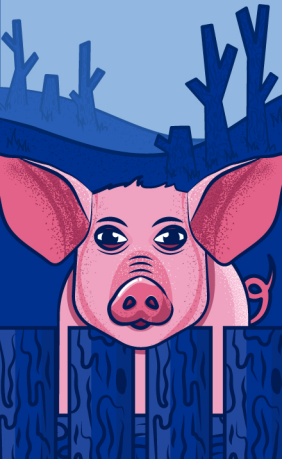


# THE ENVIRONMENTAL DISASTER OF ANIMAL AGRICULTURE

How it degrades air, land & water



Raising animals for food is one of the leading causes of global warming, pollution and resource depletion today. Over 70 billion farmed animals are killed every year for consumption, with 327 million tonnes of meat consumed globally each year. Of these, 665 million land animals are killed in Canada as the average Canadian eats 150 pounds of meat per year.

Eating animals is inefficient and unsustainable for our planet. We have more than enough crop land to feed the world plant-based now, but instead we are feeding most crops to animals, who consume far more calories over their lifetime than what they produce for human consumption. It takes significantly more land, water, and energy to produce meat, milk and eggs than it does to produce plant-based foods. Feeding a cow 2,000 calories of plants only produces 60 calories of beef roughly the size of a 1oz meatball - that's only a 3% conversion rate. About 6 kg of plant protein, on average, is required to produce 1 kg of animal protein. Giving those plant nutrients and calories directly to humans would feed them for the entire day and be better for the planet.

The efficiency of food production is critical for the environmental sustainability of our food system, especially as the global population continues to grow. We'd need several planets to support ourselves if the whole world ate like we do in North America. In contrast, were we to collectively adopt a vegan diet, we could easily feed all of us for decades to come and return over half of farm land to the wild!



# WATER

Animal agriculture is a leading cause of climate change. Raising animals and growing animal feed uses more freshwater than anything else we do.

The water footprint of farmed animals is significantly greater than that of plants we could eat directly. It takes 100 times more water to produce 1kg of animal protein than does producing 1kg of plant protein. As a result, eating a plant-based diet can significantly reduce your water footprint.

The average animal-eating American uses 3,800 liters of water per day, whereas a person eating a plant-based diet only uses 1,500 liters per day.

Animal agriculture is also a leading source of water pollution worldwide, responsible for approximately 70% of diet-caused global phosphorus footprint pollution and 60% of nitrogen pollution linked to animal foods. This mostly comes from fertilizers used to grow animal feed, as well as manure runoff, and is detrimental to our water resources and water ecosystems. As a result of this pollution, animal agriculture is the biggest contributor to dead zones at the mouths of rivers in lakes and oceans.

# LAND

Animal agriculture is a leading cause of deforestation and soil depletion.

Animal agriculture uses the most land of everything we do. It uses 80% of the world's arable land yet provides only 17% of the calories we eat. This large-scale land use is unsustainable for two main reasons – deforestation and soil depletion.

Clearing forest for animal feed and pasture is the leading cause of tropical rainforest deforestation and a leading cause of deforestation globally. In the Brazilian Amazon, for example, animal agriculture is linked to 70% of the historic deforestation of this ecosystem.



Animal agriculture is also the leading cause of soil depletion and degradation in North America, which is particularly rampant in corn and soy fields used for animal feed and on overgrazed pasture lands. Soil is being swept and washed away 10-40 times faster than it is being replenished around the world, destroying cropland the size of the state of Indiana every year.

## AIR

Animal agriculture is a leading cause of climate change.

Of all greenhouse gas emissions related to agriculture, 50-80% come from raising livestock for food. In fact, animal agriculture is responsible for 14.5-25% of all global greenhouse gas emissions - this is more than the emissions resulting from all transportation globally - making it a significant driver of climate change.

Livestock are the single largest human caused source of methane (44%) and nitrous oxide (54%), which are more potent greenhouse gases than carbon dioxide. All three greenhouse gasses are produced directly or indirectly by animal agriculture and contribute to climate change, mainly from the land-use conversion through deforestation; the fertilizers used on feed crops; the transportation and facilities energy use; and especially the flatulence, respiration, and waste produced by animals.

# WHAT COULD HAPPEN NEXT?

By 2050, it is estimated that the world's human population will be near 10 billion. If the current trends continue...

1

We will need to farm 70% more land than we are farming now.

2

Global agricultural emissions will skyrocket.

3

Most of the globe's remaining forests will need to be cleared to feed the world.

4

There may not be enough sustainable water resources to feed the population.

You can make a difference by choosing a plant-based diet. Every time you sit down to eat, you have an opportunity to make a difference to reduce climate change, deforestation, soil depletion, water consumption and water pollution by keeping animals and animal products off your plate.



# EarthsavE Canada

A registered charity since 1992, our mission is to change the world by promoting the widespread adoption of plant-based diets. We use evidence-based education to increase awareness of the ways in which choosing a plant-based diet will lead to a healthier, kinder, and more sustainable world.

For references and additional information visit  
[earthsavE.ca](http://earthsavE.ca)



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