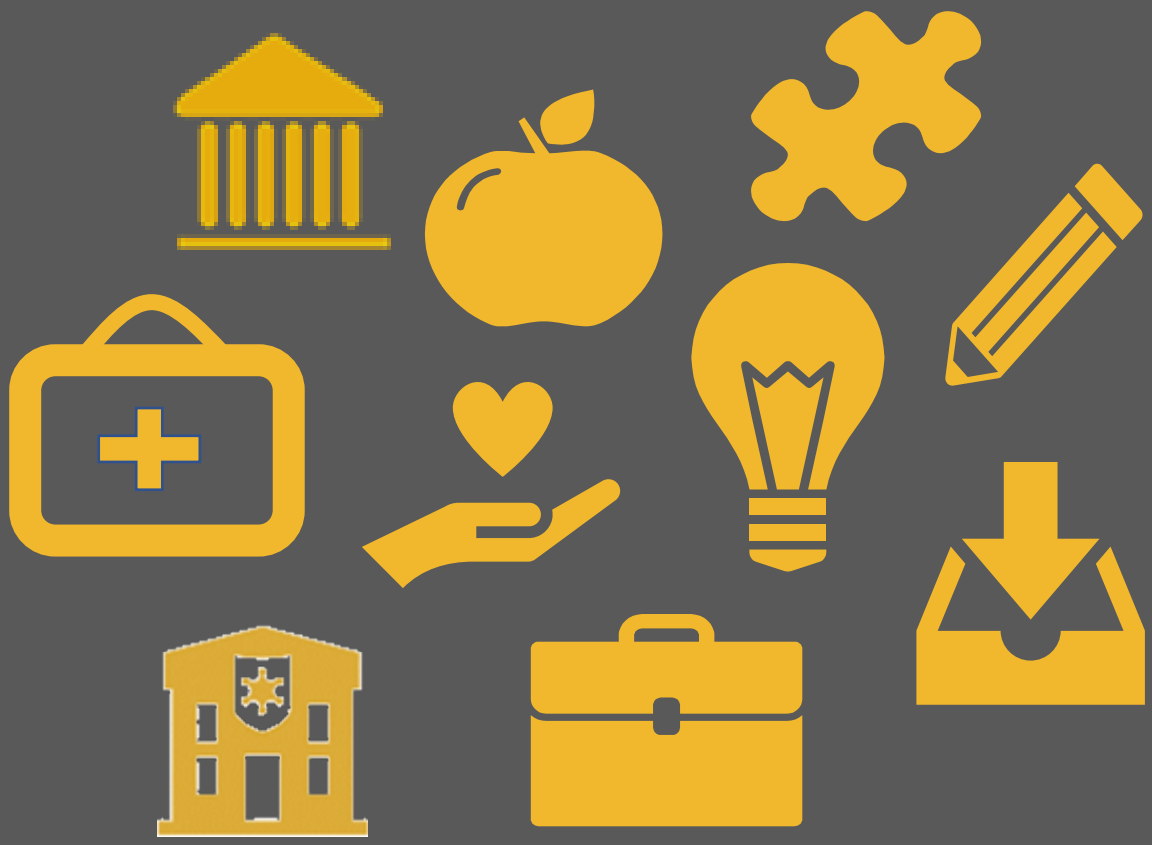
Clearing the Path for Marketing Directly from Missouri Farms to Institutions

February 2022



University of Missouri

MASBDA
MISSOURI AGRICULTURAL AND SMALL BUSINESS DEVELOPMENT AUTHORITY

Prepared by the University of Missouri
Funded by the Missouri Agricultural and Small Business Development Authority

Clearing the Path for Marketing Directly from Missouri Farms to Institutions

Authors:

Alice Roach, Senior Research Associate, MU Division of Applied Social Sciences
Jill Moreland, Program Director, MU Division of Applied Social Sciences
Joe Parcell, Director, MU Division of Applied Social Sciences
Bill McKelvey, Senior Project Coordinator, MU Division of Applied Social Sciences
Hannah Anderson, Student Intern, MU Division of Applied Social Sciences

Table of Contents:

Click to access the following report chapters.

Missouri Farm-to-Institution Project Summary and Recommendations

Authors:

Alice Roach, Senior Research Associate, MU Division of Applied Social Sciences
Jill Moreland, Program Director, MU Division of Applied Social Sciences
Joe Parcell, Director, MU Division of Applied Social Sciences
Bill McKelvey, Senior Project Coordinator, MU Division of Applied Social Sciences
Hannah Anderson, Student Intern, MU Division of Applied Social Sciences

Table of Contents:

S1 PROJECT SUMMARY

Funded by the Missouri Agricultural and Small Business Development Authority, the "Clearing the Path for Marketing Directly from Missouri Farms to Institutions" project evaluates the current situation for Missouri farms marketing directly to institutions and identifies possible approaches for increasing farm sales to Missouri institutions. The study has four objectives:

1) Evaluate Missouri value chain actor views toward farm-to-institution participation.
2) Create case studies of effective farm-to-institution programs in certain states and regions.
3) Describe proven models that have facilitated farm-to-institution sales.
4) Determine best practices for farms offering product to hunger relief organizations.

To address these four objectives, the project team conducted primary and secondary research. A survey reached Missouri producers to collect information about their farm-to-institution experience and interest. Representatives from institutions and other farm-to-institution stakeholders participated in interviews. The findings establish a current picture of Missouri farm-to-institution perspectives and activities.

Secondary research included assessing farm-to-institution efforts and initiatives in other states, and it identified several farm-to-institution models to consider. The secondary research findings provide ideas that Missouri may apply to its own farm-to-institution programming.

S2 RECOMMENDATIONS

Based on this project's research, the following represent pathways that Missouri stakeholders may consider to increase farm-to-institution activity throughout the state. To see recommendations related to facilitating more farm-to-food bank activities in Missouri, go to this report's fifth chapter, "Missouri Farm-to-Food Bank Activities and Opportunities."

S2.1 Facilitate connections between farms and institutions.

Based on feedback collected from Missouri producers and institutions, both groups have interest in connecting with one another. When asked to identify what factors would encourage further sales to institutions, producers participating in this project's survey most commonly named opportunities to network with institutional buyers. Several institutions participating in interviews cited a need to know what farms had interest in serving institutional buyers. To facilitate these connections, Missouri may consider two approaches.

- ***Create supplier directory*.** A supplier directory could list farms that sell food to institutions or have interest in selling food to institutions. Additionally, a directory may include distributors and processors that handle locally raised food products. Directories from Michigan, Oregon and Connecticut may serve as examples. Their capabilities include allowing institutions to search for farm suppliers by farm name, keyword, address, product type, farm type and product seasonality. Missouri may consider adding

institutional sales information to existing farm directories supported by Missouri Grown or University of Missouri Extension's Show Me Food Finder.

- ***Host regional farm-to-institution networking events.*** Farms participating in the survey expressed interest in networking with institutional buyers and institutions' food vendors. At meet-and-greet events, producers and institutions and institutional food vendors may have an opportunity to learn about one another, identify product needs, clarify product expectations and discuss how to transact. Networking efforts may first concentrate on making connections between farms and the institutions that this project's producer survey respondents said they had the most interest in serving in the next three years: K-12 schools, colleges or universities and workplace cafeterias.

S2.2 Support farm-to-institution procurement and programming.

The interview and survey research pointed to several opportunities related to helping farms and institutions transact. The following strategies may support more direct-from-farm procurement among institutional buyers in the state.

- ***Recruit producers of varied food products to consider farm-to-institution marketing.*** Institutions commonly named lettuce, watermelon, peppers and apples as products available locally. However, they also mentioned interest in locally sourcing diverse products such as asparagus, pawpaw and proteins. In the producer survey, adopters — those who had sold food to institutions in 2019 or 2020 — tended to produce a varied mix of food products. Nonadopters were more likely to have only sold meat, poultry and eggs. Farm-to-institution programming in Missouri may consider how to engage producers who raise varied products to appeal to institutions' needs.

- ***Match farms and institutions based on supply and demand.*** Institutional sales present a scale challenge for some farms due to some institutions' large size and food demand. Networking efforts may look for ways to connect farms that can meet an institution's volume needs. For example, farms new to institutional sales could be connected to smaller-scale institutions, and larger farms with farm-to-institution experience could be connected to institutional buyers who demand large volumes of product. For farms, one interviewee stressed the importance of starting small and managing growth over time. This approach gives a farm experience and time to build a track record. Efforts designed to encourage farm-to-institution procurement should also consider how to measure the impact of those purchases. The National Farm to Institution Metrics Collaborative has developed a process to gather and report standardized farm-to-institution metrics.

- ***Educate institutions and farms about how to fulfill farm-to-institution sales.*** Not all institutions are familiar with what they need to do to purchase from farms. Additionally, institutions' payment processes may require more steps, paperwork and time than what farms experience when they sell to other markets. Plus, institutions may require certain food safety standards. For example, several interviewed institutions didn't make GAP certification a requirement for their food suppliers, but they want food suppliers to be familiar with GAP practices. Several mentioned the importance of farms having the

appropriate liability insurance policies. Education and support materials, such as sample contracts and checklists for what's required to buy and sell, may help each entity — farm and institution — to complete a sale. Farms may feel more inclined to sell to institutions if they can secure a contract, which provides some assurance that their products have a market. By working collectively through co-ops, food hubs or other arrangements, farms may engage support staff to help them navigate institutional purchasing and sales fulfillment (e.g., transportation, logistics). Plus, by coordinating, farms may appeal to institutions, which appreciate reducing their transaction costs by connecting with one entity (e.g., a co-op or food hub) rather than multiple individual farms. One interviewee mentioned interest in seeing more local options from large-scale food vendors and distributors. Oklahoma worked in this area during 2018. A Sysco company, FreshPoint Oklahoma convened state agricultural stakeholders and provided training to explore how to move more Oklahoma-raised food into institutions.

- ***Consider different formats for farm-to-institution procurement.*** Selling food to institutions' foodservice operations represents just a single farm-to-institution pathway. Some institutions open their doors to the public — more like a restaurant — and others host market days, mini food shows or other events that could serve as an entry point for farm sales. An opportunity exists to help farms and institutions brainstorm creative pathways that lead to using more local food.

- ***Entertain new funding sources.*** The state-by-state case study research led to identifying funders that groups have pursued to support farm-to-institution work. For example, the W.K. Kellogg Foundation provided funding for the Michigan Good Food Charter, which included priorities to make local food purchasing easier. The Association of State Public Health Nutritionists manages a farm to early care and education (ECE) grants program. Producers responding to this project's survey named two funding needs as the most important that would allow them to consider selling or sell more food to institutions: funding available to purchase your own post-harvest supplies and funding available to build facilities. Producers may already request funding for post-harvest supplies through the Missouri Value-Added Agriculture "Farm to Table" Grant Program.

S2.3 Fill the gap in local food preparation.

