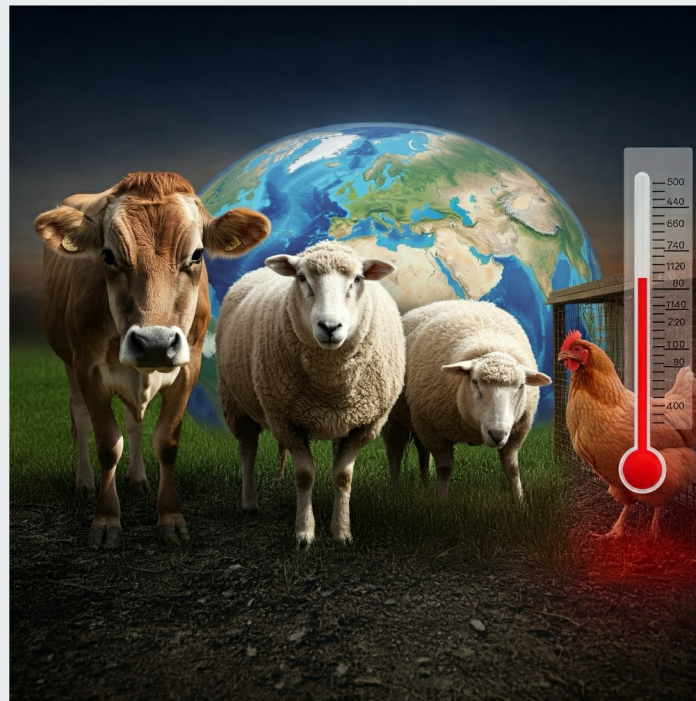


# Animal Agriculture's Effects on Climate Change



By John Dundon

## Our planet has become a giant slaughterhouse

- Each year, an estimated 92.2 **billion** farm animals are slaughtered around the world for meat.
- 94% of non-human mammal biomass is livestock. This means livestock outweigh wild mammals by a factor of 15-to-1.3 This share is 97% when only land-based mammals are included.
- 71% of bird biomass is poultry livestock. This means poultry livestock outweigh wild birds by a factor of more than 3-to-1.3
- Nearly 80% of the world's fisheries that are already fully exploited, over-exploited, depleted, or in a state of collapse. Worldwide, 90% of the stocks of large predatory fish, such as sharks, tuna, marlin, and swordfish, are already gone!



According to most estimates, animal agriculture uses around **30%** of the world's freshwater supply, meaning a significant portion of global freshwater usage is dedicated to livestock production.

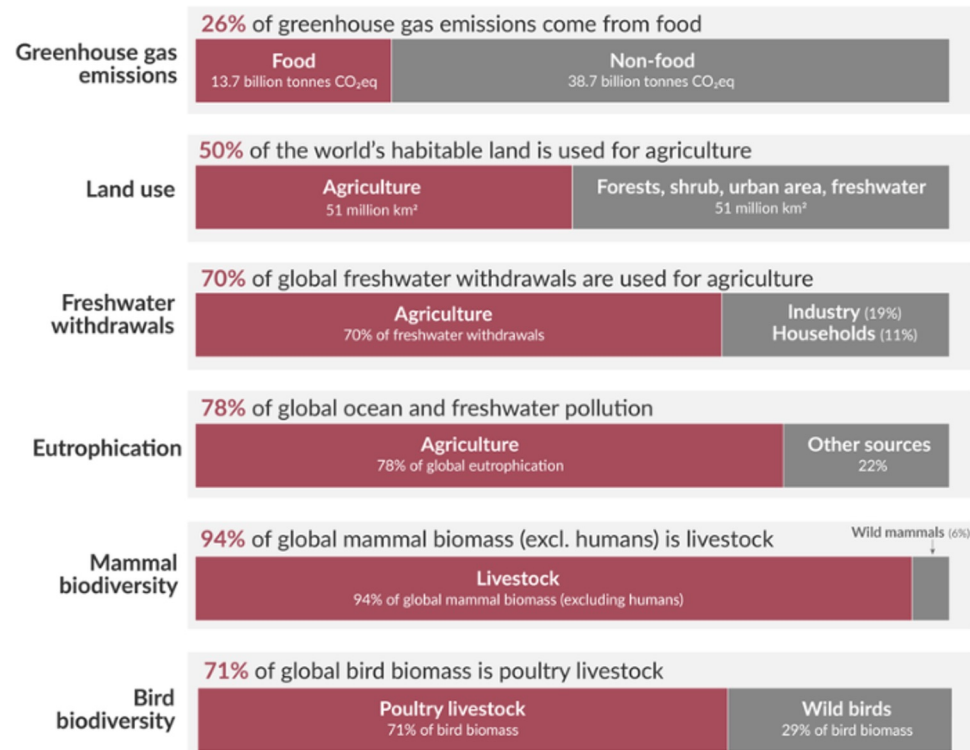
**Agriculture as a whole uses the most water:** Globally, agriculture accounts for roughly 70% of freshwater withdrawals, with a large portion of that used for raising livestock.

**Feed production is the biggest water user:** The majority of water used in animal agriculture goes towards growing crops for animal feed, not directly for the animals themselves.

**Environmental impact:** This high water usage by animal agriculture is a significant concern due to potential water scarcity issues, especially in regions with limited water resources.

