



Top 10 Farmer Sustainability Questions & Answers

1. What are practical, effective sustainability practices for farms of different sizes, locations, and contexts, and how can their implementation be financially supported?

Many U.S. dairy farmers have already implemented practical environmental stewardship practices because they make sense for business and bring benefit to their community. These practices vary by region, soil type, crop rotation, farm size and many other factors. DMI focuses efforts on evaluating the science and efficacy of many practices and technologies, so that farmers have the information to decide what options will work best for their own operation. These options may include, but are not limited to:

- Enhancing soil health and water conservation by using practices such as cover cropping, diversifying forage rotations, and/or use of strip-till/no-till
- Maximizing resource efficiency by incorporating byproducts into cows' diets
- Mitigating greenhouse gas emissions from manure through relevant manure-management practices
- Recycling and reusing water on-farm
- Improving on-farm energy use
- Protecting surface water by using buffer strips, conservation easements, etc.
- Reducing enteric methane emissions through feed additives.
- Optimizing cow health and comfort through best management practices and genetics

Although many of these practices and technologies are practical, affordable and effective, they are just a small sample of the options that farmers can implement. Local university extension and conservation districts are a few of the experts that can help farmers identify and evaluate practices and technologies for their farm. Certified crop advisors, veterinarians and nutritionists can also provide guidance.

Using research and information from experts like these, DMI is developing resources that will highlight practices/technologies appropriate for different regions farms of different sizes. For each region, DMI plans to produce a guided PowerPoint and factsheet, in addition to a recorded presentation by a local subject matter expert.



2. How is checkoff supporting farmers to monetize their sustainability efforts and get appropriate recognition for their contributions to the environment?

Checkoff's work is focused on filling knowledge gaps, supporting early research and development, documenting progress, and evaluating the economic cost-benefit of a wide variety of sustainability technologies and practices. We recognize that many sustainability practices require significant financial investment, and in many cases, it remains unclear how those investments will play out over time. Checkoff works closely with Newtrient and its team of technical experts who evaluate solutions and deliver recommendations on climate-smart practices across the entire farm footprint. Newtrient provides farms with technical assistance, understanding of their baseline, and expert recommendations to help farms access markets, government incentives and funding mechanisms that reduce the risk and costs to farms.

Newtrient monitors financial incentives for farmers, including:

- Carbon and water markets
- Government incentives (Inflation Reduction Act Funding, RCPP, EQIP)
- Supply chain funding



3. What mechanisms are in place to ensure fair and consistent measurement of sustainability practices across different farms?

Measurement is critical for showing our commitment to continuous improvement, identifying opportunities for research, and demonstrating progress towards the dairy industry's collective goals. Progress toward the goals will be reported in aggregate every 5 years, starting in 2025, through 2050. For the 2025 report, progress at the field and farm level will be determined by a national level analysis based on publicly available data to calculate the aggregated U.S. dairy field and farm GHG footprint. For reporting progress after 2025, the industry will refine measurement and reporting on the farm and field level by expanding the use of the Farmers Assuring Responsible Management Environmental Stewardship (FARM ES) tool.

The FARM ES program helps track and communicate a farm's environmental achievements as well as set a path for continuous improvement. FARM ES is the unifying industry platform for industry emissions tracking and reporting and is compliant with global standards for emissions reporting.

Dairy cooperatives and processors report specific information related to GHG emissions, energy use, water use and recycling, and water quality through the Processor Stewardship Reporting Tool. Every five years, the processor data will be combined with field and farm data to create an aggregated, collective industry-level report.



4. How can we provide practical, understandable, and accessible education on sustainable farming practices for farmers, specifically including hands-on workshops and tools that provide direct feedback?

Currently, DMI is developing the Dairy Conservation Connect program and piloting with SR representatives from Ohio, Indiana and Michigan. The program will include a library of educational material to facilitate cooperative, processor outreach to farms, ongoing education of farm advisors, and sharing at local farm events. Our plan is to refine and expand the program to other SRs after completion of the pilot.



5. How can we prevent the potential for greenwashing in the dairy industry, and ensure that sustainability efforts are grounded in scientific evidence and practice?

U.S. dairy's sustainability efforts have focused on coordinated research and promotion activities across the value chain, so that we speak with one scientifically credible voice. We know that dairy is a vital part of a sustainable food system, but to ensure that external experts and thought leaders also view dairy this way, we must create trust in our expertise and leadership on environmental sustainability. That is why the checkoff invests significant efforts in retaining expert staff who are tasked with leading research projects that fill knowledge gaps, developing future opportunities for farmers, and building dairy's reputation as a scientific powerhouse in sustainability. Our goal is to maintain and build upon the leadership position that dairy established in 2008, when it became the first U.S. food and agriculture industry to conduct a full, national-level [Life Cycle Assessment](#). That LCA, which focused on fluid milk, estimated that U.S. dairy accounts for approximately 2% of total U.S. GHG emissions, 5.1% of water use and 3.7% of U.S. farmland. We take pride in being a credible source of information. Our work with influential organizations, on behalf of U.S. dairy farmers, means that dairy farmers are viewed as truly committed partners in sustainability efforts and not simply "greenwashing." All of our efforts are critical to driving trust and sales for U.S. dairy at home and abroad.