When purchasing local food, institutions tend to have more access to whole, raw options than they do ready-to-use products. Preparing value-added ingredients for institutional meals takes investments in labor, skills, time and equipment. To make Missouri-grown food easier to incorporate into institutional meals, Missouri may consider efforts such as the following.

- ***Invest in institutional foodservice training and resources.*** With resources available, institutions could prepare raw products in their institutional foodservice spaces and preserve food products to use during the offseason. To do this, institutions' foodservice staff would require training on how to handle raw product and use it to make value-added goods. Training would take staff time and require training resources. Additionally, some institutions may need equipment and storage space.

- ***Make centralized preparation facilities available to producers.*** Instead of institutions making investments in food preparation and preservation, farms could work together to offer value-added products (e.g., diced, frozen). Working collectively was one training topic of interest to producer survey respondents. If centralized facilities created own product standards — for example, use the same recipes and ingredients to produce similar value-added products — then that would meet a need for consistency that one institution stated during an interview for this project. Public-private partnership may support value-added production. The Montana Food and Agriculture Development Network provides an example. The network has four centers focused on innovating and commercializing products. One food processing research and development facility sources ingredients from a local co-op, and it makes products used by institutions.

S2.4 Re-engage following the pandemic.

The COVID-19 pandemic imposed limits on farm-to-institution efforts as some institutions closed or introduced new health and safety protocol. During this time, farm-to-institution initiatives that had been gaining steam were forced to change or stop. As pandemic-related restrictions ease, Missouri may consider strategies to generate renewed momentum.

- ***Enable peer-to-peer collaboration.*** Already, Missouri groups have organized to collaborate on farm-to-school and farm to ECE efforts. Some institutions participating in this project's interview research noted that they enjoyed peer-to-peer collaboration because they could exchange ideas and share knowledge. Formalizing these groups for other types of institutions (e.g., hospitals, workplaces) and providing a framework or recommendations for how these groups may best operate could help to grow farm-to-institution activity. Peers located near one another may have an opportunity to not only share ideas but also share resources (e.g., equipment, labor).

- ***Release demanded resources.*** This project's primary research uncovered training topics of interest to farms and institutions. Topics of greatest interest to farms were networking with institutions, working collectively, marketing and product specifications. The training formats farms said they had the most interest in using were in-person, one-day workshops; tours or field days; websites; one-on-one assistance; and webinars. Institutions mentioned interest in topics such as food preservation, cooking techniques, knife skills, health department guidance and purchasing contracts or agreements. Offering these trainings in a coordinated format may maximize their reach.

- ***Add a mentoring component to farm-to-institution efforts.*** Several states observed in the state-by-state case studies have introduced farm-to-school training institutes, which combine training with team-based farm-to-school program planning and yearlong mentorship. Thus, this format takes education an extra step by supporting planning and application. Offered by Vermont FEED, the Farm to School Institute Adaptation Program teaches states how to implement their own training institutes. Missouri may consider participating to see how it can create a training institute that serves schools and other types of institutions.

Chapter 1

Missouri Producer Farm-to-Institution Survey Analysis

Authors:

Alice Roach, Senior Research Associate, MU Division of Applied Social Sciences
Jill Moreland, Program Director, MU Division of Applied Social Sciences
Joe Parcell, Director, MU Division of Applied Social Sciences
Bill McKelvey, Senior Project Coordinator, MU Division of Applied Social Sciences
Hannah Anderson, Student Intern, MU Division of Applied Social Sciences

Table of Contents:

1.1 MISSOURI FARM-TO-INSTITUTION SURVEY

To collect producer perspectives about participating in farm-to-institution sales and donations, the project team surveyed Missouri producers. The Missouri Farm to Institution Survey launched in July 2021 and closed in October 2021. Strategies used to recruit producers to respond to the survey included announcing the survey at industry meetings, publicizing it in social media posts and marketing it in producer-oriented e-newsletters. The project team worked with the Missouri Grown program and University of Missouri Extension to share recruitment messages.

The survey collected 80 responses. This report summarizes data submitted by 28 respondents. Responses must have met the following three conditions to be included in the analysis.

1. The respondent's farm was primarily located in Missouri
2. The respondent's farm produced food products to sell in 2019 or 2020
3. The respondent participated in the survey questions that pertained to farm-to-institution experience, interest and perspectives

Each of the 28 responses was categorized into one of three segments based on a respondent's previous farm-to-institution sales experience: adopter, abandoner and nonadopter. The following definitions describe how respondents were split into the three categories.

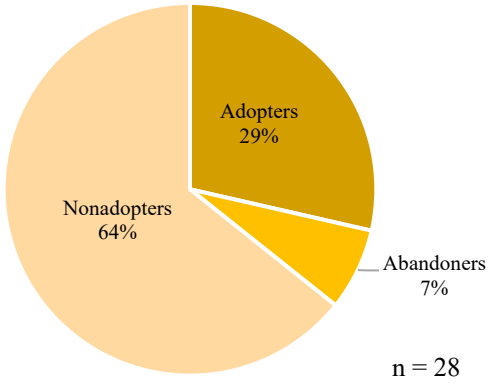
- **Adopter**: Farm sold food products to at least one institution in 2019 and/or 2020.
- **Abandoner**: Farm sold food products to at least one institution in the past but didn't sell to any institutions in 2019 or 2020.
- **Nonadopter**: Farm has never sold food products to an institution.

The survey referred to the following as institutions:

- K-12 private and public schools
- Colleges and universities
- Government agencies
- Military bases
- Food banks, food pantries and hunger relief organizations
- Childcare providers
- Correctional facilities and prisons
- Hospitals
- Workplace cafeterias
- Adult care facilities (e.g., nursing homes, long-term care)

Exhibit 1.1 reports nearly two-thirds of the 28 qualifying responses originated from nonadopters — individuals whose farms had never sold food to institutions. Adopters represented 29% of responses. Just two survey respondents were abandoners; they represented 7% of the responses analyzed.

Exhibit 1.1 – Respondent Segmentation

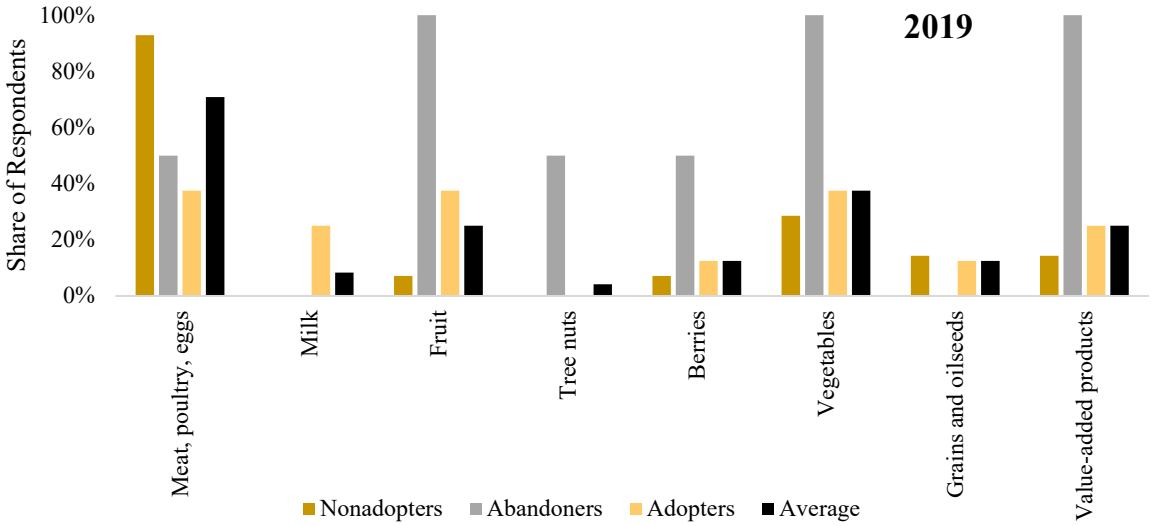


n = 28

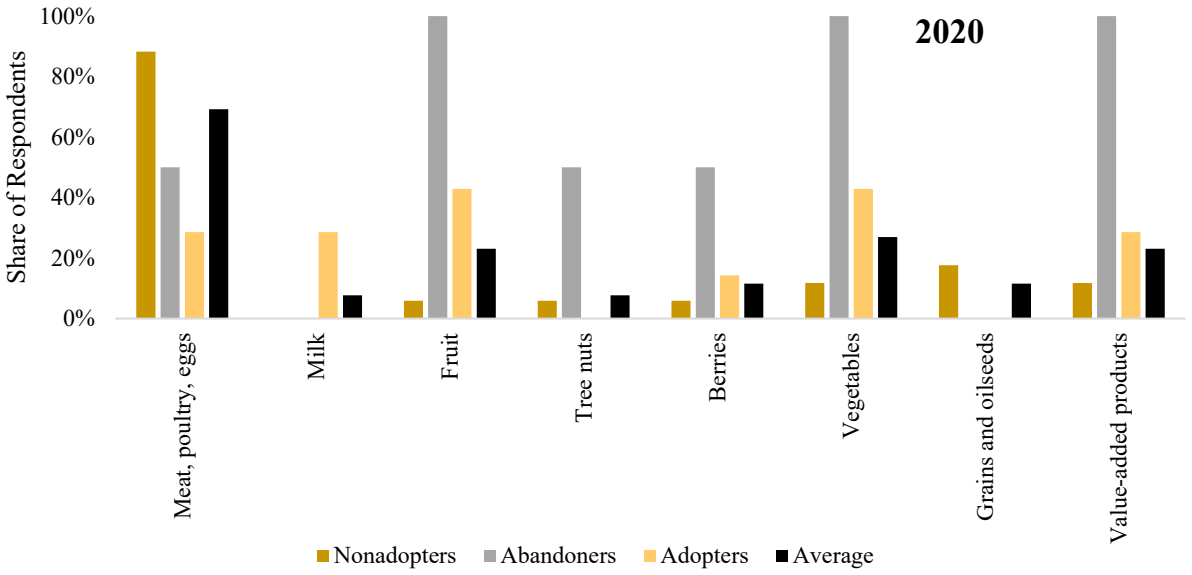
1.2 TOP TAKEAWAYS

Sections 1.3. 1.4 and 1.5 of this chapter describe data for the three segments, their experience with farm-to-institution activities and their perspectives about farm-to-institution participation. Here, the discussion compares these segments and focuses on understanding the similarities and differences among adopters, abandoners and nonadopters. Exhibit 1.2.1 illustrates that nonadopters were most likely to sell meat, poultry and eggs in 2019 and 2020. Adopters and abandoners tended to have a more diversified portfolio of food products to sell.

