

Adapted from an article by Catherine Shoard.

# Arnold Schwarzenegger and James Cameron urge people to eat less meat

Terminator actor and director fronting a new campaign to try and curb animal product consumption, endorsing initiatives in China to reduce meat eating by 50%



More than two decades since the first, gut-crunching Terminator movie, James Cameron and Arnold Schwarzenegger have collaborated again on a campaign encouraging people to cut down on the amount of meat they eat.

Spearheaded by WildAid, the drive has American and Chinese audiences in its crosshairs, and endorses efforts by the latter government to reduce the population’s meat consumption by 50%.

“You have to respect that,” says Cameron in backstage footage from the shoot. “That’s a leadership position.” The director, whose off-screen ecological activism has been detected in the plots of films such as Avatar, said he’d been stirred into action after clocking his own hypocrisy.

“How can I call myself an environmentalist when I’m contributing to environmental degradation by what I eat?”

Speaking alongside Cameron, Schwarzenegger reports health benefits of cutting down his meat and dairy intake on the advice of doctors. “I’m slowly getting off meat,” he says, “and I tell you: I feel fantastic.”

The video, which is part of a wider strategy including billboards and online pledges, features Schwarzenegger staggering through a ravaged landscape presumably destroyed in part by the livestock industry.

“Less meat, less heat, more life,” concludes the actor in the film, who also states that the notion meat is needed for muscle strength is incorrect.

The campaign makes curious contrast with a video released earlier this week, fronted by Matt Damon, Joaquin Phoenix and Rooney Mara, lobbying for an end to the torture and slaughter of some 10,000 dogs in the Far East as part of an annual food festival.

# Scientist: Don't blame cows for climate change

Adapted from an article written by **Paul Armstrong**, CNN

**London, England (CNN)** -- A scientist in the United States has questioned the impact meat and dairy production has on climate change, and accused the United Nations of exaggerating the link. In 2006, a report published by the U.N. Food and Agriculture Organization (FAO) titled "Livestock's Long Shadow," claimed meat production was responsible for 18 percent of greenhouse gas emissions, which it added was greater than the impact of transport.

Livestock farming already occupies 30 percent of the world's surface and its environmental impact will double by 2050 unless drastic action is taken, the U.N. warned. Environmentalists and leading campaigners including Paul McCartney, used the findings to urge consumers to eat less meat and save the planet. Last year the former Beatle's much hyped-campaign featured the slogan: "Less meat = less heat."

But Frank Mitloehner, an air quality specialist from the University of California at Davis (UCD), said the U.N. reached its conclusions for the livestock sector by adding up emissions from farm to table, including the gases produced by growing animal feed; animals' digestive emissions; and processing meat and milk into foods. But its figures for transport did not add up emissions from well to wheel; instead, it considered only emissions from fossil fuels burned while driving.

"This lopsided 'analysis' is a classical apples-and-oranges analogy that truly confused the issue," Mitloehner said on the university's Web site. Mitloehner also pointed to the fact that leading authorities agree raising animals for food accounts for about 3 percent of all greenhouse gas emissions in the U.S., while transportation creates an estimated 26 percent. He added "smarter animal farming not less farming will equal less heat."

One of the report's authors, Pierre Gerber, told CNN he accepted the comparison with transport data was inaccurate. "This was not done deliberately," he said. "But the comparability of the data does not challenge the estimate of 18 percent". It has been endorsed by the scientific community, the IPCC (Intergovernmental Panel on Climate Change) made reference to it, so this is not in doubt.

Meanwhile, Liz O'Neill of British Vegetarian Society -- an educational charity which counts Paul and Stella McCartney among its patrons, told CNN the meat industry remains a hugely significant contributor to climate change. "It's obviously convenient to have comparisons but 18 percent is still a really massive contribution," she said. "But it's not only about reducing emissions in this area. We have to do it all. The Vegetarian Society has always been careful never to say 'go vegetarian and then you can go on long-haul flights on your holiday.' We say this is just one of things you can do to make a contribution."

Duncan Pullar of the English Beef and Lamb Executive (EBLEX), which promotes the beef and lamb industry in Britain, said the "credibility gaps" on both sides of the argument are making it difficult for consumers to understand the impact of food production on the environment.

## Rearing cattle produces more greenhouse gases than driving cars, UN report warns

29 November 2006 – Cattle-rearing generates more global warming greenhouse gases, as measured in CO<sub>2</sub> equivalent, than transportation, and smarter production methods, including improved animal diets to reduce enteric fermentation and consequent methane emissions, are urgently needed, according to a new United Nations report released today.



“Livestock are one of the most significant contributors to today’s most serious environmental problems,” senior UN Food and Agriculture Organization (FAO) official Henning Steinfeld said. “Urgent action is required to remedy the situation.”

Cattle-rearing is also a major source of land and water degradation, according to the FAO report, *Livestock’s Long Shadow—Environmental Issues and Options*, of which Mr. Steinfeld is the senior author. “The environmental costs per unit of livestock production must be cut by one half, just to avoid the level of damage worsening beyond its present level,” it warns.