6. How are other industries and key partners like Starbucks and Nestle approaching sustainability, and what are they expecting from farms?

Key partners such as Nestlé and Starbucks are expecting to partner with dairy farmers to achieve shared goals that benefit the entire dairy value chain. They have committed to supporting and partnering with U.S. dairy farmers to help support the sustainable future of dairy. As [Starbucks notes](#): “Since the introduction of our first Caffè Latte in 1984, cow’s milk has been an integral ingredient for the company. As a company that works with and relies on the farming community every day, we have a responsibility to help drive solutions to reach our resource positive goals, support farmers and help ensure a sustainable future of dairy.”

Nestlé and Starbucks are among the 66 Net Zero Initiative (NZI) partners who are collaborating with farmers to advance environmental stewardship and ensure a more sustainable dairy industry for future generations. [Nestle shared](#), “Dairy farmers are experts who know their land and what will work on their farms best, but high costs and technological barriers mean many farmers need support transitioning to practices that can reduce greenhouse gas emissions,”. Both Nestle and Starbucks have committed to invest \$10 million toward the research and implementation of new sustainability practices through NZI alone.



7. What sustainability questions are consumers asking, and are they general or specific to farms?

Consumers, both in the U.S. and around the world, have a strong and growing interest in sustainability. According to 2022 research from the global marketing firm Kantar US, while 45% of global consumers indicate that it's been harder to purchase sustainably given financial considerations, 90% of U.S. consumers are still concerned about climate change and climate issues – and that percentage continues to increase. While sustainability is becoming more of a concern, consumers continue to make purchase determinations based on price, taste and perceived effectiveness.

These expectations also relate to food, with consumers expressing interest in where their food comes from and how it is produced. While consumers generally value dairy and trust farmers, they still have questions about how dairy is produced and its impact on the environment.

- Among more than 1,000 American consumers between 18 and 80 surveyed about the types of foods/beverages choices most affected by perceptions of climate impact, respondents rated meat and poultry as most impacted, though half of them also mentioned dairy¹.
- According to research that tracks consumer perceptions of dairy, the top drivers of trust for the dairy industry among consumers age 13+ include health and environmental attributes, but research shows consumers may not be aware of dairy's environmental efforts².

¹ IFIC 2023

² DMI Dairy Perceptions Tracker Dec 2022



8. What is the return on investment (ROI) for different sustainability practices, and how does this influence the decision to invest in these efforts?

The return on investment (ROI) for different practices depends on many factors and must be evaluated individually for each farm in the context of that farm's business and sustainability goals. Just as a nutritionist might create a specific feeding program tailored to a farm - and then update it as feed ingredients change and prices fluctuate - sustainability practices and technologies may need to be customized and adapted for each operation over time. We recommend speaking with your university extension agent, nutritionists/veterinarians/crop advisors, Newtrient and other trusted advisors as relevant.



9. How can dairy organizations, including checkoff programs, collaborate effectively to foster a unified and strategic approach to sustainability, taking into account various regional and operational contexts and challenges?

The U.S. Dairy Net Zero Initiative (NZI) is a collaboration of dairy organizations and partners that serves as a unifying learning journey to advance research and technology, on-farm pilots and new market development. This initiative is essential to coordinating efforts across multiple partner organizations, each with an important role to play in ensuring dairy's place in the food system and allow for broad sharing out of information and learnings. The founding members of NZI included six dairy organizations that represent a large percentage of the industry, recognizing the need to bring together different areas of the sector, from strategy to policy to practice, to support action on the ground. These founding organizations are:

- Dairy Management Inc.
- The Innovation Center for U.S. Dairy
- International Dairy Foods Association
- National Milk Producers Federation
- Newtrient
- U.S. Dairy Export Council

The work of NZI is helping to learn, establish and validate the pathway to meet the climate change and environmental challenges head-on through a holistic approach to responsible stewardship of natural resources. This reflects U.S. dairy's commitment to sound science and a recognition that environmental progress must come with economic viability for farmers. This also reflects an understanding that it is only through collaboration that opportunities are revealed, and barriers are overcome.



- 10. Given the complex and politically charged nature of sustainability in the dairy industry, how can we ensure that sustainability is not used as a tool to make the dairy industry cost-prohibitive, drawing lessons from the situation in Europe?**

The dairy checkoff works to increase sales and demand for dairy through research, education and innovation, and to maintain confidence in dairy foods, farms and businesses. We understand your concern, however, the checkoff's mandate is limited to research and promotion, and we are, unfortunately, unable to respond to policy-related questions. Given the nature of this question, we recommend that it be directed to appropriate staff with the National Milk Producers Federation (NMPF).