Exhibit 1.2.1 – Food Products Sold, 2019 and 2020



* n = 14 for nonadopters; n = 2 for abandoners; n = 8 for adopters

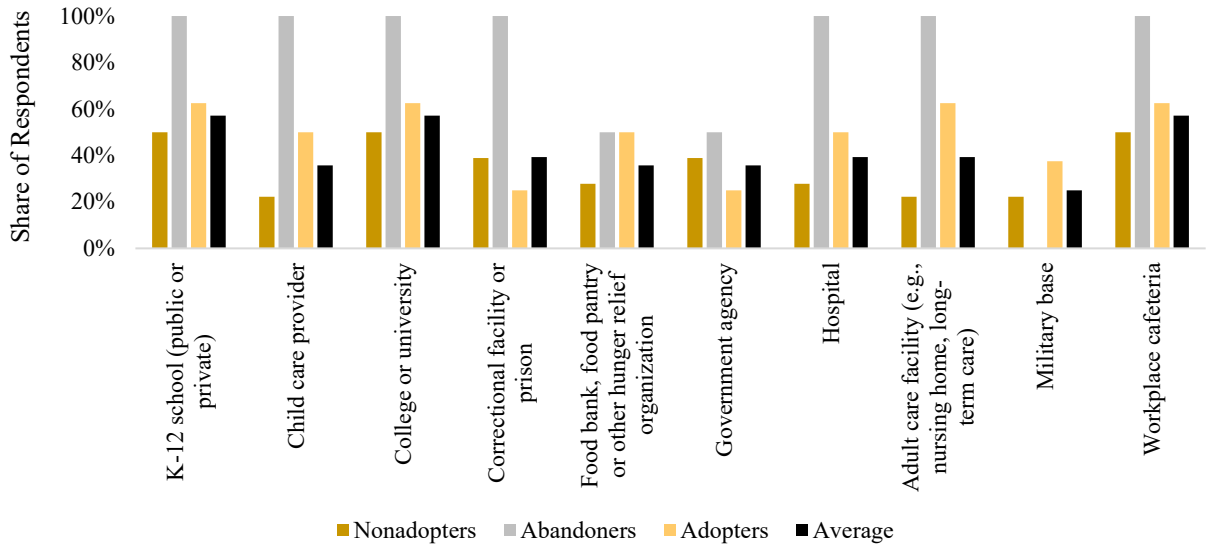


* n = 17 for nonadopters; n = 2 for abandoners; n = 7 for adopters

Question: What types of food products did your farm produce to sell to any market outlet in the year(s) noted?
Source: Missouri Farm to Institution Survey (2021)

To an extent, nonadopters and abandoners expressed interest in selling to institutions in the next three years. Exhibit 1.2.2 presents the percentage of respondents in these segments who said they had such interest and the percentage of adopters who expressed interest in entering a given market or increasing sales to that market. On average, the institutions of greatest interest to all respondents on average were K-12 public or private schools, colleges or universities and workplace cafeterias. Of all individuals who responded to the question, 57% said they had interest in selling food products to these three types of institutions.

Exhibit 1.2.2 – Interest in Selling Food to Institutions in the Next Three Years



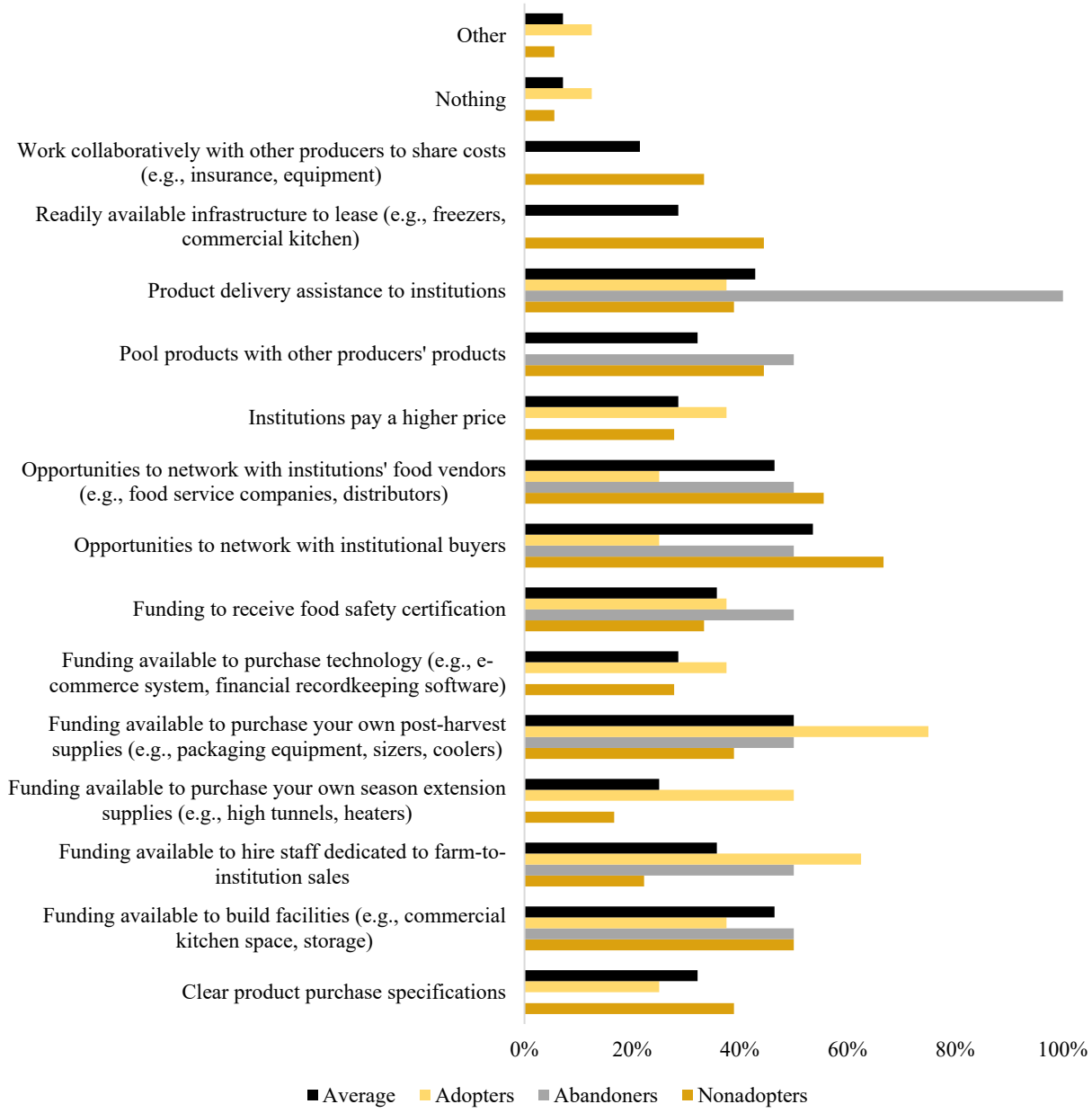
* n = 18 for nonadopters; n = 2 for abandoners; n = 8 for adopters

Question: To which of the following institutions is your farm interested in selling food products in the next three years? Please select all that apply. NOTE: Adopters data represent the sum of respondents who said they had interest in entering a market and those said they had interest in increasing sales in a market

Source: Missouri Farm to Institution Survey (2021)

To encourage farms to sell to institutions, the survey respondents provided ideas about what types of motivators may have the most meaningful impact. Of all respondents, 54% said opportunities to network with institutional buyers would encourage them to consider selling to institutions, consider selling to institutions again or sell more food to institutions. Half of respondents identified funding available to purchase post-harvest supplies (e.g., packaging equipment, sizers, coolers) as a form of encouragement. Other top factors cited to encourage respondents were funding available to build facilities and product delivery assistance. Exhibit 1.2.3 summarizes the responses provided by nonadopters, abandoners and adopters and the aggregate average across the three segments.

Exhibit 1.2.3 – Factors that Would Encourage Farms to Consider Institutional Sales or Sell More to Institutions

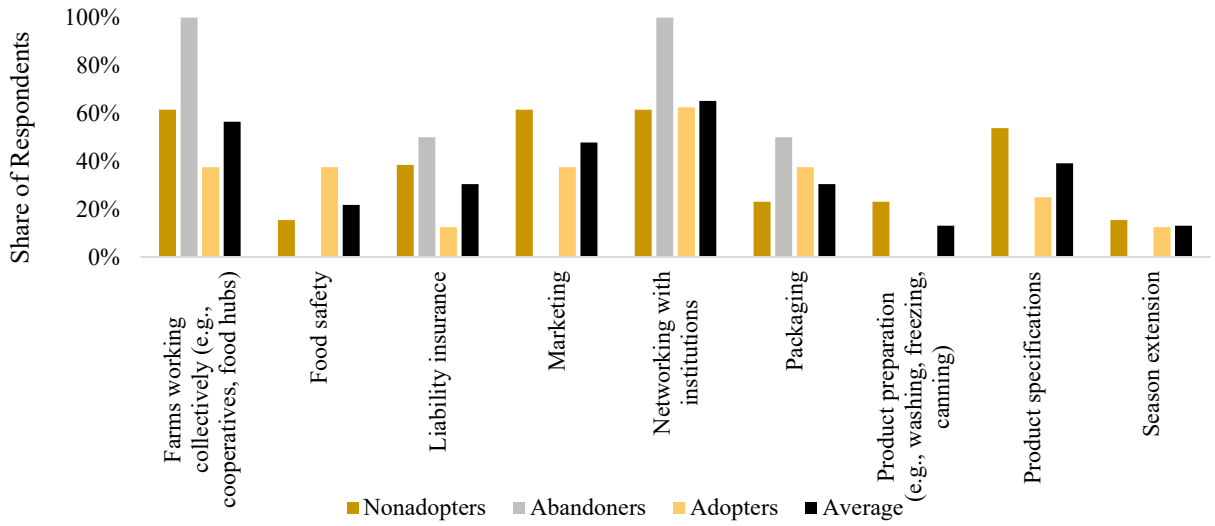


* n = 18 for nonadopters; n = 2 for abandoners; n = 8 for adopters

Question: Which of the following would encourage your farm to CONSIDER SELLING/CONSIDER SELLING AGAIN/CONSIDER SELLING MORE food to institutions? Please mark all that apply.
Source: Missouri Farm to Institution Survey (2021)

Training may also support farms in making institutional sales. At least half of all respondents said they had interest in receiving training on these two subjects: networking with institutions, 65%, and farms working collectively, 57%. Exhibit 1.2.4 articulates the extent to which all respondents said they had interest in various farm-to-institution training topics.

