FARM.

April 2021

Overview



More than a decade ago, the U.S. dairy industry recognized that meeting the nutritional needs of a growing and diversified population **UN SDG2** requires a sustainable food system **UN SDG12** with transparent production practices and proof points on sustainability goals. The dairy sector believes deeply, in keeping with UN Sustainability

Development Goals, that people have a right to wholesome nourishment, produced safely and responsibly, as part of a sustainable food system.

To address these needs and demonstrate our devotion to a sustainable food system, in 2009 the U.S. dairy industry formed the National Dairy Farmers Assuring Responsible Management (FARM)[™] Program, which commits U.S. dairy farmers to high-quality on-farm management practices for safe, sustainable dairy production. FARM's transparency provides consumers with confidence that their U.S. dairy products are produced in keeping with the highest level of science-based metrics and best practices. The FARM Program demonstrates key learnings and models implementation possibilities for the global dairy industry. As part of a One Health approach, the Farmers Assuring Responsible Management Program is U.S. dairy's industry wide, onfarm social responsibility program that provides assurances that U.S. dairy farmers are global leaders in

- Animal care UN SDG 9 and 12
- Antibiotic stewardship UN SDG 9 and 12
- Biosecurity UN SDG 9 and 12
- Environmental stewardship UND SDG 13, 14, and 15
- Workforce development UN SDG 8 and 12



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Program Structure

FARM is an industry wide collaboration, created by the National Milk Producers Federation in partnership with the U.S. levy program Dairy Management, Inc. It is open to all U.S. dairy farmers, cooperatives, and processors. The Innovation Center for U.S. Dairy¹ has endorsed the FARM Program as the industry wide social responsibility program for on-farm U.S. dairy production.

Science-driven standards and best practices, with a commitment to continuous improvement, stand at the core of FARM's mission. These practices and standards are required to have a scientific and technical basis and be measurable for implementation. The standards are revised and



updated every three years to ensure the program keeps pace with the latest science-based recommendations. Such data-driven procedures have allowed the program to empower dairy farmers, cooperatives and processors to assure consumers and customers that dairy farmers manage their animals, workforce and land responsibly and sustainably.

History

U.S. dairy farmers have a long history of deep commitment to animal care, land stewardship and workforce wellbeing. Building on this foundation of socially responsible production, the National Dairy FARM Program today includes five program pillars: Animal Care, Antibiotic Stewardship, Biosecurity, Environmental Stewardship and Workforce Development.



¹ The Innovation Center for U.S. Dairy is a voluntary organization that works with leaders from across the dairy value chain to align on pre-competitive priorities, drive progress and speak with one voice. The goal – to advance a shared social responsibility platform and demonstrate U.S. dairy's collective commitment to provide the world responsibly produced dairy foods that nourish people, strengthen communities and foster a sustainable future. https://www.usdairy.com/about-us/innovation-center



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Animal Care UN SDG 9 and 12

As the world's first Animal Care program to meet the International Organization for Standardization (ISO) Technical Specification requirements for dairy welfare as set by the World Organization for Animal Health (OIE), the FARM Animal Care pillar currently boasts participation from 99% of U.S. domestic milk production and includes dairy farmers in 49 of the 50 states – more than 31,000 dairy farm participants from more than 130 dairy cooperatives and processors.

FARM Animal Care provides assurances through three primary components. The first component comes from best management practice manuals, including the Animal Care Reference Manual and the Milk and Dairy Beef Drug Residue Prevention Manual. These science-based guides provide a comprehensive set of expectations and serve as educational tools and resources for dairy farm



owners/managers as they develop on-farm best management practices.

The second component is second-party farm evaluations conducted by trained and certified evaluators. These evaluations follow a standardized protocol and evaluation rubric based upon the current version of the FARM Program standards and best practices. On-farm evaluations occur at least once every three years; they include interviews with farm owners and employees, review of written protocols, verification that protocols are effectively implemented on-

A cornerstone of FARM Animal Care is involvement of a veterinarian in assisting the dairy farmer with animal health decision-making as part of a comprehensive Herd Health Program to prevent, control, and treat animal disease. This is demonstrated through valid and active Veterinarian-Client-Patient Relationship (VCPR). During the most recent cycle (2017-2020), 78 percent of all U.S. dairy farms had a valid and active VCPR with the remaining 22 percent being required to establish a valid and active VCPR within a year of their evaluation. farm, and observations of animals and the facility. Evaluation results include any action plans that may be needed to meet minimum criteria, as well as longer-term continuous improvement plans.