## The environmental impacts of food and agriculture

Our World  
in Data



Data sources: Poore & Nemecek (2018); UN FAO; UN AQUASTAT; Bar-On et al. (2018).  
OurWorldinData.org - Research and data to make progress against the world's largest problems.

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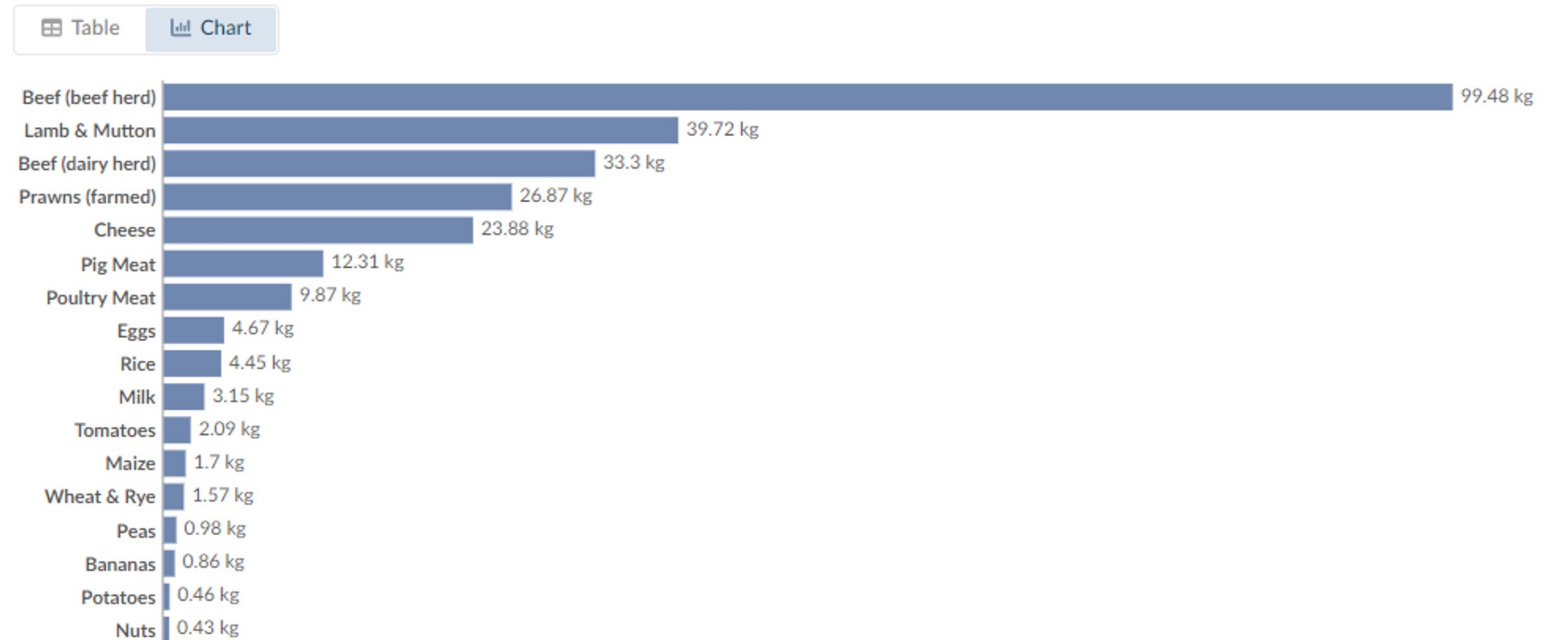
Beef herd meat is from steers raised for beef and are the more expensive cuts of meat like ribeye and sirloin.

Dairy herd meat is used for ground beef and processed foods primarily.

## Greenhouse gas emissions per kilogram of food product

Our World in Data

Greenhouse gas emissions are measured in kilograms of carbon dioxide-equivalents. This means non-CO<sub>2</sub> gases are weighted by the amount of warming they cause over a 100-year timescale.



Data source: Poore and Nemecek (2018) – [Learn more about this data](#)  
OurWorldinData.org/environmental-impacts-of-food | CC BY

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**For those interested in a deep dive, I suggest the EAT - Lancet Commission Report on Healthy Diets from Sustainable Food Sources**

“Transformation to healthy diets by 2050 will require substantial dietary shifts. Global consumption of fruits, vegetables, nuts and legumes will have to double, and consumption of foods such as red meat and sugar will have to be reduced by more than 50%. A diet rich in plant-based foods and with fewer animal source foods confers both improved health and environmental benefits.”

**Our Food in the Anthropocene: Healthy Diets From Sustainable Food Systems**



Without action, the world risks failing to meet the UN Sustainable Development Goals (SDGs) and the Paris Agreement, and today's children will inherit a planet that has been severely degraded and where much of the population will increasingly suffer from malnutrition and preventable disease.

## Should the choices of foods we eat be considered an ethical practice?

### Things I think about what I eat

- Food is something I need survive, and what I eat can greatly impact my health and ability to be a full member of my community and family.
- The choices of what I eat impacts the health of our planet.
- The choices of what I eat affects my conscience in respect to how much suffering was involved to get it on my plate.
- Food should be celebrated as a source of joy, of sharing deeply with family and friends, and an outlet of creativity in exploring new recipes and cultures.