Exhibit 1.2.4 – Interest in Farm-to-Institution Training Topics

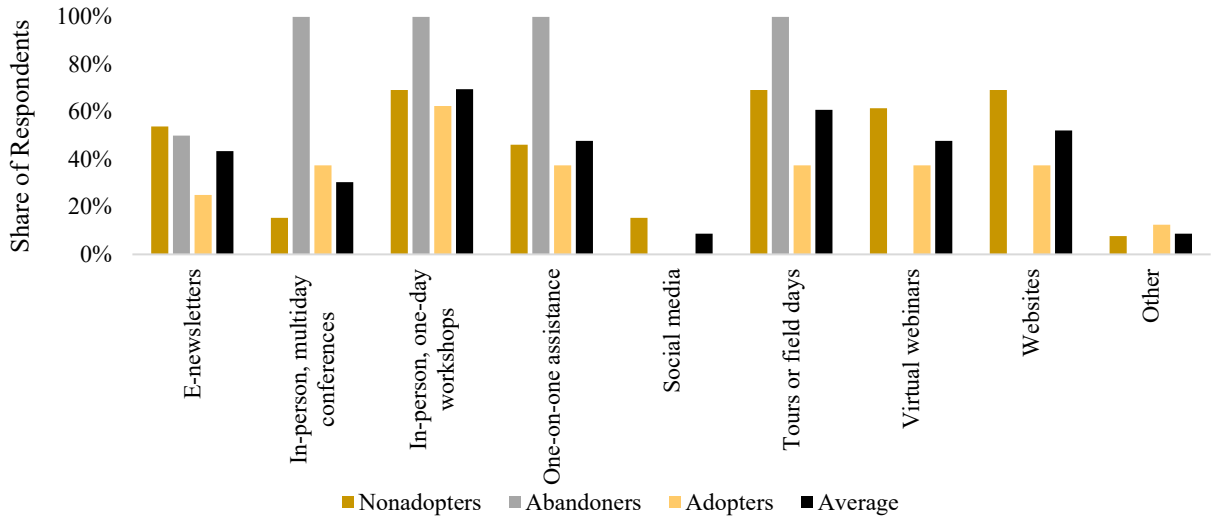


* n = 13 for nonadopters; n = 2 for abandoners; n = 8 for adopters

Question: On which of the following topics would you like to receive training to help your farm participate in farm-to-institution marketing? Please mark all that apply.
Source: Missouri Farm to Institution Survey (2021)

Exhibit 1.2.5 highlights the training formats respondents said they would use to learn about farm-to-institution topics. Seven in 10 said they'd participate in in-person, one-day workshops, and 61% expressed interest in tours or field days. Half selected websites as a training resource they'd access, and just less than half identified interest in one-on-one assistance and virtual webinars.

Exhibit 1.2.5 – Interest in Farm-to-Institution Training Formats

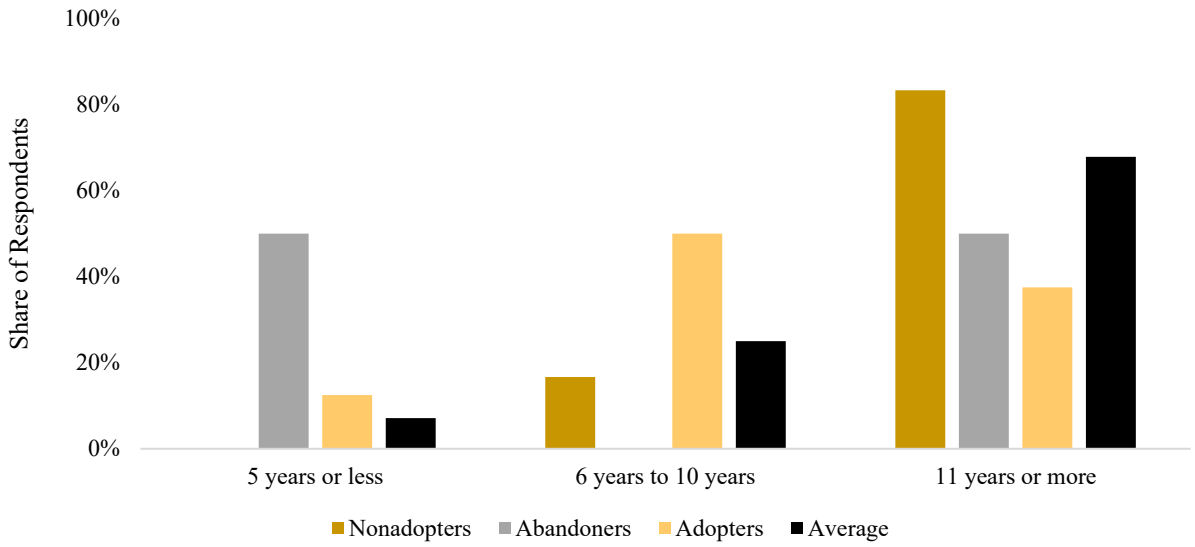


* n = 13 for nonadopters; n = 2 for abandoners; n = 8 for adopters

Question: Which of the following formats would you use to access training on farm-to-institution topics? Please mark all that apply.
Source: Missouri Farm to Institution Survey (2021)

More than half of adopters would be considered beginning farmers because they had no more than 10 years of farming experience. See Exhibit 1.2.6. The average nonadopter, however, had more farming experience. More than 80% of nonadopters had at least 11 years of experience.

Exhibit 1.2.6 – Years of Farming Experience



* n = 18 for nonadopters; n = 2 for abandoners; n = 8 for adopters

Question: How many years have you operated any farm?
Source: Missouri Farm to Institution Survey (2021)

Adopters and abandoners were more likely to say they participate in the Missouri Grown program. Most of the participating farms had gross sales of agricultural products that didn't exceed $100,000. None of the responding nonadopters or abandoners had gross sales of agricultural products that exceeded $100,000 in 2019 or 2020. A small share of adopters, however, did report that they earned more than $100,000 in gross sales of agricultural products.

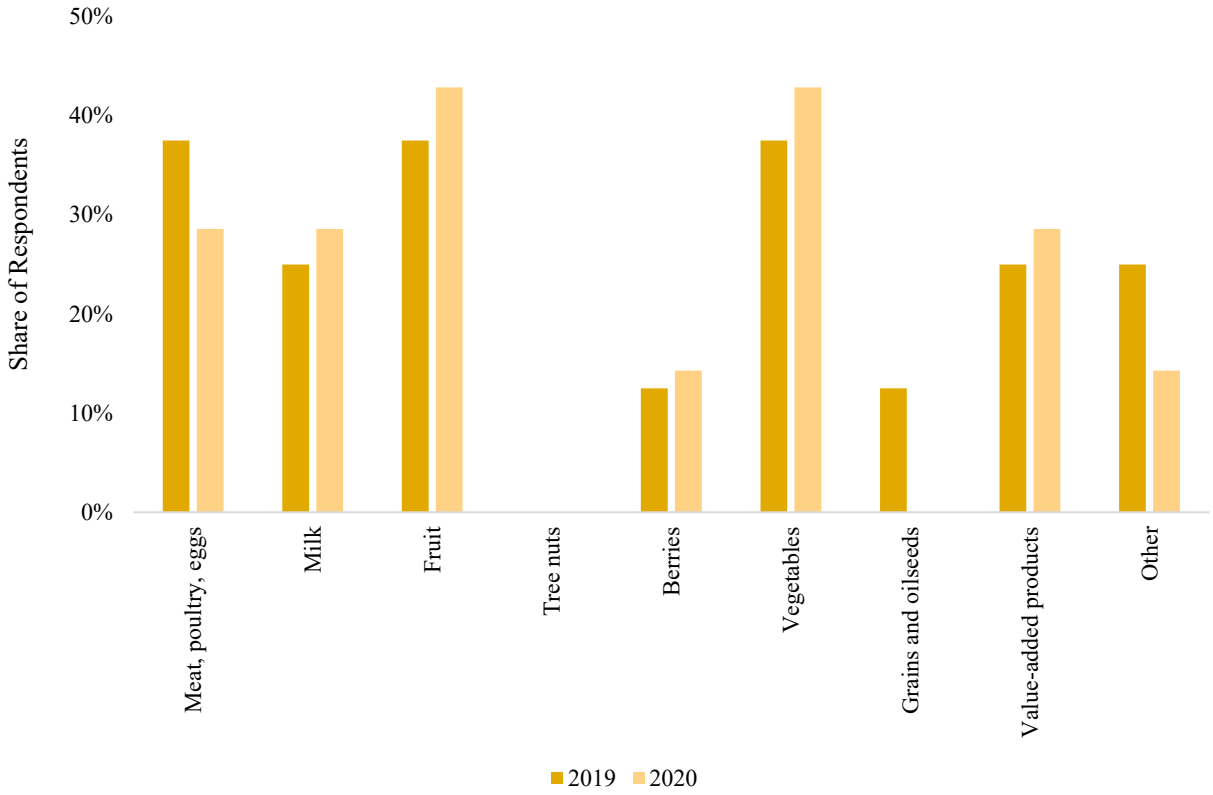
1.3 ADOPTERS

"Adopter" Defined

Farms operated by adopters had sold food products to at least one institution in 2019 and/or 2020.

Adopters — Missouri farms that sold food to at least one institution in 2019 and/or 2020 — produced a variety of products to sell in 2019 and 2020. Exhibit 1.3.1 presents the share of adopters who said they sold various food products to any market outlet. In 2019, the most commonly produced foods that adopters sold were meat, poultry and eggs; fruit; and vegetables. In 2020, adopters most commonly said they sold fruit and vegetables.

Exhibit 1.3.1 – Food Products Sold by Adopters, 2019 and 2020

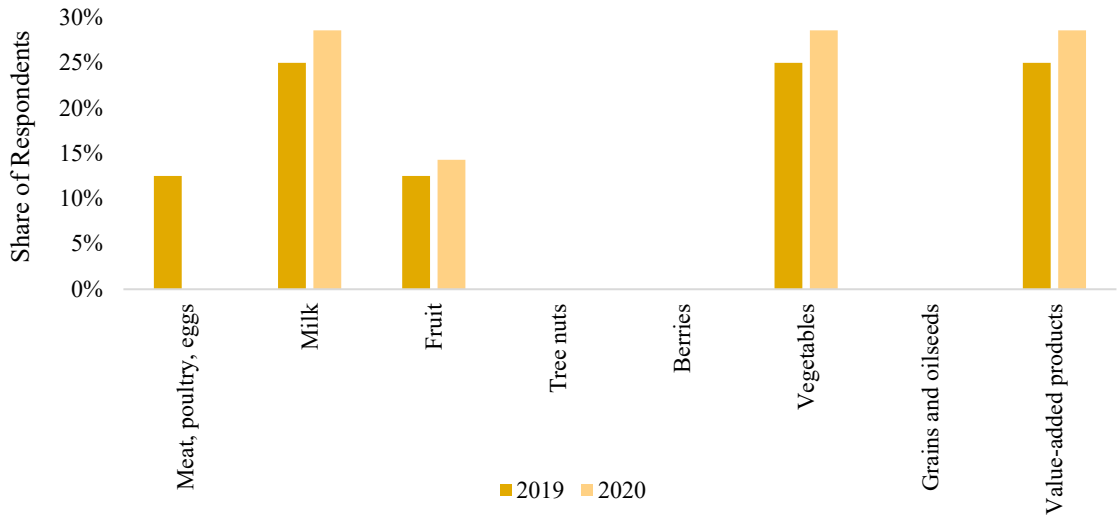


* n = 8 for 2019; n = 7 for 2020

Question: What types of food products did your farm produce to sell to any market outlet in the year(s) noted?
Source: Missouri Farm to Institution Survey (2021)

Three products chiefly contributed to adopters' gross sales in 2019 and 2020. Exhibit 1.3.2 reports the share of adopters who said various farm products contributed the most to their farms' gross sales in a given year. Adopters were most likely to name milk, vegetables or value-added products as the predominant contributors to their farms' gross sales.

