

Animal Agriculture's Impact Overview

“The rearing of livestock for meat, eggs and milk generates 14.5% of total global GHG emissions, occupies 70% of agricultural land, is the main agricultural cause of deforestation, biodiversity loss and land degradation, and a major polluter of waterways. Meat-heavy diets are implicated in rapid growth in diet related diseases around the world.”
—Tara Garnett, University of Oxford, Food Climate Research Network ¹ ([source](#))

Impact on Climate

Livestock make up as much as 80% of agricultural greenhouse gas emissions and 14.5% of total global greenhouse gas emissions—more than the emissions from ALL the planes, trains, cars & trucks in the world.^{2,3} ([source](#)) ([source](#))

Beef generates 20 times more greenhouse gas emissions than beans, per gram of protein.⁴ ([source](#))

Research has shown we cannot reach emissions reduction goals by 2050 without reducing global meat consumption. Without this change, other efforts such as efficient transportation, solar panels, clean energy, will be for naught.⁵ ([source](#))

Water Usage

17% of global fresh water is used for livestock production.⁶ ([source](#))

It takes 4,068 gallons of water to produce 2 pounds of beef. Eating one cheeseburger uses about the same amount of water as watering the lawn and garden of a typical American home for 11 days.^{7,8} ([source](#)) ([source](#))

Globally, our diets must be 95% plant-based by 2050 to avoid catastrophic water shortages.⁹ ([source](#))

Impact on Deforestation & Biodiversity

30% of biodiversity loss on land has been linked to animal agriculture.¹⁰ ([source](#))

In Brazil, animal agriculture is responsible for between 70-80 percent of Amazon forest loss.¹¹ ([source](#))

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Pollution

The massive livestock sector is the largest contributor to global water pollution and a major driver of the ocean's 404 dead zones.^{12, 13} ([source](#)) ([source](#))

Livestock are also responsible for almost two-thirds (64%) of human-caused ammonia emissions, which contribute significantly to acid rain and acidification of ecosystems.¹² ([source](#))

Food Security

According to the scientific experts of the U.S. Dietary Guidelines Advisory Committee, "The availability and acceptability of healthy and sustainable food choices will be necessary to attain food security for the U.S. population over time."¹⁴ ([source](#))

Plant-based diets are an essential part of sustainable eating and increased food security. Shifting to diets with a greater share of plant-based foods can help close the gap of food available and what is needed from a growing global population by 30 percent.¹⁵ ([source](#))

Health

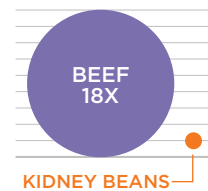
Vegetarians and vegans are at reduced risk of certain diseases, including heart disease, type 2 diabetes, hypertension, obesity and some cancers.¹⁶ ([source](#))

A global shift to more plant-based or fully plant-based diets by 2050 would save trillions of dollars in health care costs by 2050.¹⁷ ([source](#))

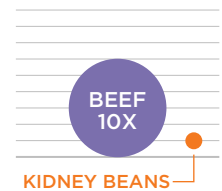
Kidney Beans vs. Beef?

To produce 1 kg of protein from kidney beans required approximately eighteen times less land, ten times less water, nine times less fuel, twelve times less fertilizer and ten times less pesticide in comparison to producing 1 kg of protein from beef.¹⁸ ([source](#))

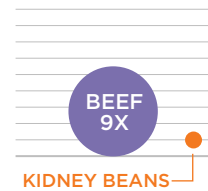
LAND USE



WATER USE



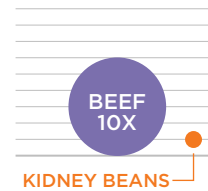
FUEL USE



FERTILIZER USE



PESTICIDE USE



Plant-based solutions to address climate change.

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Appendix

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Animal Agriculture's Impact on Biodiversity Loss and Deforestation

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