When emissions from land use and land use change are included, the livestock sector accounts for 9 per cent of CO<sub>2</sub> deriving from human-related activities, but produces a much larger share of even more harmful greenhouse gases. It generates 65 per cent of human-related nitrous oxide, which has 296 times the Global Warming Potential (GWP) of CO<sub>2</sub>. Most of this comes from manure.

And it accounts for respectively 37 per cent of all human-induced methane (23 times as warming as CO<sub>2</sub>), which is largely produced by the digestive system of ruminants, and 64 per cent of ammonia, which contributes significantly to acid rain.

With increased prosperity, people are consuming more meat and dairy products every year, the report notes. Global meat production is projected to more than double from 229 million tonnes in 1999/2001 to 465 million tonnes in 2050, while milk output is set to climb from 580 to 1043 million tonnes.

The global livestock sector is growing faster than any other agricultural sub-sector. It provides livelihoods to about 1.3 billion people and contributes about 40 per cent to global agricultural output. For many poor farmers in developing countries livestock are also a source of renewable energy for draft and an essential source of organic fertilizer for their crops.

Livestock now use 30 per cent of the earth’s entire land surface, mostly permanent pasture but also including 33 per cent of the global arable land used to producing feed for livestock, the report notes. As forests are cleared to create new pastures, it is a major driver of deforestation, especially in Latin America where, for example, some 70 per cent of former forests in the Amazon have been turned over to grazing.

At the same time herds cause wide-scale land degradation, with about 20 per cent of pastures considered degraded through overgrazing, compaction and erosion. This figure is even higher in the drylands where inappropriate policies and inadequate livestock management contribute to advancing desertification.

The livestock business is among the most damaging sectors to the earth’s increasingly scarce water resources, contributing among other things to water pollution from animal wastes, antibiotics and hormones, chemicals from tanneries, fertilizers and the pesticides used to spray feed crops.



Skeptical Science was created by and is maintained by John Cook, the Climate Communication Fellow for the [Global Change Institute](#), University of Queensland. He has written numerous books including a college text in 2013 entitled [Climate Change Science: A Modern Synthesis](#). *This article is adapted from that site.*

## How much does animal agriculture and eating meat contribute to global warming?

The burning of fossil fuels for energy and animal agriculture are two of the biggest contributors to global warming, along with deforestation. Globally, fossil fuel-based energy is responsible for about 60% of human greenhouse gas emissions, with deforestation at about 18%, and animal agriculture between 14% and 18% (estimates from the World Resources Institute, UN Food and Agriculture Organization, and Pitesky et al. 2009).

So, animal agriculture and meat consumption are significant contributors to global warming, but far less so than fossil fuel combustion. Moreover, fossil fuels are an even bigger contributor to the problem in developed countries, which use more energy and have increased livestock production efficiency (Pitesky et al. 2009). For example, in the United States, fossil fuel-based energy is responsible for about 80% of total greenhouse gas emissions as compared to about 6% from animal agriculture (estimates from the World Resources Institute and Pitesky et al. 2009).

### How does animal agriculture cause global warming?

One of the main ways in which the livestock sector contributes to global warming is through deforestation caused by expansion of pasture land and arable land used to grow feed crops. Overall, animal agriculture is responsible for about 9% of human-caused carbon dioxide emissions globally (UN FAO).

Animal agriculture is also a significant source of other greenhouse gases. For example, ruminant animals like cattle produce methane, which is a greenhouse gas about 20 times more potent than carbon dioxide. The livestock sector is responsible for about 37% of human-caused methane emissions, and about 65% of human nitrous oxide emissions (mainly from manure), globally (UN FAO).

### Beef is a bigger problem than other sources of meat.

Eschel et al. 2014 estimated that producing beef requires 28 times more land, 6 times more fertilizer and 11 times more water than producing pork or chicken. As a result, the study estimated that producing beef releases 4 times more greenhouse gases than a calorie-equivalent amount of pork, and 5 times as much as an equivalent amount of poultry.

Eating vegetables produces lower greenhouse gas emissions. For example, potatoes, rice, and broccoli produce approximately 3–5 times lower emissions than an equivalent mass of poultry and pork (Environmental Working Group 2011).

### How do the numbers get misrepresented?

There are often suggestions that going vegan is the most important step people can take to solve the global warming problem. While reducing meat consumption (particularly beef and lamb) reduces greenhouse gas emissions, this claim is an exaggeration.

An oft-used comparison is that globally, animal agriculture is responsible for a larger proportion of human-caused greenhouse gas emissions (14-18%) than transportation (13.5%). While this is true, transportation is just one of the many sources of human fossil fuel combustion. Electricity and heat generation account for about 25% of global human greenhouse gas emissions alone.

Moreover, in developed countries where the 'veganism will solve the problem' argument is most frequently made, animal agriculture is responsible for an even smaller share of the global warming problem than fossil fuels. For example, in the USA, fossil fuels are responsible for over 10 times more human-caused greenhouse gas emissions than animal agriculture. That's not to minimize the significant global warming impact of animal agriculture, especially from beef and lamb, but it's also important not to exaggerate its contribution or minimize the much larger contribution of fossil fuels.