Exhibit 1.3.2 – Products Contributing Most to Adopters' Gross Farm Sales, 2019 and 2020

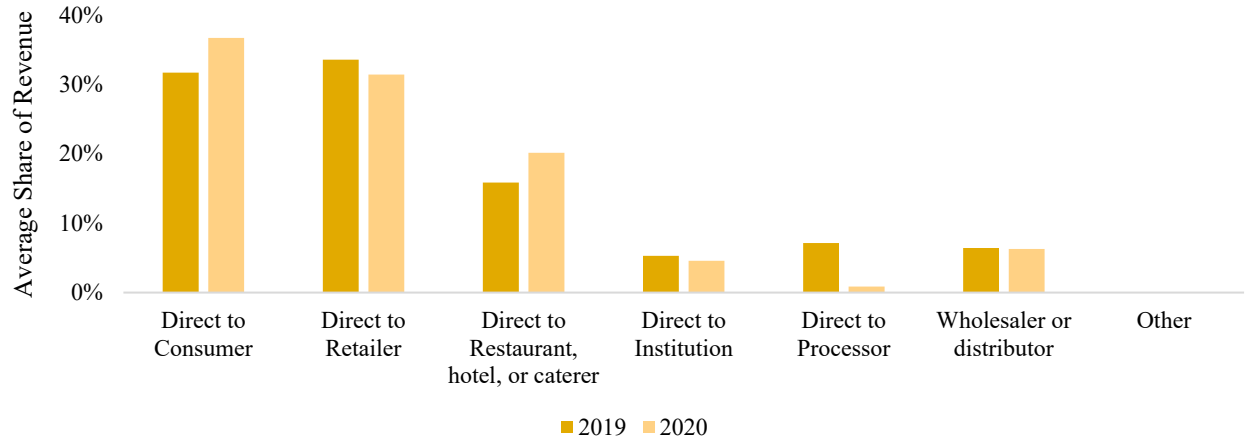


* n = 8 for 2019; n = 7 for 2020

Question: Of the products your farm produced to sell to any market outlet in 2019, which contributed the most to your farm's gross sales?
Source: Missouri Farm to Institution Survey (2021)

Respondents who identified as adopters sold products through a variety of market outlets. Exhibit 1.3.3 indicates that direct-to-consumer and direct-to-retailer market outlets contributed the most to adopters' agricultural product revenue in 2019 and 2020. Direct-to-institution sales were steady between the two years. They averaged 5% of total agricultural product revenue.

Exhibit 1.3.3 – Average Share of Total Agricultural Product Revenue Generated by Market Outlet, 2019 and 2020



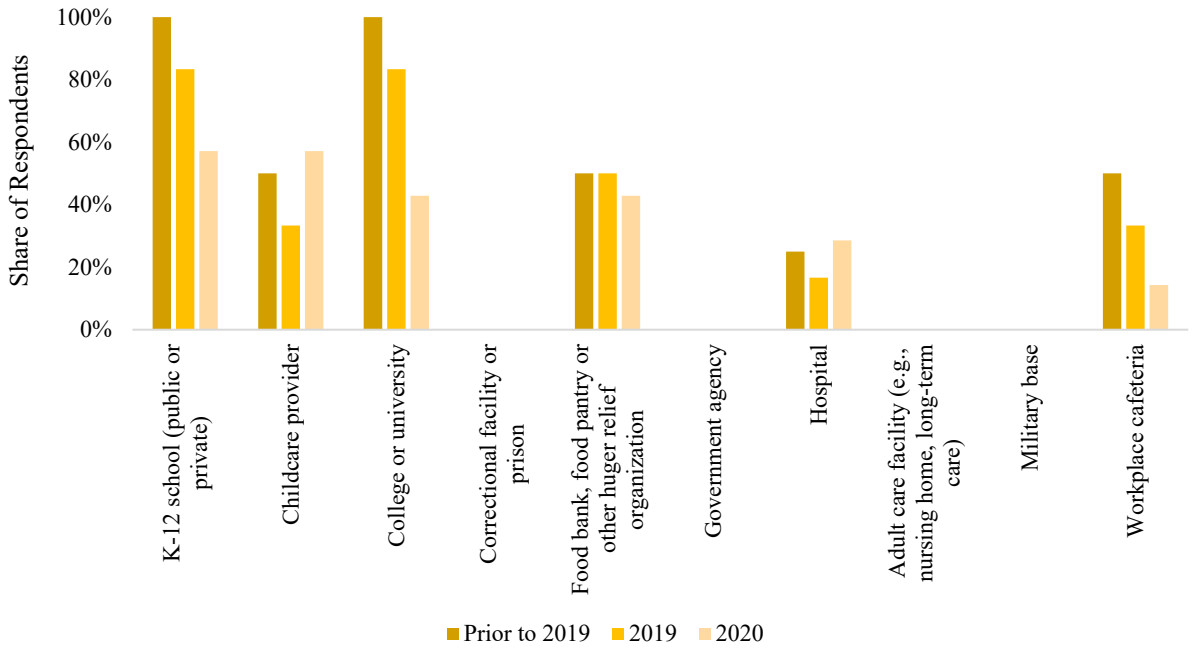
* n = 7 for 2019; n = 7 for 2020

Question: Of the total agricultural product revenue your farm collected in 2019/2020, what percentage was generated from the following market outlets? The total must add to 100.
Source: Missouri Farm to Institution Survey (2021)

To understand the types of institutions that adopters had served, respondents selected the institutions they reached before 2019 and during 2019 and 2020. Of the four respondents who provided responses about institutional sales before 2019, all had sold food products to K-12 public or private schools and colleges or universities. The share of respondents serving these types of institutions declined in 2019 and 2020; six and seven respondents, respectively, reported institutions where they sold food products in those two years. The incidence of selling to workplace cafeterias also declined. See Exhibit 1.3.4. This weakening participation in 2020 may be attributed to the COVID-19 pandemic, which caused institutions such as schools, colleges and workplaces to close during lockdown periods.

The share of respondents who reported selling food to hospitals stayed relatively consistent during the three time periods noted. In 2020, a greater share of adopters said they sold food products to childcare providers compared with 2019. Adopters didn't indicate having previous experience with selling food products to correctional facilities, government agencies, adult care facilities or military bases.

Exhibit 1.3.4 – Institutions Where Adopters Sold Food Products



* n = 4 for prior to 2019; n = 6 for 2019; n = 7 for 2020; "n" represents the number of adopters who reported selling to at least one institution in the time period noted

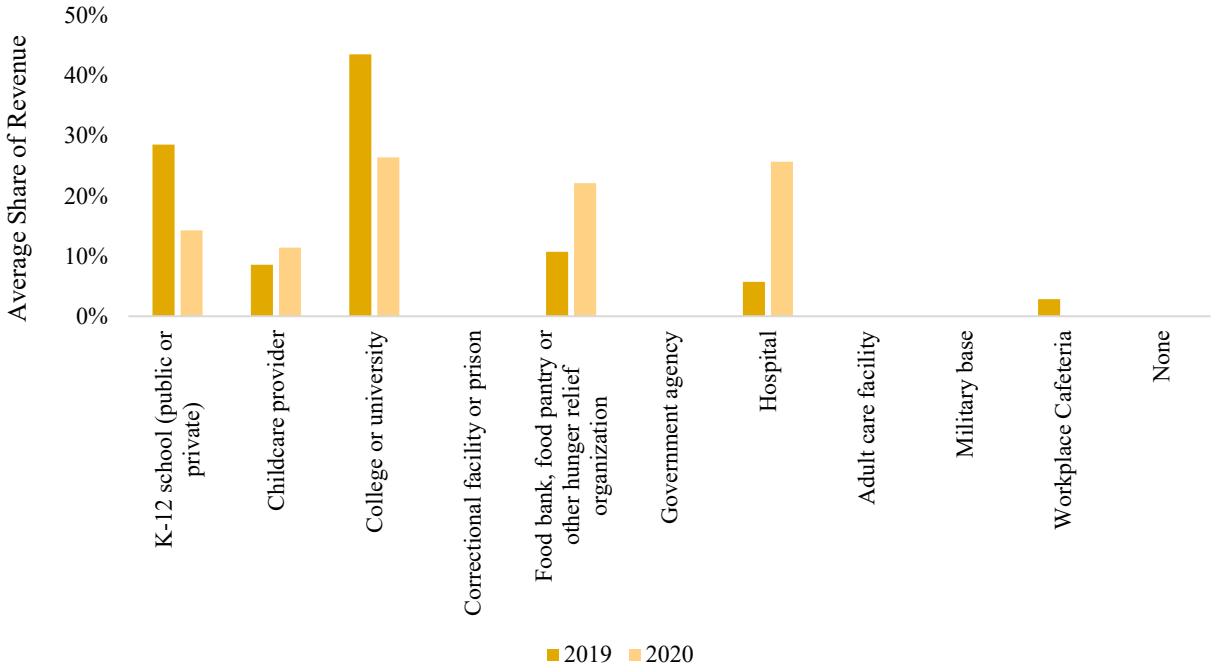
Question: To which of the following institutions did your farm sell food products in the year(s) noted? Please select all that apply.
Source: Missouri Farm to Institution Survey (2021)

In 2019, adopters most significantly relied on institutional sales to colleges and universities and K-12 public and private schools. Exhibit 1.3.5 communicates the average share of institutional sales attributed to 10 institutional markets. Compared with 2019, institutional sales in 2020 were more diversified. Of the revenue they collected from institutions, adopters earned more from

hospitals and food banks, food pantries and other hunger relief organizations in 2020 than they did in 2019. Farms also reported slightly greater sales to childcare providers in 2020.

Again, lockdowns during the COVID-19 pandemic may have stimulated at least some of the institutional sales shift observed in the chart. Many schools and colleges closed or significantly reworked food service programs during the pandemic. Hospitals and food banks, food pantries and other hunger relief organizations may have served food to more clients during the pandemic.

