



Alton Sustainable Eating



Healthy Food, Healthy Planet

Dietary change can help bring down food-related climate emissions

By Dee Panes, ACAN's consultant on Sustainable Eating

It may come as quite a surprise, but the connection between livestock farming and climate change has never been clearer.



The use of animals as a form of technology for transforming plants into meat, milk and fish is by far the greatest threat to our future and that humanity has ever faced!



Greenhouse gas emissions from animal farming in the EU account for 17% of the EU's total emissions and do more damage to the climate than all cars and vans put together! The analysis also shows the scale of possible emissions reductions, where a 50% reduction in animal farming would save the equivalent of 250 million tonnes of CO₂ – the combined emissions, from all sectors, of the 11 lower emitting EU countries.

Read on...

So, How Does Farming Livestock Affect Climate Change?

It can be quite a shock to discover that raising animals for food uses extraordinary amounts of water, causes deforestation, and contributes heavily to greenhouse gas emissions, making the practice of farming animals severely damaging to the climate and overall planetary health. However thankfully, research suggests that a number of shifts, including dietary change, can help bring down food-related climate emissions. Raising animals on farms for food production takes a tremendous toll on the health of the environment. Animal agriculture is a contributor to greenhouse gas emissions, including nitrous oxide and methane, water pollution and the destruction of forests and other wild areas that help to regulate the planet's atmosphere.

Livestock Farming Contributions to GHG?

Animal agriculture is responsible for 18% of all greenhouse gases worldwide; to put this into context, animal agriculture contributes more greenhouse gas emissions than all forms of transportation combined, which is responsible for 13% of global

emissions. The fishing method of bottom trawling alone is responsible for producing the same amount of [emissions as the entire aviation industry](#).

Switching to a plant-based diet can reduce agricultural emissions by as much as 73% in high-income nations and a study, published in the journal *Science of The Total Environment*, that analysed 313 different potential food systems discovered that the highest GHG emissions were found in the food systems that included a high meat demand, especially if focused on ruminant meat and milk, and the lowest emissions were from the vegan diets.

But what about local animal products? Are they not more sustainable than buying plant foods from abroad?

Well not according to the science.

Example 1: When it comes to beef only around 0.5% of the emissions come from transportation

Example 2: For lamb it is only 2%.

The above examples demonstrate that the issue of animal farming is the farming itself. Even with plant foods like avocados, only 8% of the total footprint comes from the travelling itself - indeed for most food products the transportation accounts for less than 10%, with the higher transportation percentage simply being a reflection of the fact the food naturally produces lower amounts of greenhouse gases.



Furthermore, a report comparing greenhouse gas emissions from the average diet across countries in the EU revealed that transportation was only responsible for 6% of the total emissions related to diet, and when the results were broken down by food items, animal products were shown to be responsible for 83% of emissions in the average EU diet, compared to only 17% coming from plant-based foods.

The only way that buying local animal products could be more sustainable is if, to begin with, the farming of different foods was the same environmentally with the only difference being the miles the two foods had to travel. This is obviously not the case. Even the lowest impact beef is responsible for six times more greenhouse gases and a staggering 36% more land than plant proteins such as peas.

What can we (as consumers) do to make a HUGE difference to help reduce GHGs?

Transforming our food production systems and consumption habits are undeniable solutions that must be part of the global road map to addressing climate change. Switching to a plant predominant and/or exclusive diet will have an enormous impact. An impact not just for planetary health but, as an added bonus, human health too. A win win!

To feed a growing global population while remaining within proposed safe environmental boundaries for GHG emissions, land use, water use, water pollution and biodiversity loss, we will need big changes in diets.

If you would like further information about transitioning your diet to a plant predominant and/or exclusive diet, please respond to this post and/or send a DM to Alton Climate Network (ACAN) and someone will contact you to answer your questions and help you further.

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