

## FACT VS. FICTION

# CLIMATE CHANGE ISSUES

Here's an assembled list of words and phrases bringing mixed reaction from beef producers. Greenhouse gas emissions (GHG). Global warming. Carbon footprint. Carbon sequestration. Methane production. Sustainability.

As the public's interest in climate change increases, beef producers must challenge the growing misperception that livestock are harming the planet. They should become familiar with trusted sources of accurate scientific information about climate change and livestock's environmental footprint.

Frank Mitloehner, Ph.D., professor and air quality Extension specialist at the University of California-Davis, has made it easy for producers to access current information about cattle and the beef industry's impact on the climate.

Many inaccurate statements by journalists and activists can be traced to a global report issued in 2006 from the Food and Agriculture Organization of the United Nations (FAO), an agency leading international efforts to defeat hunger. The report, *Livestock's Long Shadow*, claimed global livestock production accounted for 18% of GHG emissions, which was a level exceeding even the transportation sector.

Mitloehner led the charge to debunk those myths. He called out the FAO inaccuracies outlined in *Livestock's Long Shadow*, and due to his work and diligence, the FAO amended the report to show animal agriculture figures account for 3.9% of GHG emissions. By comparison, transportation and electricity generation together made up 56% of the 2016 total and agriculture in general, 9%. Data from National Cattlemen's Beef Association's (NCBA) beef life cycle assessment concluded beef production (all inputs) totals 3.3% of total U.S. GHG emissions.

Mitloehner called *Livestock's Long Shadow* a lopsided analysis and said it was "a classical apples-and-oranges analogy that truly confused the issue."

Mitloehner speaks around the world to the scientific community and various agricultural and consumer groups. He's also testified before Congress on livestock and their effect on global warming. He created a video called

*Rethinking Methane*. The five-minute segment gives viewers talking points on methane, which is a "flow" gas emitted by cattle. Mitloehner details methane's life cycle and how it can be reduced.

You can find this video, plus additional information on the relationship between livestock and GHG at <https://clear.ucdavis.edu>.



Frank Mitloehner, Ph.D.  
University of California-Davis

In the video, Mitloehner offers many talking points on the efficiency of today's beef population as compared to the herd that existed in the 1970s. We are producing the same amount of beef today with 90 million head as we did in the 1970s with 140 million head. The reasons for this increase in efficiency is manifold, including improvements in management, breeding and genetics, feeding efficiencies and animal health practices.

NCBA, with funding from the Beef Checkoff, also participates in research and funding of this subject matter.

Even though the data originally released in *Livestock's Long Shadow* has been amended, that horse had "left the barn," and those with ulterior motives continue to use this report as a reference point.

Again, please know you have tools to correct inaccurate information. Livestock production and its impact on climate change is an issue beef producers should be confident discussing with those who do not fully understand our business.

The world's population is expected to grow from just under eight billion people today, to nearly ten billion by the year 2050. The protein demands of this population increase indicate it would be difficult, if not impossible, to feed the world without food sourced from livestock.

As Mitloehner said, "Smarter animal farming, not less farming, will equal less heat. Producing less meat and milk will only mean more hunger in poor countries." Meeting this demand can be done without further GHG contributions from beef production. ♦