Exhibit 1.3.5 –Institutional Food Product Sales by Institution Type, 2019 and 2020



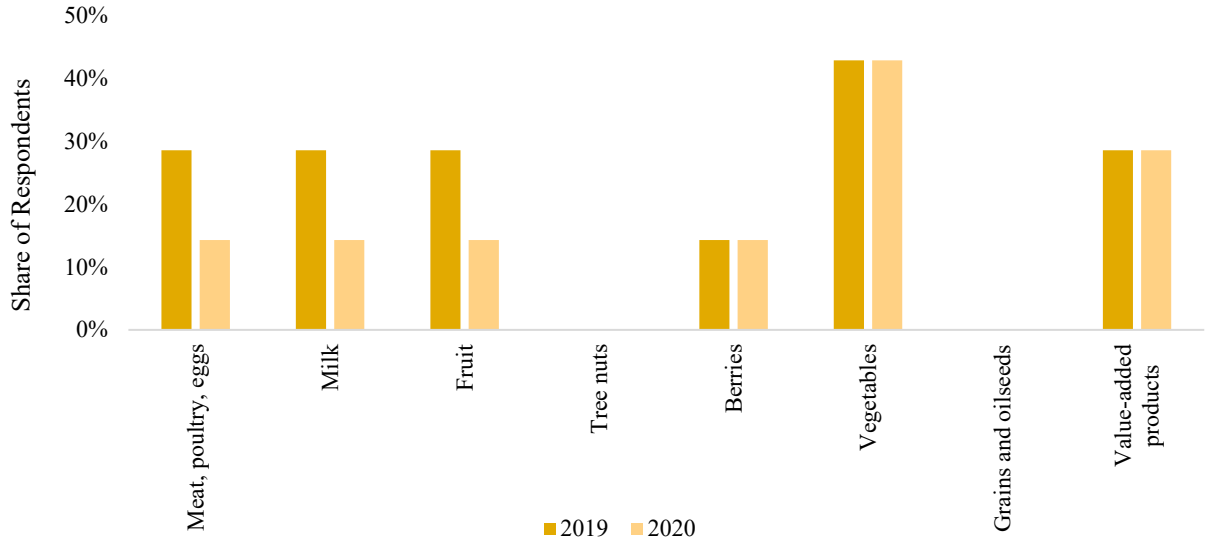
* n = 7 for 2019; n = 7 for 2020

Question: Of your farm's revenue collected from institutions in 2019 or 2020, what percentage was generated from the following institutions. The total must add to 100.
Source: Missouri Farm to Institution Survey (2021)

When selling food products to institutions, adopters largely didn't secure contracts or preseason commitments between their farms and institutional buyers. None of the seven adopters providing a response for 2020 said they had contracts or preseason commitments with institutions. In 2019, one respondent said 15% of his or her food sales generated from institutions were linked to a contract or preseason commitment. Additionally, few respondents sold "seconds" to institutions. Seconds include overripe fruit, very small eggs and misshapen vegetables.

Exhibit 1.3.6 presents that adopters most commonly sold vegetables to institutions in 2019 and 2020. Adopters' sales to institutions were slightly less diversified in 2020 than 2019 in terms of the types of products they sold — as shown by a smaller share of adopters saying that they sold meat, poultry and eggs; milk; and fruit to institutions in 2020 compared with 2019. The share of respondents selling berries, vegetables and value-added products to institutions experienced no change between 2019 and 2020.

Exhibit 1.3.6 – Food Products Adopters Sold to Institutions, 2019 and 2020

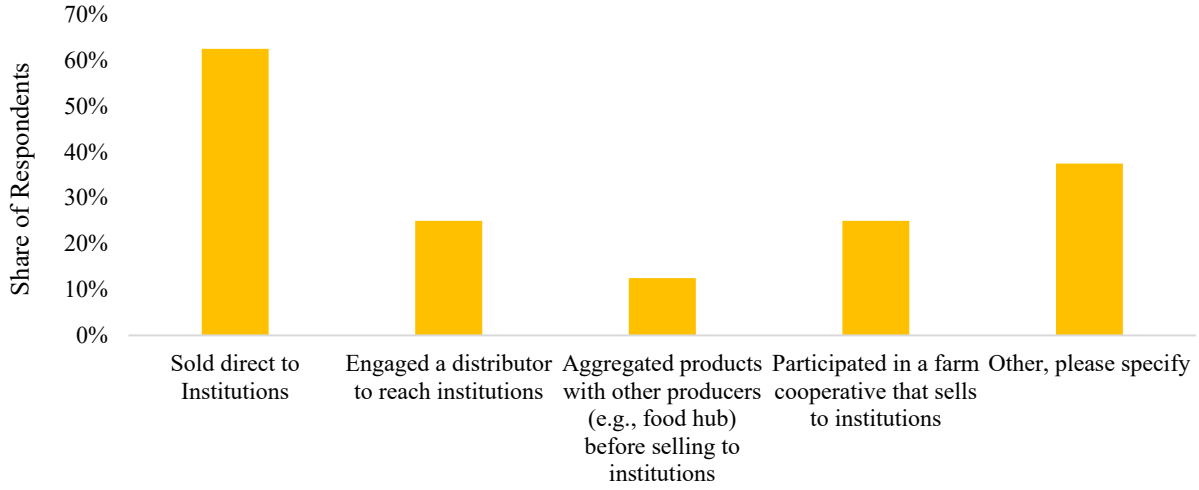


* n = 7 for 2019; n = 7 for 2020

Question: What types of food products did your farm sell to institutions in the year(s) noted? Please mark all that apply.
Source: Missouri Farm to Institution Survey (2021)

In terms of how adopters said they reached institutions, 63% said they had at some point sold food products directly to institutions. Relatively few adopters had worked with a distributor or farm cooperative to sell food products to institutions. Exhibit 1.3.7 displays the extent to which adopters had pursued certain pathways to reach institutional markets.

Exhibit 1.3.7 – Pathways Adopters Had Ever Used to Reach Institutional Markets

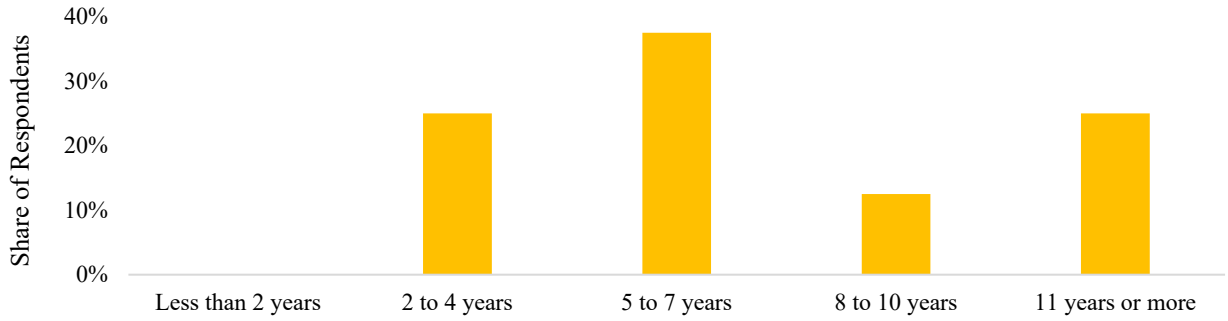


* n = 8

Question: Which of the following describes how your farm has ever reached institutional markets?
Source: Missouri Farm to Institution Survey (2021)

The adopters who responded to the survey have a history of working with institutions. Exhibit 1.3.8 illustrates that all of the responding adopters had served institutions for at least two years. Three-quarters of these adopters had at least five years of institutional sales experience.

Exhibit 1.2.8 – Years of Experience Selling Food to Institutions

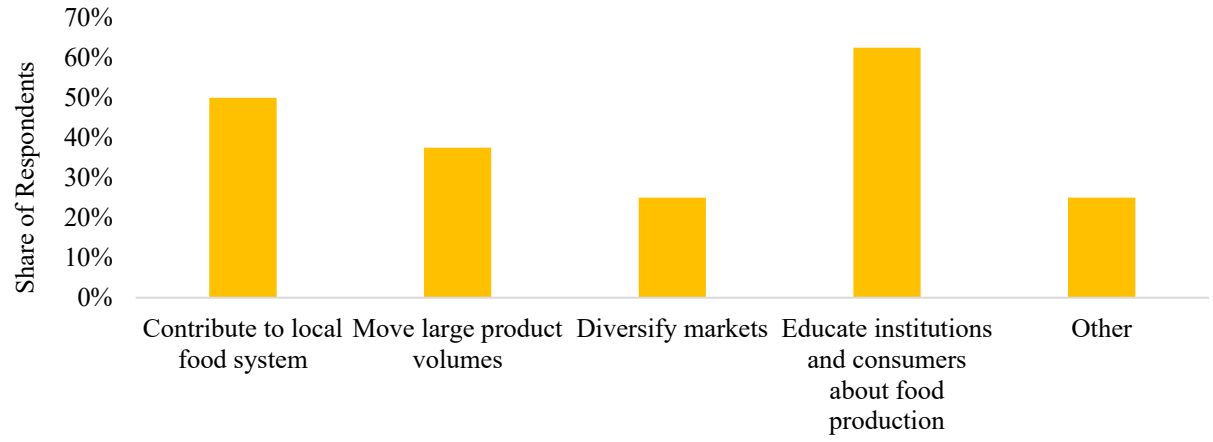


* n = 8

Question: For how many years total – not necessarily consecutively – has your farm sold food products to institutions?
Source: Missouri Farm to Institution Survey (2021)

Adopters identified two factors as the leading reasons to sell food products to institutions. For 63% of adopters, educating institutions and consumers about food production motivated them. Half indicated they sell to institutions to contribute to their local food systems. Exhibit 1.3.9 summarizes the share of respondents who selected other reasons. Slightly more than one-third viewed selling food to institutions as an opportunity to move large product volumes. One-quarter said institutional sales allow them to diversify markets. Comments submitted as write-in "other" responses mentioned sustainability and fulfilling Missouri Farm to Table grant requirements.

Exhibit 1.3.9 – Reasons for Selling Food to Institutions

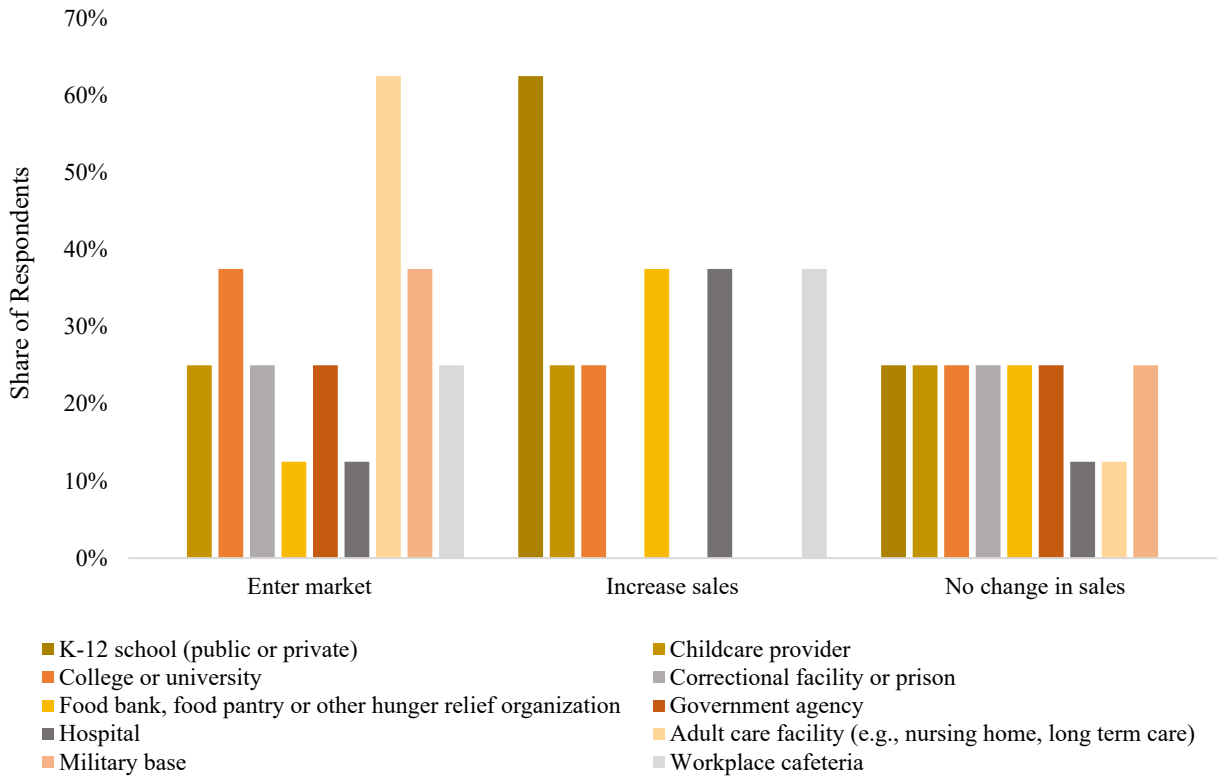


* n = 8; no respondents selected the following reasons as motivators for selling food to institutions: receive a consistent price, earn a fair price, secure contracts to know volumes in advance, decrease marketing costs and reduce product delivery costs

