

Livestock report discredited

In July 2009, I reported on a controversial 2006 Food and Agriculture Organization report called "Livestock's Long Shadow."

This report aimed to assess the impact of livestock production worldwide on environmental issues in which it lumped together the environmental impact of so-called "slash and burn" agricultural practices in developing countries to efficient modern farming practices in the United States.

The report alluded to the fact that livestock production worldwide contributed 18 percent to the world's anthropogenic greenhouse gas (GHG) emissions, a number larger than the entire global transportation sector. Just think about this for a minute and realize this doesn't make any sense.

While these numbers may be true for certain parts of the world, they are not representative for the U.S. Even the Environmental Protection Agency and the New Mexico Environment Department, in their respective assessments, agree that agriculture in the U.S. only produces about 5 percent to 6 percent of all the anthropogenic GHG, which includes less than 3 percent associated with livestock production, while



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transportation accounts for at least 26 percent nationwide and about 19 percent in New Mexico.

The political ramifications of this oversimplifying and generalizing report were severe. The report was quoted in many places as additional evidence of livestock production's horrendous impact on global warming. (New York Times, Los Angeles Times and others), and suggestions to consume less animal products to help save the planet were running wild. Whole campaigns to get people to change eating habits and even initiatives to radically change school lunch programs were launched based in part on reports like this.

Well, come to find out, the report was at best a decent first shot at trying to calculate so-called Life Cycle Assessments of GHG emissions on a global level, but it most certainly fell short of being a policy document. However, it was conveniently used by many to fuel the global warming

debate. All and all, the report needed a healthy dose of scientific peer review.

Frank Mitloehner, an animal scientist with University of California-Davis, researched how the numbers were derived and how these numbers stack up for U.S. agriculture. During a recent presentation to the American Chemical Society, Mitloehner explained that the reason why FAO came up with these strange numbers is because in their calculations for the transportation sector, only "direct emissions" associated mainly with combustion during transportation were used, while failing to account for indirect emissions of the production of these products. On the other hand, the livestock industry was assessed "holistically" from both a direct and an indirect emissions perspective. This little oversight resulted in a gross underestimation of the transportation sector numbers and made agriculture look especially bad. Lead researchers for the FAO report have since agreed with Mitloehner's assessment. A perfect example of comparing apples to oranges with the proverbial unintended consequences as a result.

Forestland in the U.S. has increased by approxi-

mately 25 percent in the last 25 years, while livestock production has intensified and has become more efficient in terms of product produced per unit of resource utilized.

As recent research by Jude Capper at Cornell University has shown, because of improved feeding and animal care practices, dairy cows nowadays produce much more milk compared to cows in 1944. Dairy farms produce almost 40 percent more milk with 65 percent less cows; milk production per cow has quadrupled since 1944. The bottom line is the total carbon footprint of a gallon of milk has been reduced by two-thirds since 1944.

Since the World War II era, this implies that while in other parts of the world GHG emissions associated with livestock production may have increased, in the U.S. and some other developed areas in the world, the efficiency of production has improved while all along reducing the environmental impact.

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