

**House Committee on Agriculture
Subcommittee on Livestock and Foreign Agriculture
Sustainability in the Livestock Sector: Environmental Gain and Economic Viability**

Thursday, February 3, 2022

**Testimony of Melvin Medeiros, Dairy Farmer
Chairman, DFA Western Area Council
Member, NMPF Executive Committee**

Good morning, Chairman Costa, Ranking Member Johnson, and members of the subcommittee. Thank you for the opportunity to testify before you today to share the dairy industry's perspective on sustainability.

Introduction

My name is Melvin Medeiros. I have been dairying since 1981 on a farm started by my father. Today, my wife, Kelley, and I own and operate Medeiros Holsteins, a 1,600-cow dairy operation in California. I am proud that all three of our sons work with us; our two oldest own their own dairies as well, while our youngest manages the 550 acres of double-crop wheat and corn required to supply our silage needs.

I am honored to serve as Chairman of Dairy Farmers of America (DFA)'s Western Area Council. DFA is the nation's leading diversified milk marketing cooperative, owned and governed by 12,500 dairy farmers across the country. DFA's family farmers are invested in 84 processing facilities that produce a wide range of dairy products, including fluid milk, cheese, butter, ice cream, and dairy ingredients. The DFA Western Area includes nearly 225 farmers residing in California, Nevada, and Western Arizona as well as eight manufacturing plants.

I am testifying before you today on behalf of the National Milk Producers Federation (NMPF), of which DFA is a member cooperative and where I serve on its Executive Committee. NMPF develops and carries out policies that advance the well-being of dairy producers like me and the cooperatives we own. NMPF's member cooperatives produce the majority of the U.S. milk supply, making NMPF the voice of tens of thousands of dairy producers on national issues. Sustainability is one of our priority issues and has only become ever more important in recent years.

Dairy Sustainability Leadership

U.S. dairy farmers are environmental stewards. We tend with great care to our land and water to improve the resources on our farms and ensure future generations can carry on our important work of feeding the nation and the world. Dairy farmers have dealt with changing weather patterns for years, and we have been addressing changing temperature and moisture challenges for generations. We value a proactive approach to sustainability, which can take many different forms, and we have adapted as agricultural practices and technologies have evolved and improved over time. Farmers place a high importance on land and water stewardship, and our

family farm-owners continue to perfect these practices through sustainable innovations on the farm.

As a testament to dairy's endeavors, in 2007, producing a gallon of milk used 90 percent less land and 65 percent less water, with a 63 percent smaller carbon footprint than in 1944. More recently, research shows that producing a gallon of milk in 2017 required 30% less water, 21% less land, had a 19% smaller carbon footprint, and produced 20% less manure than it did in 2007.

As a farmer-owned and farmer-governed cooperative, DFA works to identify new, innovative ways to conserve resources, reduce waste, and work efficiently – on farms, in plants, and on the road. Our own science-based target commits to working toward a 30 percent reduction in absolute emissions across the cooperative by 2030. Nearly all DFA member-owners who grow crops implement a soil management plan to maintain or improve soil health, while 82% practice crop rotation and 63% plant cover crops. Good soil health supports water conservation, efficient use of nutrients, and creates a more stable structure for plant roots. In 2009, our cooperative created DFA Energy, a company to help our producers navigate the emerging and complex field of on-farm energy conservation and renewable energy production by connecting them with credible partners and available funding opportunities to offset some of the cost of expensive, but important, technologies.

More broadly, in 2009, the U.S. dairy industry launched the National Dairy FARM Program: Farmers Assuring Responsible Management™ “to show customers and consumers that the dairy industry is taking the very best care of cows and the environment, producing safe, wholesome milk and adhering to the highest standards of workforce development.” Created by NMPF in partnership with Dairy Management Inc., the FARM Program helps ensure the success of the entire industry by demonstrating that U.S. dairy farmers are committed to producing the best milk with integrity. The FARM Program's Environmental Stewardship pillar provides a comprehensive estimate of greenhouse gas emissions and energy use on dairy farms with a suite of tools and resources for farmers to measure and improve their footprint. Today, organizations representing 99% of U.S. milk volume participate in the FARM Program overall, with almost 80% by milk volume participating in the Environmental Stewardship portion.

Farmers are always striving to produce more with less and are focused on continuous improvement in this area. As part of its collective commitment to provide the world responsibly produced dairy foods that nourish people, strengthen communities, and foster a sustainable future, in 2020, the U.S. dairy industry set aggressive environmental sustainability goals to become greenhouse gas-neutral or better, improve water quality, and optimize water usage by 2050. My cooperative is determined to do its part to help the dairy industry achieve these goals.

To reach these 2050 goals, the U.S. dairy industry will need to identify technological and other advancements that can accelerate productivity improvements, enabling nimble adaptation and focusing on technology and practices that can be scaled for maximum impact. To meet these challenges, NMPF and its industry partners have created and mobilized through the U.S. Dairy Net Zero Initiative (NZI), a partnership of the U.S. dairy community that seeks to unite the assets and expertise of trade, professional, and industry organizations. This collaborative effort creates a path and growing portfolio of strategies and programs to achieve greenhouse gas neutrality, as

well as significant improvements in water quality and optimization of water use, through adoption of economically viable technologies and practices.

As part of the groundwork needed to launch this initiative, the dairy industry has worked to develop scientific models to quantify the economic and environmental benefits associated with certain dairy farm technologies and practices, and various technologies have been catalogued and evaluated based on their effectiveness, resilience, and business prospects. The industry, within this initiative, will explore the impact of multiple technologies and management practices that have an ability to aid in reducing dairy's greenhouse gas footprint and water quality impact while optimizing water use. This effort will identify which technologies and practices work well for different types and sizes of operations, topography of land, the region's climates, and the unique needs of a farm's soil and water.