Question: Why does your farm sell food products to institutions?
Source: Missouri Farm to Institution Survey (2021)

The survey also asked adopters to describe their future outlook for farm-to-institution sales. Looking forward, the largest share of respondents expressed interest in entering into sales with adult care facilities such as nursing homes and long-term care facilities. In the next three years, more than half of responding adopters said they had interest in entering into this institutional market. See Exhibit 1.3.10. In terms of the institutional market where adopters indicated the greatest interest in increasing sales, 63% of respondents said they'd like to increase farm-to-school sales in the next three years. Note, no respondents said they'd like to decrease sales in a certain institutional market outlets or exit any institutional markets.

Exhibit 1.3.10 – Adopters' Interest in Pursuing Different Institutional Markets in the Next Three Years

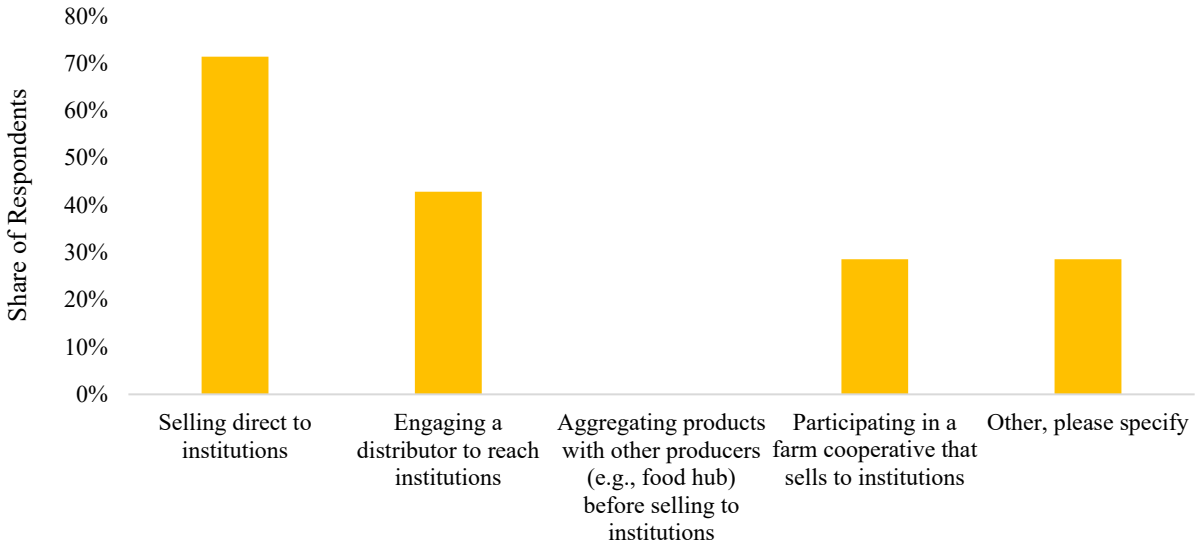


* n = 8

Question: In the next three years, what's your farm's outlook for food product sales to institutions?
Source: Missouri Farm to Institution Survey (2021)

With respect to the pathway that adopters had the most interest in pursuing to reach institutions in the next three years, nearly three-quarters selected direct sales to institutions. See Exhibit 1.3.11. Of the seven responding adopters, 43% said they had interest in engaging a distributor to reach institutional markets. Fewer adopters expressed interest in farm cooperative participation. None of the adopters said they had interest in aggregating their product with other products' goods — like would be the case if operating a food hub.

Exhibit 1.3.11 – Adopters' Interest in Pursuing Different Pathways to Reach Institutional Markets in the Next Three Years



* n = 7

Question: In the next three years, which of the following pathways are you interested in pursuing to reach institutional markets?
Source: Missouri Farm to Institution Survey (2021)

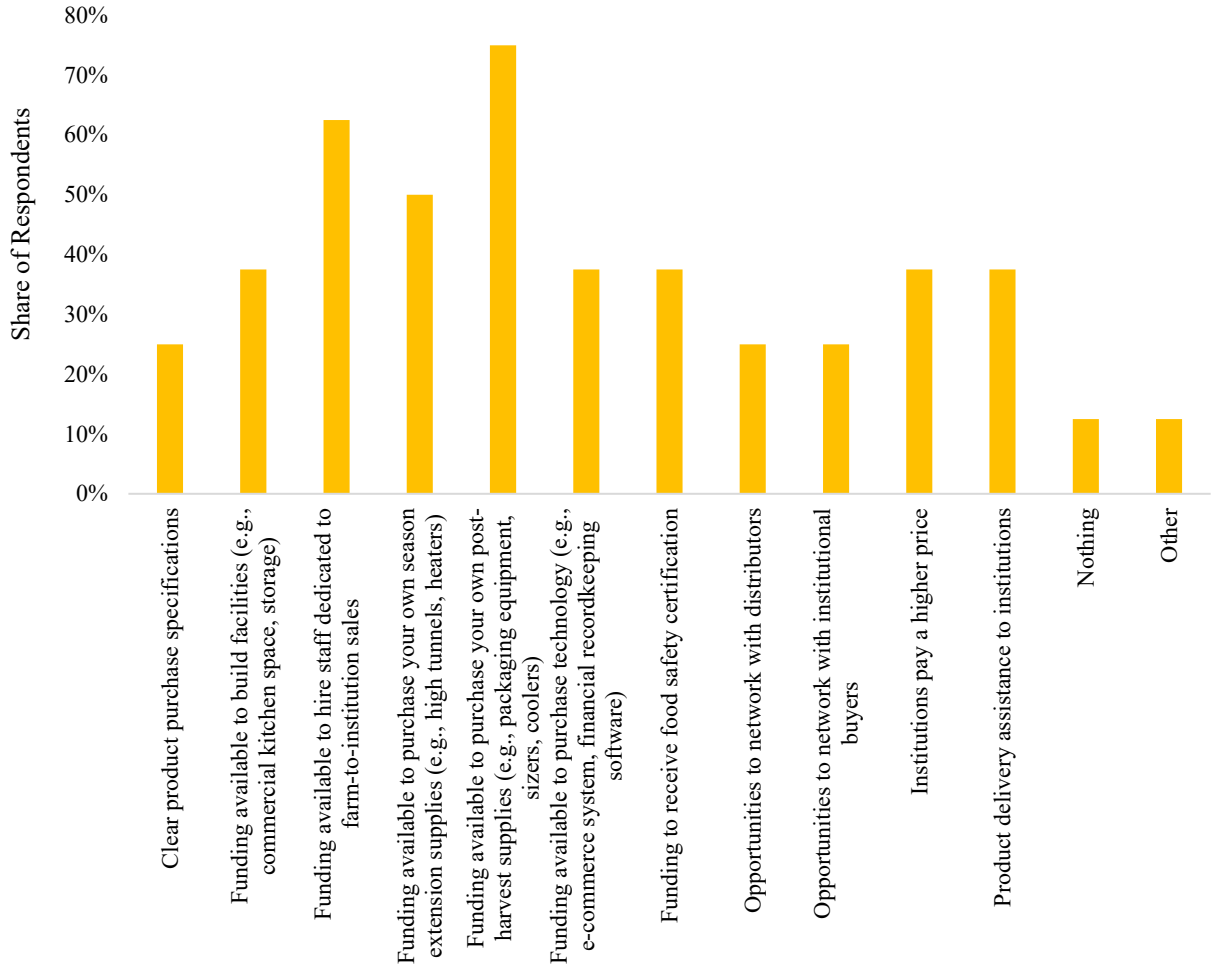
Adopters who responded to the survey selected several factors that would encourage them to sell more food to institutions. At least half of adopters named three factors as those that would facilitate more farm-to-institution activity. All three tie to funding availability.

- Funding available to purchase your own post-harvest supplies (e.g., packaging equipment, sizers, coolers), 75%
- Funding available to hire staff dedicated to farm-to-institution sales, 63%
- Funding available to purchase your own season extension supplies (e.g., high tunnels, heaters), 50%

Fewer respondents selected other items such as product delivery assistance and funding available to build facilities as forms of assistance that would drive more farm-to-institution sales. Exhibit 1.3.12 presents the share of adopters who expressed interest in other types of support meant to drive farm-to-institution sales.

Supplier directories can serve as a resource that connects farms and institutions and facilitates sales opportunities. Of the eight adopters who responded to the question, 88% of adopters said they had interest in listing their farms in a farm-to-institution supplier directory.

