

Carbon footprint study positions dairy favorably

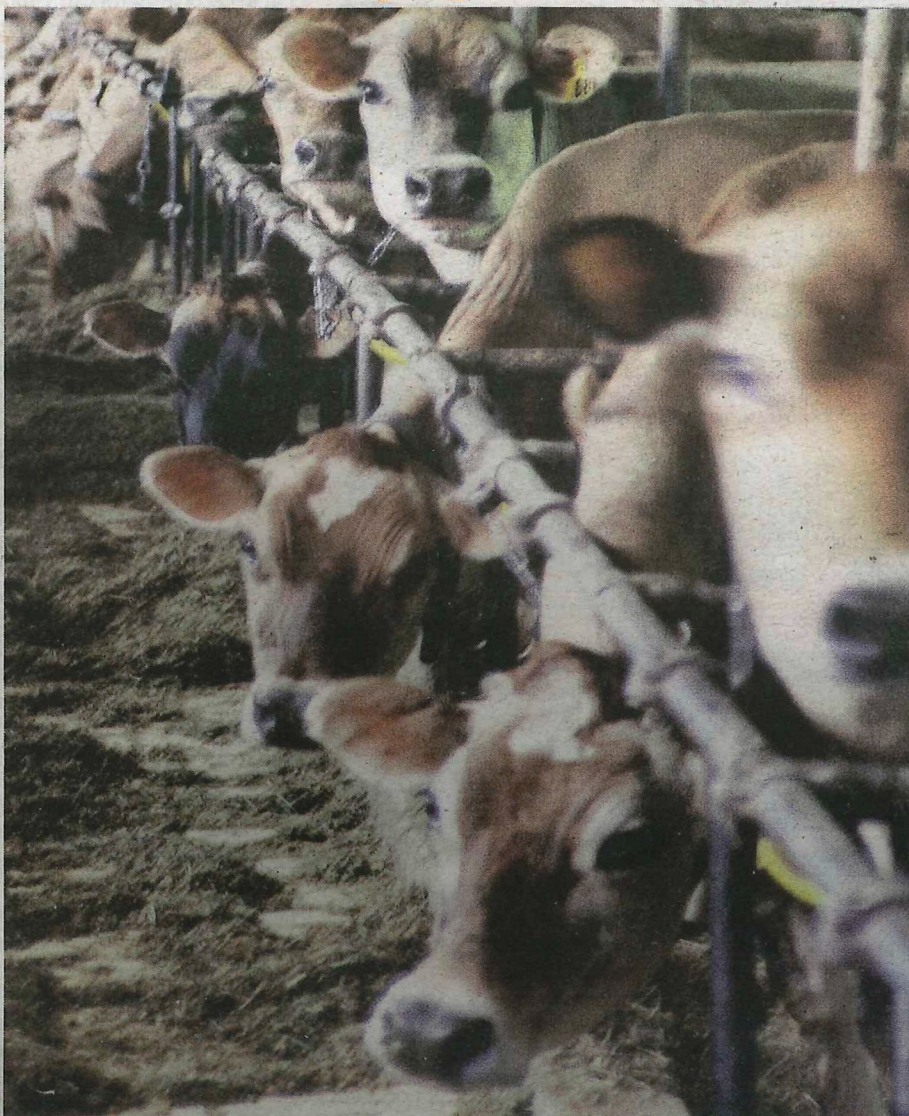
ROSEMONT, Ill. -- A “carbon footprint” study completed last fall of the U.S. dairy industry is being hailed as part of an industry-wide sustainability commitment. The study measured the greenhouse gas (GHG) emissions associated with a gallon of milk.

Researchers followed the journey of a gallon of milk from the beginning of the life cycle when crops are grown to feed cows; milk is produced and delivered to processors; through processing, packaging and distribution; all the way to the purchase and disposal of the gallon of milk by the consumer. The completion of the study is a significant first step for the dairy industry in a comprehensive, science-based approach to measure and improve its environmental footprint.

The Innovation Center for U.S. Dairy commissioned the Applied Sustainability Center at the University of Arkansas to conduct the GHG LCA of fluid milk, also called the carbon footprint study. Dr. Greg Thoma, professor of chemical engineering at the University of Arkansas served as the lead investigator.

The carbon footprint study, together with data from additional studies measuring GHG emissions, helps validate that total U.S. dairy GHG emissions are approximately 2 percent of total U.S. emissions. This is far less than earlier figures reported about the global livestock industry that were incorrectly attributed to U.S. dairy.

