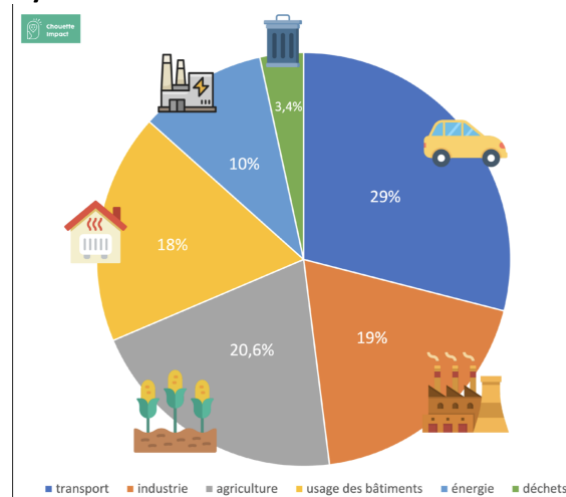


Food and agriculture contributions to carbon emissions, natural resource use and environmental impacts

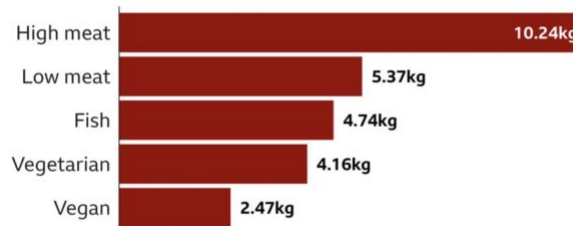
The UN's Intergovernmental Panel on Climate Change has singled out meat-eating for a key chunk of the reason why carbon emissions are rising rapidly.

Sources of CO2 emissions by sector



Eating meat creates more greenhouse gases

How much carbon dioxide do different types of diet produce per person* each day?



*Based on an adult eating 2,000 calories a day

Source: LEAP Project/Nature Foods

B B C

Why do meat and dairy have such a damaging effect?



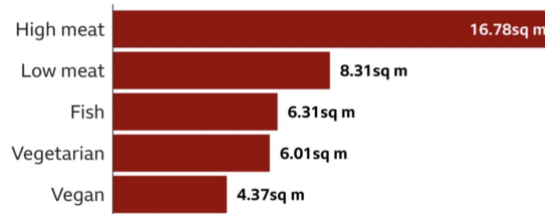
Animal husbandry is responsible for some 20% of greenhouse gas emissions.

Research from 2020 found that methane levels were the highest on record, driven by livestock farming and fossil fuels. Methane is 28 times more powerful than CO₂ at trapping heat.

A 2018 UN report estimated that to **keep global temperatures to below +2°C above preindustrial levels would require meat consumption to be reduced by 90%** and increase plant based foodstuffs four-fold.

Meat production uses lots of land

How much land is needed to support a person on different types of diet* each day?



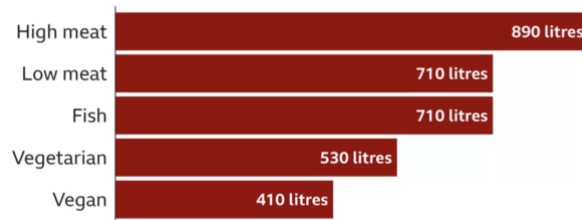
*Based on an adult eating 2,000 calories a day

Source: LEAP Project/Nature Foods

B B C

High-meat diets need more water

How much water is used to produce food for different types of diet per person* each day?



*Based on an adult eating 2,000 calories a day

Source: LEAP Project/Nature Foods

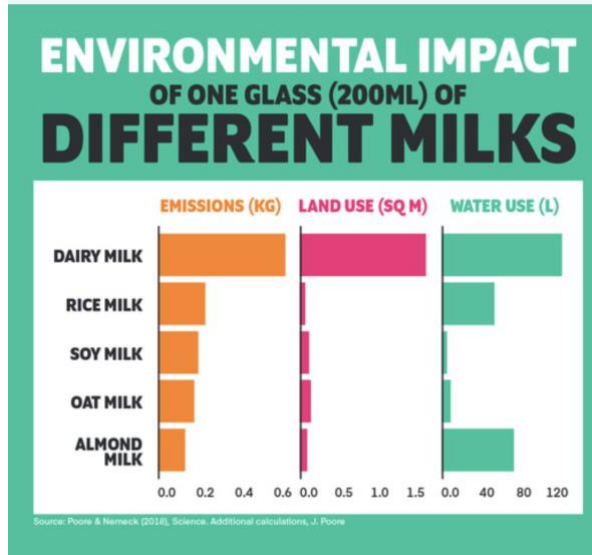
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Half the world's habitable land is given over to agriculture, of which 80% of is devoted to livestock for dairy or meat production. Meat production is highly inefficient – this is particularly true when it comes to red meat. To produce one kilogram of beef requires 25 kilograms of grain – to feed the animal – and roughly 15,000 litres of water. **Producing protein from beef takes up to 100 times more land to produce the same amount of protein from peas or soy.** Pork is a little less intensive and chicken less still. .

Poorer countries are rapidly acquiring the meat habit, if that of growth continues and richer countries don't cut back, some estimates project **that by 2050 all the world's agricultural land will be given over to rearing livestock.**

Since food, water and cultivable land are scarce in many parts of the world, production of meat represents a very inefficient use of natural resources and one which causes huge environmental damage through yet more Greenhouse Gas emissions, large scale deforestation and consequential habitat loss, over exploitation of water resources etc. etc.

If all grain were fed to humans instead of animals, we could feed an extra 3.5 billion people. In short, industrial livestock farming is not only inefficient but also not equitable.



THE FISHING INDUSTRY IS DEVASTATING OUR OCEANS



Consumption of fish has **DOUBLED** since the 1960s*.

*Source: WWF

90% of the world's main fish stocks have been pushed beyond their biological limits*.

Whole populations are on the verge of collapse.

It is estimated that **OVER 300,000** small whales, dolphins and porpoises die from entanglement in fishing nets each year.

Sharks, turtles and hundreds of thousands of sea birds are also killed by nets.

The fishing industry calls them 'bycatch'.

Cows, pigs and chickens are in effect ocean 'predators', as well as humans. Millions of tons of fish are added to livestock feed each year. Although it may seem counterintuitive, eating meat and dairy can impact our oceans just like eating fish does.

Biodiversity loss and species extinction

The global food system is the primary driver of this trend. Over the past 50 years, the conversion of natural ecosystems for crop production or pasture has been the principal cause of habitat loss, in turn reducing biodiversity. The authoritative Chatham House think tank says "global dietary patterns need to converge around diets based more on plants, owing to the disproportionate impact of animal farming on biodiversity, land use and the environment. Such a shift would also benefit the dietary health of populations around the world, and help reduce the risk of pandemics".