The FARM Animal Care program's third component is an independent third-party verification process that helps demonstrate program integrity

by objectively evaluating the consistency and accuracy of farm evaluators and the program itself. These third-party verifications both evaluate the integrity of the implementation of the program and provide feedback to assess the knowledge, accuracy and consistency of the second party evaluators.



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Antibiotic Stewardship UN SDG 9 and 12

The FARM Antibiotic Stewardship program area provides ongoing education for the dairy community on prudent and responsible antibiotics use that keeps cows healthy and U.S. milk production safe.

FARM's Milk and Dairy Beef Drug Residue Prevention Reference Manual is the primary educational tool for U.S. dairy farms on the prudent and responsible use of antibiotics, including how to avoid of drug residues in milk and meat.

Updated each year, the manual and accompanying pocket guide conveniently detail which antibiotics Only one out of 10,400 milk tankers tested positive for antibiotic residues last year, according to the 2020 National Milk Drug Residue Database. This data illustrates the continued long-term national pattern of industry improvements in milk-quality practices.

and other drugs are approved by the U.S. Food and Drug Administration for treatment of disease for dairy animals. Standards related to antibiotic stewardship are incorporated into the FARM Animal Care on-farm second-party evaluation, including requirements for a valid and active VCPR, a comprehensive Herd Health Plan and maintenance of complete drug treatment records.

Biosecurity UN SDG 9 and 12

The FARM Biosecurity pillar is currently being developed to improve awareness and understanding of U.S. dairy farm biosecurity. Following the successful path taken by other FARM Program pillars, FARM Biosecurity will begin

with a manual of science-informed best practices and standards for dairy farmer education. This will be followed with second party, on-farm evaluations to assess implementation and identify opportunities for continuous improvement.

Building on more than a decade of work with the U.S. Department of Agriculture on food-system resiliency in the face of a foreign animal disease outbreak, the FARM Biosecurity Pillar will also integrate the Secure Milk Supply Plan. The Secure



Milk Supply Plan has developed procedures to collect and transport raw milk from dairy farms during a foreign animal disease outbreak to minimize the risk of disease spread while continuing to supply nutritious dairy foods to the public.



Environmental Stewardship UND SDG 13, 14, and 15

U.S. dairy farmers have a long history of being exceptional environmental stewards in agriculture. The FARM Environmental Stewardship Program provides tools and resources for U.S. dairy farmers to measure and continue to improve their environmental footprint. Cooperatives and processors representing 78% of U.S. milk production participate

in FARM Environmental Stewardship.

The FARM Environmental Stewardship second-party evaluation quantifies a dairy farm's greenhouse gas and energy-use footprints while also assessing the use of written nutrient-management plans. Second-party evaluators must complete a training program, promoting consistent program implementation and equipping evaluators with the knowledge they need to determine the environmental



footprints of the dairies they evaluate. Each Environmental Stewardship evaluation helps dairy farmers, cooperatives and processors assess change over time, identify areas of operational improvement and report progress to their customers.

Through continued evolution and improvements, the Environmental Stewardship Program stays on the cutting edge of scientific findings, telling dairy farmers' environmental stories and meeting the growing need for supply chain assurances. Version 2 of the program, released in 2020, contained updates and new data inputs including updated

2050 Environmental Stewardship Goals

According to a life cycle assessment for fluid milk commissioned in 2008, U.S. dairy contributes only 2% of all U.S. greenhouse gas emissions. Coupled with a rigorous and third-party reviewed materiality assessment, the industry prioritized the most pressing areas of environmental sustainability as the foundation for the 2050 goals:

1 Become carbon neutral or better

2 Optimize water use while maximizing recycling

3 Improve water quality by optimizing utilization of manure and nutrients

crop emissions factors, a breakdown of greenhouse gas emissions by gas type, and the ability to capture the benefits of solid-liquid separation as well as solar and wind energy. Future evolution of FARM Environmental Stewardship will promote continued alignment with U.S. dairy's industrywide 2050 Environmental Stewardship Goals and its Net Zero Initiative.



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Workforce Development UN SDG 8 and 12

While 95 percent of U.S. dairy farms are family-owned, more than 40 percent hire non-family employees, which translates to more than 129,000 non-family employees working on dairy farms across the U.S. FARM Workforce Development equips dairy farm owners and managers with tools to enhance their safe and thriving work environments through a suite of educational resources. These materials include human resources (HR) templates; comprehensive, dual-language HR and Safety Manuals; legal fact sheets; and a variety of farm-focused fact sheets. The program also offers an on-farm second-party evaluation to help farmers learn more about HR and safety management best practices, identify which best practices will be most useful to implement on their farm, and track improvement over time. The evaluation tool complements the program's suite of educational resources, thereby optimizing FARM WFD materials and supporting dairy producers and managers.