“The entire dairy industry — dairy producers, processors, manufacturers and brands — is working together to build on its long history of sustainability. We are committed to providing the nutritious dairy products consumers want in a way that makes the industry, people and the earth economically, environmentally, and socially better — now and for future generations,” said Thomas P. Gallagher, CEO of the Innovation Center for U.S. Dairy and Dairy Management Inc., which manages the dairy



No matter what the breed, cows have not contributed the level of ‘greenhouse gases’ that some people like to claim.
Photo by Dieter Krieg

checkoff on behalf of the nation’s farmers.

The carbon footprint study identifies opportunities for efficiency and innovation across the fluid milk supply chain, including feed efficiency, manure management, energy management and fuel efficiency. A key finding indicates that management practices are an important driver of the carbon footprint for farms, plants and transportation fleets, rather than the geographic region, business model, or size of the farm or organization.

“Generation after generation, dairy farmers have made many improvements in the care of the land, air and water,” said Jerry Kozak, president and CEO of the National Milk Producers Federation. “I am pleased that hundreds of America’s dairy farmers completed detailed surveys about their farming practices, in order for us to create the most comprehensive, accurate assessment of our industry’s collective carbon footprint. Being proactive in this effort is another way to make improvements in the next generation.”

Dairy businesses across the country are already making changes that are environmentally and economically beneficial. The Innovation Center has collected a variety of success stories, case studies and best practices, providing a platform for industry partners to learn from one another and make informed decisions that suit their unique needs.

One example is Prairieland Dairy near Firth, Nebraska, where the owners practice a zero-waste philosophy. Byproducts from local food processors contribute to cow diets, including distiller’s grain, leftover cereal mix and spent brewers grain from a nearby microbrewery. Prairieland’s compost operation makes fertilizer from cow manure and local organic material, which is used on the farm and by local gardeners.

HP Hood LLC, Lynnfield, Mass., a processor,



Researchers followed the journey of a gallon of milk from the beginning of the life cycle when crops are grown to feed cows; milk is produced and delivered to processors; through processing, packaging and distribution; all the way to the purchase and disposal of the gallon of milk by the consumer.

Photo by Dieter Krieg

Carbon footprint from page 21

established energy management plans in its 22 processing plants, which include energy use, recycling and water use initiatives; and has decreased diesel fuel consumption through safe

driver practices, electronic onboard recorders, temperature controls and automatic idle shutdown, among other practices.

In 2008, the Innovation Center worked with industry stakeholders to develop a roadmap of opportunities to reduce GHG emissions and build business value across the entire value chain. Ten projects, all of which align with the opportunities for

improvement identified by the carbon footprint study, are currently under way. These projects explore best and next practices for feed efficiency, manure management, energy management, improved packaging formats, processing technologies and fuel efficiency.

More than 500 active volunteers from more than 300 organizations are committing time, knowledge and resources to the projects. Volunteers include representatives from the dairy industry, as well as experts from academic, government and nongovernmental organizations such as University of Michigan, the U.S. Department of Agriculture, and World Wildlife Fund.

“Sustainability has become a new way of living and a new standard for managing how we do business,” said Connie Tipton, president and CEO of the International Dairy Foods Association. “The study is helping dairy businesses to see that reducing GHG emissions not only meets consumers’ expectations for more earth-friendly products, but also reduces plant operation costs.”

“The World Wildlife Fund has issued a statement of support for the carbon footprint study and its implications.

Bryan Weech, director of livestock at WWF, remarked: “World Wildlife Fund is pleased to see the U.S. dairy industry take a science-based approach to measuring its environmental footprint and to determine appropriate reductions methods. This is an essential first step toward improving practices and to build on its commitment to sustainability. We look forward to tracking the industry’s progress and to see this science expanded to ensure long term, broad impact.”

“It’s clear that the U.S. dairy industry understands the value, both business and environmental, to reducing greenhouse gas emissions along the dairy supply chain. By taking a comprehensive view of its footprint, the industry can be targeted and strategic in improving practices in the areas that have the most impact. The U.S. dairy industry’s commitment to reducing its footprint can have major influence on WWF’s conservation objectives, like reducing climate impact, conserving finite resources and preserving biodiversity. We encourage other businesses and industries to follow The Innovation Center for U.S. Dairy’s leadership.”