Policy Recommendations

Sustained low milk prices and high input costs have created many challenges in recent years for dairy producers, exacerbated by the significant damages wrought by the COVID-19 pandemic. Dairy farmers are eager for policy improvements that would unlock additional revenue streams and make advanced environmental protection a source of economic strength for all dairy farms. Currently, practices or technologies that yield real sustainability benefits while also providing an alternative revenue stream are gaining adoption in the dairy sector, but economic challenges present obstacles to more widespread adoption.

To help U.S. dairy farmers enhance their ongoing environmental leadership, NMPF recommends several priority areas of policy focus. First, under this committee's purview, USDA conservation programs will be instrumental to attaining the dairy industry's sustainability improvements over the next 30 years. NMPF last summer led a dozen agricultural and conservation organizations in urging Congress to substantially increase funding for conservation programs, emphasizing areas that can yield meaningful environmental and sustainability benefits. We are grateful that members in both parties have put forth legislation to enhance conservation programs and believe that additional program funding will position producers to expand their efforts as this committee begins the process of crafting the next farm bill.

However, current USDA programs have neglected manure and feed management, key areas of opportunity in dairy production. Enteric methane emissions account for approximately one-third of a dairy farm's greenhouse gas footprint. Enhancements to conservation programs could help dairy farmers adopt new approaches to feed management, such as using feed additives and optimizing feed rations, to reduce enteric methane emissions. USDA's Natural Resources Conservation Service should review its existing feed management practice standard and consider establishing a transition program for switching feed rations to reduce environmental impact. Dairy farmers thank this committee for its work in the 2018 Farm Bill to create on-farm Conservation Innovation Trials, and we support increasing funding for the program with emphasis on initiatives that can use feed and diet management to reduce enteric methane emissions. NMPF is pleased that this proposal is moving forward in Congress as one of many conservation program enhancements that will help dairy farmers advance their sustainability leadership.

NMPF also supports policies that create or enhance mechanisms to spur adoption of innovative technologies and practices. For example, dairy farmers see great value in adopting anaerobic digesters to maximize the value of manure and diversify farm income as well as reduce odors and emissions. The first anaerobic digester was installed on a dairy farm in the late 1970s, creating one of the first opportunities for significant greenhouse gas mitigation of farms' manure. Digesters capture emissions from manure and create energy in the form of renewable natural gas, electricity, and heat. However, significant financial challenges persist in this area. A lack of sustainable, reliable markets for the energy produced on farm has resulted in digesters not being economically viable for many farmers. We support the bipartisan Agriculture Environmental Stewardship Act to create an investment tax credit to cover 30% of the upfront capital costs of installing digesters. This important bill also creates a similar credit for nutrient recovery systems which can separate manure nutrients, like nitrogen and phosphorus, and enable dairy farmers to use these nutrients on and off the farm in a more sustainable manner. This bipartisan measure has begun to move forward in both chambers of Congress.

In this vein, we also support expediting approval of animal feed additives with meaningful sustainability benefits for dairy. New additives such as plant extracts, fats, oils, and other by-products can significantly improve digestibility and redirect production pathways of enteric methane emissions, reducing enteric emissions by 30% or more according to growing research. Current U.S. policy prevents timely market availability, hindering widespread adoption of these products. The Food and Drug Administration (FDA) reviews and approves animal food ingredients to ensure their safety as they enter the marketplace, but it uses the same approval process it uses for antibiotics and hormones, even though feed additives move solely through the animal's digestive tract. This regulatory barrier encourages feed additive makers to bypass the U.S. on account of its market approval process in favor of other countries that have a more streamlined process. That puts U.S. dairy farmers at a disadvantage with our global competitors. NMPF thanks the members of this committee for securing funding and language in this year's pending budget bill to direct FDA to expedite approval and market delivery of these important feed additives.

From an economic perspective, I also wish to emphasize how critical sustainability is for us to remain a competitive supplier to global markets, as more than 16% of U.S. milk production is exported overseas. With significant global interest in sustainable food production, the U.S. dairy sector is well positioned to meet the environmental demands of both domestic and global consumers. We stack up strongly compared to international competitors: Our farms have the lowest greenhouse gas footprint per gallon of milk compared to other suppliers around the world.¹ But our competition is continually making investments and working to position their way of farming and their products as more sustainable. The type of support I outlined above is needed to counter that. We appreciate the work the U.S. government has done to advance a positive sustainability agenda during the U.N. Food Systems Summit process and more recently during the COP26 conference. With climate and sustainability issues commanding a greater focus worldwide than ever before, we as an industry are eager to work with this committee and its

¹ FAO and GDP. 2018. Climate change and the global dairy cattle sector – The role of the dairy sector in a low-carbon future. Rome. 36 pp. Licence: CC BY-NC-SA- 3.0 IGO <https://dairysustainabilityframework.org/wp-content/uploads/2019/01/Climate-Change-and-the-Global-Dairy-Cattle-Sector.pdf>

other governmental partners to combat voices that are driving a harmful narrative that does a major injustice to dairy's proactive, producer-led efforts.

Conclusion

As I conclude, I want to note that the agriculture industry has been focused on sustainability for generations. While we might have talked about it differently before, our goal has always been to leave the land better for our children. We raise our families and our herds on the same land, drinking the same water and breathing the same air. Caring for what we have is part of who we are.

Thank you for the opportunity to represent the dairy industry today during this important conversation on sustainability. As I said in my opening comments, sustainability can take many different forms, and ensuring that farms of all types and sizes can participate in this area is important as consumers here at home and abroad demand more. Your partnership can help us to fill in the policy gaps that dairy farmers need to make even further strides. If we work with one another, I am confident in our success. I look forward to your questions.