## U.S. Department of Agriculture Report to Congress

Status and Outcomes of the Dairy Business Innovation Initiatives

January 2022

# Overview

The Dairy Business Innovation (DBI) Initiatives was authorized by section 12513 of the Agriculture Improvement Act of 2018 (2018 Farm Bill) [Public Law 115—334]. In addition to establishing the program (subject to appropriations), the 2018 Farm Bill requires that "...the Secretary shall submit to Congress a report on the outcomes of the program under this section and any related activities and opportunities to further increase dairy innovation."

The following report discusses background on DBI, outcomes of grants awarded to date, and potential opportunities to expand innovations in the dairy industry.

# Background

USDA's Agricultural Marketing Service (AMS) administers the DBI Initiatives to support dairy businesses in the development, production, marketing, and distribution of dairy products. The DBI initiatives provide technical assistance to dairy businesses and use at least 50% of the award for subawards to dairy businesses, including makers of niche dairy products, such as specialty cheese, or producers of dairy products derived from the milk of a dairy animal, including cow, sheep, and goat milk. The DBI Initiatives approach of providing both technical assistance and subawards to dairy businesses serve as unique and effective model by facilitating the development of critical relationships with local dairy producers and processors to support their on-the-ground needs. Anecdotally, the USDA has received positive feedback of this model from these groups when discussing the program in terms of the flexibility it provides, targeting resources in ways that meet shared regional needs and building local and regional dairy markets. The subawards may be offered to dairy businesses that receive direct technical assistance to implement recommendations identified through such assistance and may also identify subaward recipients through a competitive selection process.

Each DBI award has a duration of 3 years, and current initiatives must apply annually to receive additional funding as it becomes appropriated.

DBI initiatives specifically focus on:

- Diversifying dairy product markets to reduce risk and develop higher value uses for dairy products.
- Promoting business development that diversifies farmer income through processing and marketing innovation.
- Encouraging the use of regional milk production.

Congress originally appropriated \$1.5 million for DBI in Fiscal Year (FY) 2019 to select not fewer than three initiatives. AMS awarded three equal grants of \$454,392 through a competitive selection process to the <u>University of Tennessee</u>, the <u>Vermont Agency of Agriculture, Food & Markets</u>, and the <u>University of Wisconsin</u>.

In FY2020, Congress appropriated \$20 million to provide an equal distribution of funds to the three existing initiatives and AMS awarded \$6,133,333 to each initiative. This was followed by \$22 million in FY2021, with approximately \$2 million appropriated to fund at least one new (competitive) initiative. On November 8, 2021, AMS announced \$18.4 million, to be evenly split among the three current initiatives, and \$1.8 million for a new initiative at <u>California State University Fresno Foundation</u>.

Grantee	FY19	FY20	FY21	Total
University of	\$454,392	\$6,133,333	\$6,133,333	\$12,721,058
Tennessee				
Vermont Agency of	\$454,392	\$6,133,333	\$6,133,333	\$12,721,058
Food & Markets				
University of	\$454,392	\$6,133,333	\$6,133,333	\$12,721,058
Wisconsin				
California State	N/A	N/A	\$1,799,778	\$1,799,778
University, Fresno				
Total Awards (by FY)	\$1,363,176	\$18,399,999	\$20,199,777	

Given the success of the DBI model to target federal funds to meet local needs on emerging dairy sector issues, many of which require significant investment, on March 2, 2022, the USDA announced the availability of \$80 million from the American Rescue Plan (ARP) Act of 2021 [Public Law 117—2] to support pressing concerns across the industry. Initiatives have the opportunity to submit additional applications for up to \$20 million to further support processing capacity expansion, on-farm improvements, and technical assistance to producers. AMS expects to announce the awards in June 2022.

As with all its grant programs, AMS uses a portion of the appropriated funding to administer the program and ensures that recipients fulfill the purpose of the program and abide by Federal assistance regulations and laws. For DBI, AMS uses 8% of the appropriated funding, which enables the agency to provide remote and on-site technical assistance for grant recipients. AMS also conducts compliance-related activities, such as analyzing financial and performance reports and selected source documentation for payment requests to ensure that grant recipient activities comply with the intent of the authorizing legislation.

## **Grants Awarded and Outcomes**

AMS grant recipients are required to submit annual progress and financial reports for each award that they receive. AMS received the initial series of DBI progress reports from the three original initiatives in December 2020, and the results from those reports are discussed below. In addition, AMS is providing an update on reported future plans of the current initiatives, including the recently funded new initiative at California State University Fresno Foundation.

#### The University of Tennessee

The University of Tennessee's Southeast Dairy Business Innovation Initiative provides educational opportunities and financial assistance to help participants manage financial risk by evaluating opportunities to develop and market value-added dairy products. This initiative began as a statewide initiative in Tennessee in 2019 and expanded to include Kentucky and North Carolina following the 2020 DBI award. In 2021, the initiative expanded further to cover producers looking to start or expand a dairy business in the Southeast (Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, and West Virginia, Virginia).

## Technical assistance and sub-award activities

The Southeast initiative conducts field audits with dairy producers to assess strengths, weaknesses, opportunities, and threats associated with the manufacture and marketing of dairy products in a new or existing dairy business. The initiative collaborates with the Master Dairy Producer Workshops series and the Tennessee Dairy Producers Association to facilitate educational sessions. Value- Added Dairy Processing Workshops teach dairy producers and businesses about pasteurization, technology advances, food manufacturing, food safety, and navigating local and Federal regulations.

Examples of technical assistance provided thus far include:

- Recruiting and training a cohort of peers to conduct workshops for managing stress and mental health, as well as transition planning.
- Assembling a multi-disciplinary team of consultants including dairy animal, dairy processing, marketing, and financial experts who provide one-on-one consulting to existing or potential dairy businesses on topics such as assessing equipment needs before beginning an enterprise, financial planning, and animal care questions.
- Creation of the "Dairy Farm Gauge", an economic tool to help dairy farmers understand where they are spending funds to improve farm efficiency. This is a unique deliverable from this grant, as it can serve both value-added dairy businesses and conventional dairy businesses. This tool has been deployed in Tennessee, Kentucky, and North Carolina, and it will expand to the other southeastern states with the 2021 expansion.
- Offering resources and tools on animal care, financial management, and product processing through the initiative's website.
- Identifying and providing targeted support to dairy business owners among underrepresented populations in the southeast.

Across three rounds of subaward applications from 2019 to 2021, the Southeast initiative received a total of 68 applications from dairy businesses for awards from across the 3-state region, with total requests for funding topping \$8.08 million. Through a competitive review process, 35 projects were selected to receive a total of approximately \$3.3 million in funding. These subrecipients used the funds to conduct feasibility studies on small-scale processing facilities, perform an exploratory expansion to increase market access of a new value-added dairy product, and purchase specialized equipment that takes traditional 'production waste' such as cheese trimmings and creates a saleable product, among other projects.

#### **Outcomes and future activities**

In the first year of the initiative, over 850 dairy farmers and businesses participated in 14 workshops. Participants estimated the overall value of the knowledge gained to be between \$1,000 and \$5,000 per presentation, estimating a 20% gain in increased knowledge through preand post-assessments. Participants also rated the workshops highly in terms of "increasing trust in the dairy industry as a whole" (4.2 / 5.0).

Participants requested opportunities to visit existing processors and receive hands-on training; increase food safety knowledge; and obtain training in business management, marketing, and finished-product pricing. The initiative will therefore be expanding its technical assistance offerings to include these subjects and will report to AMS on the initial results in early 2022.

Other planned activities in 2022 include conducting a survey of southeastern U.S. farmstead creameries; developing content for state-specific modules on regulations, permitting, and retail and wholesale marketing; creating a value-added dairy processing web page and listserv discussion group; and expanding the Competitive Subaward Program for dairy businesses across the southeast.

### Vermont Agency of Agriculture, Food & Markets

The Vermont Agency of Agriculture, Food, and Markets (VAAFM) Northeast Dairy Business Innovation Center (NE-DBIC) addresses the most pressing concerns for small dairy farmers and processors across the New England region: Vermont, Connecticut, Delaware, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, and Rhode Island. The initiative takes a targeted and intentional approach to supporting dairy marketing and production efforts that consider consumer relevancy in the design and development of value-added products design and development. The initiative's goals are to increase consumption through diversified markets, improve business viability and food safety efforts within the sector, and develop a resilient supply chain that can withstand economic and weather-related interruptions.

#### Technical assistance and sub-award activities

The Northeast initiative provides a variety of technical assistance resources for the region that are closely tied to their subaward activities, from education on how to best grow forage crops and reduce reliance on imported feeds to grant funding that will develop sustainable alternative packaging suitable for use by the region's small-scale processors. The initiative's grant project objectives reflect the diverse array of production and processing in the region, while underscoring the importance of consumer demand in a successful dairy economy. Over half of the available sub-award funds are allocated for innovation – bringing emerging ideas and strategies into the mainstream and making them accessible to farmers and processors at all scales across the region. By pairing these grant opportunities with the research and development conducted with funding from previous DBI awards, the initiative looks to position the Northeast as the leading dairy product producer supporting rural communities, maintaining a climate forward approach, and laying the foundation for long-term success. Through two rounds of

subaward applications, NE-DBIC received 76 dairy business applications requesting a total of over \$4.2 million. Forty-five subawards totaling over \$3.3 million were awarded.

Technical assistance and sub-award highlights include:

- Supporting the addition of "grazing transition" to a DBI-funded curriculum on farm management practices for 36 farmers in Vermont, New Hampshire, New York, and Pennsylvania.
- Awarding \$500,000 to dairy processors across six states to support their marketing and branding efforts by increasing consumer awareness, supporting brand expansion, and enhancing market strategies. For example, one 2020 subrecipient used their \$25,000 subaward to work with a firm focused on increasing direct-to-consumer sales as a response to the pandemic. As a direct outcome of this technical assistance award, their website and social media platforms received an additional 39 million views over the last six months of 2020.
- Six dairy farmers, processors, and organizations in Maine, New York, Pennsylvania, and Vermont launched innovative agritourism projects through the Northeast initiative's first competitive subaward round.

## **Outcomes and future activities**

The initiative launched a Dairy Goat and Sheep Market Research project in August 2020 and plans to develop an interactive dashboard and perform stakeholder outreach as part of a "dairy goat and sheep farm accelerator program" to assist producers interested in expanding their dairy operations beyond cow milk products.

Upcoming subaward opportunities include goat and sheep supply chain grants; food safety certification grants for processors; and grants to support the delivery of business technical assistance through existing provider resources and networks across the region.

Farmers that complete the grazing transition workshop and training receive a sub-award to support their adoption of grazing for dairy cows. One Vermont farmer reported animal health improvement and feed cost savings of over \$34,000.

More farms will be added to the grazing transition cohort and a supply chain and distribution innovation subaward component will be developed. These projects will continue to impact cheesemaker direct sales, with results expected in the next round of initiative progress reports.

Twenty northeast regional processors completed training required by the Food and Drug Administration on Preventive Controls for Human Food Grants.

The agritourism subaward projects were designed to raise awareness, understanding, and consumption of Northeast dairy products through agritourism activities and have had a cumulative impact on a total of 95 dairy businesses.

Additional production education is being developed for value-added processors and was largely completed in 2021, with the webinar series freely available. Processors will also have access to

marketing and branding consultants as they pivot their business strategies in response to the pandemic.

Lastly, the initiative launched a project to support sensory research on consumer preferences for specialty cheese, particularly those that are produced with exterior molds, which will lead to increased competitive advantages for regionally produced products.

## **University of Wisconsin**

The Dairy Business Innovation Alliance brings together diverse experts and partners from the Upper Midwest to optimize expertise, resources, and structures to support dairy business innovation by providing direct technical assistance through workshops and awarding subawards for projects that improve on-farm diversification, create value-added products, and increase dairy exports. The Alliance also supports industry research for dairy farmers and processors in Illinois, Iowa, Minnesota, South Dakota, and Wisconsin. The Midwest initiative spurs growth and innovation in the regional dairy industry and is driven by a partnership between the University of Wisconsin's Center for Dairy Research (CDR) and the Wisconsin Cheese Makers Association (WCMA).

With each round of DBI funding, the initiative builds upon previous grant activities to support projects that help dairy farmers and processors develop existing and new markets, and that can be scaled for potential application across the country.

## Technical assistance and subaward activities

Through the Midwest initiative, dairy businesses have access to product development educational opportunities, prototype manufacturing, and small-scale production support for their efforts to commercialize higher value products.

The Midwest initiative is offering two types of subawards: the Business Builder and Industry Impact programs. The Business Builder program has completed two rounds of subawards and received 129 applications from across the five-state region, with total requests for funding exceeding \$3.8 million. Through a competitive review process, 38 projects have been selected to receive almost \$1.5 million in funding. A further round of subawards has been announced and will take place in February 2022, with \$1 million allocated for successful applications.

The Industry Impact program has completed one round of subawards and received 16 applications from across the five-state region, with a total funding request of almost \$3 million. Four awards have been announced, and successful applicants will receive a total of approximately \$650,000. A second round of this program is scheduled for the summer of 2022, with \$1 million allocated for subawards.

With remaining funds, the Midwest initiative organized and offered direct, on-call technical assistance, a website detailing business resources in the five-state region and cataloging interviews with successful dairy business entrepreneurs. The initiative also developed and

implemented the "Let's Get Started" curriculum, an 8-part webinar series that is accessible to anyone.

In addition, the Midwest initiative implemented a concerted effort in their 2020 subaward program to reach small dairy businesses in the region, resulting in \$1.19 million awarded to 26 dairy businesses (88 percent of which have 50 or fewer employees). The quality of applications from year 1 to year 2 was significantly improved as applicants utilized resources outlined in the original webinar series. Subaward highlights include:

- A South Dakota creamery born from an eight-generation family dairy farming business that handcrafts small batch artisan cheese. With a DBI subaward, the creamery is launching production of paneer, a value-added dairy product that will enable them to process more milk and cater to a new consumer audience.
- A Minnesota-based dairy farm that began working with its competitors and colleagues in the early days of the COVID-19 pandemic to batch multiple Minnesota-made cheeses together to form full pallets for shipping at a reduced cost to buyers outside the Midwest. DBI funds are helping to offset the expense of some necessary updates that will expand this product consolidation endeavor and open new markets to small Minnesota cheesemakers.
- A small creamery in Illinois is using DBI funds to create a new value-added frozen product made with whey from the milk of their Jersey cows.
- A cheesemaking farm in Wisconsin is using DBI funds to develop and install an innovative water use and circulation system to conserve a precious natural resource and save money. This, in turn, provides a new case study for others in the industry on how focusing on environmental sustainability also can make operations more profitable.

## **Outcomes and future activities**

The "Let's Get Started" webinars were very successful, with the online series being viewed over 600 times in its entirety so far, with approximately 4% viewership coming from outside the 5-state region.

With the second round of funding in 2020, the Midwest initiative built on its initial offerings to support market research, product development, training workshops, and consultative services to dairy farmers and processors across the region. Specific endeavors included:

- Development of value-added cheese and dairy beverages via Center for Dairy Research trials
- Market research and prototype development, targeting export opportunities for dairy manufacturers
- An updated version of the "Let's Get Started" webinar series with the following topics:
  - Getting Your Business Act Together
  - Developing Strategies for Your Small Business
  - Keeping Your Business Safe: Understanding and Using Risk Management Principles

- Setting Up and Improving Manufacturing Processes
- Fine-Tuning Your Marketing Strategy to Fit Consumers' Buying Preferences
- Social Media Marketing
- o Developing E-Commerce Functionality for Your Small Business
- Developing an Export Program

In 2021 and 2022, the Midwest initiative plans to award up to \$1 million in "industry impact" subawards of between \$50,000 and \$250,000 to support dairy product manufacturers and their collaborators developing an innovative idea or tackling a broad challenge with the potential to significantly advance the dairy industry. The initiative also plans to award up to \$1 million in smaller grants (up to \$50,000) to support dairy business development. The results of these awards in terms of job creation, increased sales, market expansion, and other related economic development will be summarized in the 2021 and 2022 progress reports, respectively.

### **California State University Fresno Foundation**

The newest DBI initiative, the Pacific Coast Coalition administered by California State University, Fresno, will provide direct technical assistance and subawards to dairy producers and processors across the Pacific Coast region – California, Oregon, and Washington.

Between 2012 and 2017, the Pacific Coast region lost over 450 dairy farms, a trend which accelerated during the COVID-19 pandemic. The new initiative will form a collaborative effort supporting regional dairy businesses in the development, production, marketing, and distribution of dairy products, leveraging existing dairy industry resources including institutions of higher education, state dairy promotion programs, research organizations, and industry stakeholders. The overall goal will be to spur regional dairy innovation by assisting dairy businesses in developing higher value uses for their milk, diversifying their markets and income, and realizing increased returns. The first round of results for the initiative will be submitted to AMS in December 2022.

#### Potential opportunities to expand innovations in the dairy industry

AMS will continue to focus on allowing DBI initiatives to develop local and regional strategies to address the challenges facing dairy farmers and processors while encouraging a collaborative environment in which each initiative can share knowledge gained through those activities amongst themselves and across the industry. Many of the educational resources developed using DBI funds are made publicly available to the dairy industry via dedicated initiative websites. The initiatives work with subrecipients to implement suggestions on the application experience, review processes, and application requirements to minimize administrative burden and allow flexibilities to address dairy local needs. AMS conducts quarterly meetings with the initiatives to allow them to discuss successes and challenges within their programs and will look to expand opportunities to communicate across initiatives to share promising practices and collaborative efforts. AMS also collaborated with the three original initiatives in reviewing and revising the DBI program outcomes and performance indicators to better align these elements with the

statutory goals for the program set forth in the 2018 Farm Bill. These new measures will go into effect with the next round of awards in FY 2022.

The program's expansion into the western U.S. is an opportunity to increase innovative practices within the dairy industry. Such practices are intended to help farmers and processors diversify their operations in order to increase revenue and reduce risk while meeting the needs and desires of their customers. AMS will continue to work with the initiatives to identify outcomes, address challenges, and provide technical assistance that focuses on local decision making and the ability to be responsive to on-the-ground needs to support dairy producers and processors, which include small businesses and underserved farmers and ranchers. The \$80 million in supplemental ARP funding will further support the initiatives' work to expand processing capacity and technical assistance services to producers and improve regional dairy supply chain resiliency.