Exhibit 1.3.12 – Factors that Would Encourage Adopters to Sell More Food to Institutions



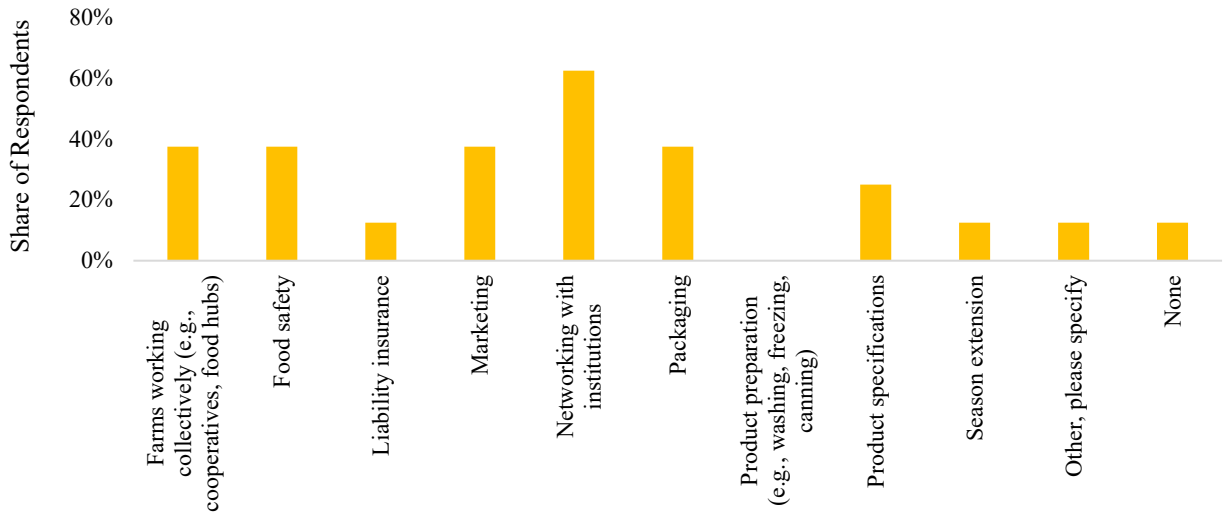
* n = 8; no respondents selected the following factors that would encourage them to sell more food to institutions: pool products with other producers' products, readily available infrastructure to lease (e.g., freezers, commercial kitchens) and work collaboratively with other producers to share costs (e.g., insurance, equipment)

Question: Which of the following would encourage your farm to consider selling more food to institutions?
Source: Missouri Farm to Institution Survey (2021)

Training programs may provide some farms with the knowledge and skills that could help to market more food products to institutions. Exhibit 1.3.13 lists potential training topics and the share of adopters who said they'd like to receive training on those topics. Networking with institutions ranked as the top training topic of interest to farms. Nearly two-thirds of adopters said they viewed networking with institutions as a training topic that could help their farms participate in farm-to-institution marketing. Four topics tied for second place as 38% of respondents indicated interest in these topics: farms working collectively (e.g., cooperatives, food hubs), food safety, marketing and packaging.

The "other" response provided to this question mentioned that institutions may have greater training needs than producers. Other training ideas noted by this respondent included how to make wholesale work and how to maximize yield and shelf life.

Exhibit 1.3.13 – Farm-to-Institution Training Topics of Interest to Adopters

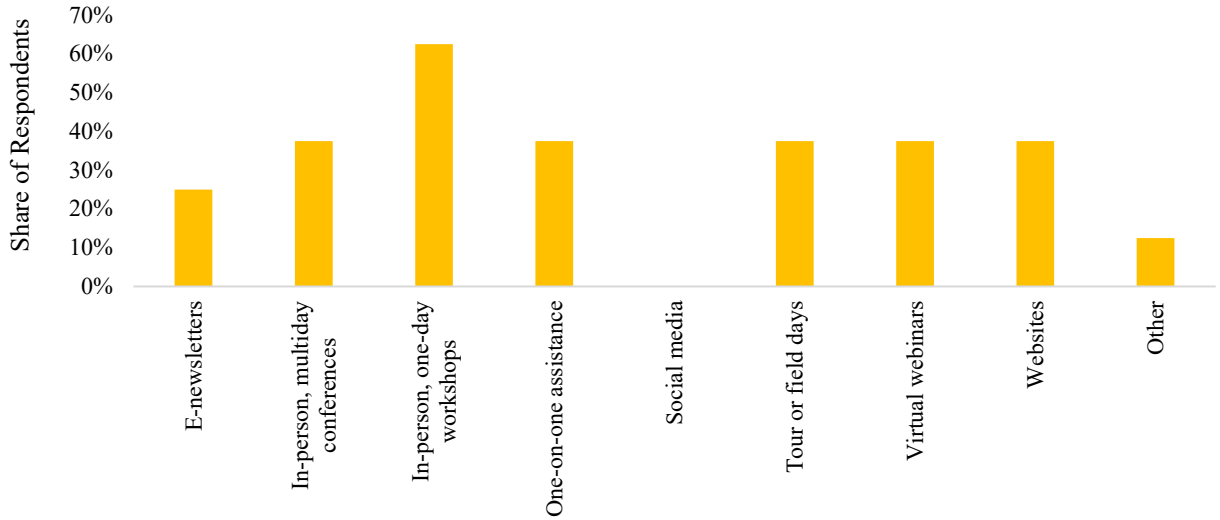


* n = 8

Question: On which of the following topics would you like to receive training to help your farm participate in farm-to-institution marketing?
Source: Missouri Farm to Institution Survey (2021)

The training format of greatest interest to adopters are in-person, one-day workshops. More than 60% of respondents said they would use such workshops to access training on farm-to-institution topics. Five training formats interested 38% of adopters: in-person, multiday conferences; one-on-one assistance; tour or field days; virtual webinars; and websites. See Exhibit 1.3.14. Note, no respondents selected social media as a format they'd access for farm-to-institution training.

Exhibit 1.3.14 – Farm-to-Institution Training Formats of Interest to Adopters

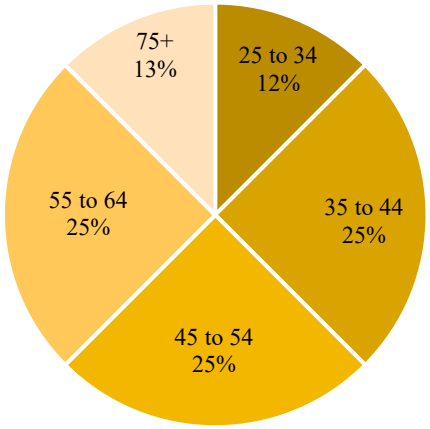


* n = 8

Question: Which of the following formats would you use to access training on farm-to-institution topics?
Source: Missouri Farm to Institution Survey (2021)

Three-quarters of the responding adopters were females, and three-quarters said their farms participate in the Missouri Grown program. More than half reported they had fewer than 10 years of farming experience. Thus, they are beginning farmers, according to USDA. Exhibit 1.3.15 illustrates the age distribution of responding adopters. Half of adopters were 35- to 54-year-olds. Additionally, 38% of adopters were at least 55 years old.

Exhibit 1.3.15 – Age Distribution of Responding Adopters

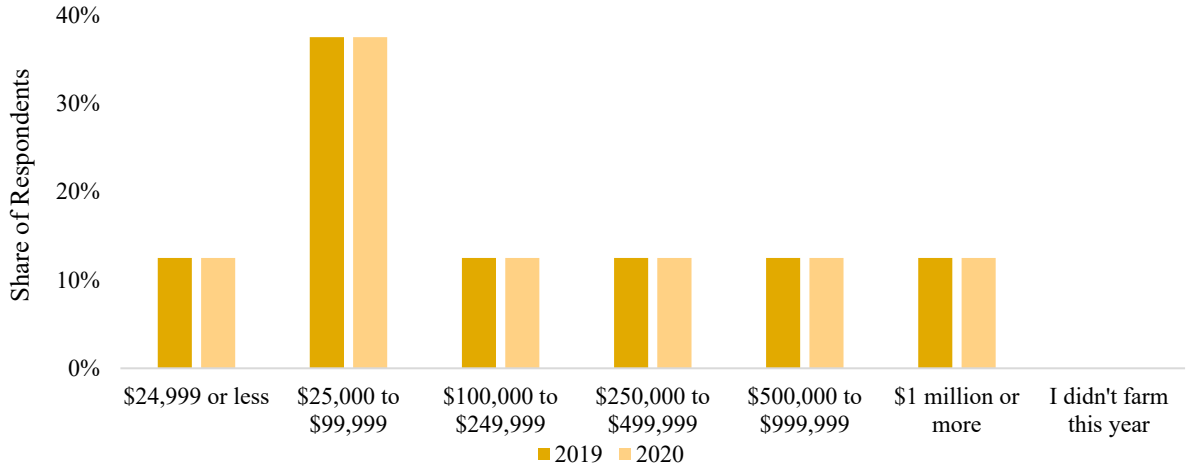


* n = 8

Question: What is your age?
Source: Missouri Farm to Institution Survey (2021)

Half of responding adopters said their farms' gross sales of agricultural products didn't exceed $100,000 in 2019 and 2020. Exhibit 1.3.16 details the gross sales of agricultural products data. The other half of adopters reported more wide-ranging gross sales of agricultural products.

Exhibit 1.2.16 – Adopter Average Gross Sales of Agricultural Products



* n = 8

Question: Which of the following categories best reflects your farm's average gross sales of agricultural products in 2019 and 2020?
Source: Missouri Farm to Institution Survey (2021)

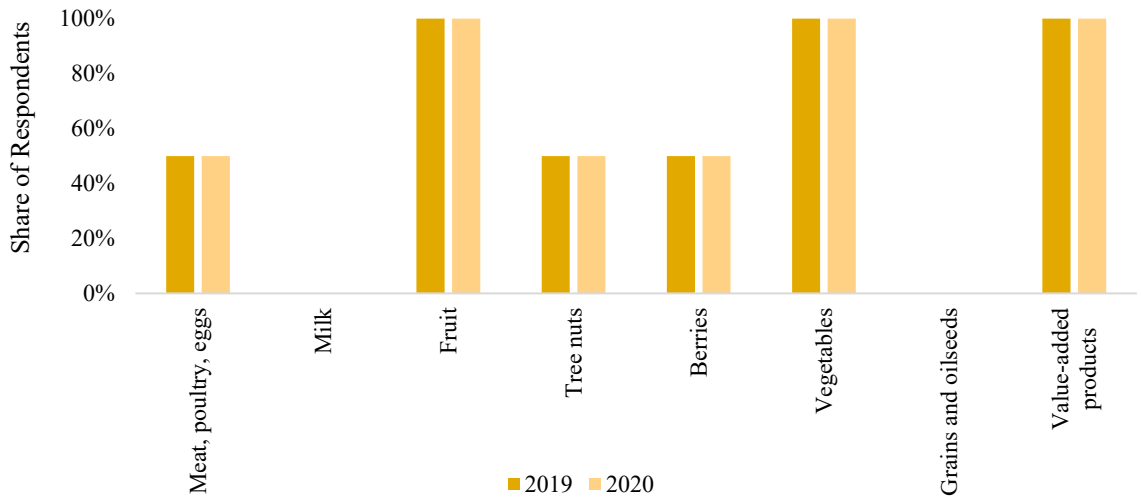
1.4 ABANDONERS

"Abandoner" Defined

Farms operated by abandoners had sold food products to at least one institution but didn't sell to any institutions in 2019 or 2020.

Of the 28 respondents who had survey responses analyzed, two reported being abandoners who had sold food to at least one institution at some point but not in 2019 or 2020. The two operations these respondents represented were diversified in terms of the food products they sold to any market outlet in 2019 and 2020. Exhibit 1.4.1 illustrates that both farms produced fruits, vegetables and value-added products in 2019 and 2020. In both years, the two abandoners said vegetable sales contributed the most to their farms' annual gross sales. These farms also reported experience selling meat, poultry and eggs; tree nuts; and berries.

Exhibit 1.4.1 – Food Products Abandoners Sold to Any Market Outlet, 2019 and 2020



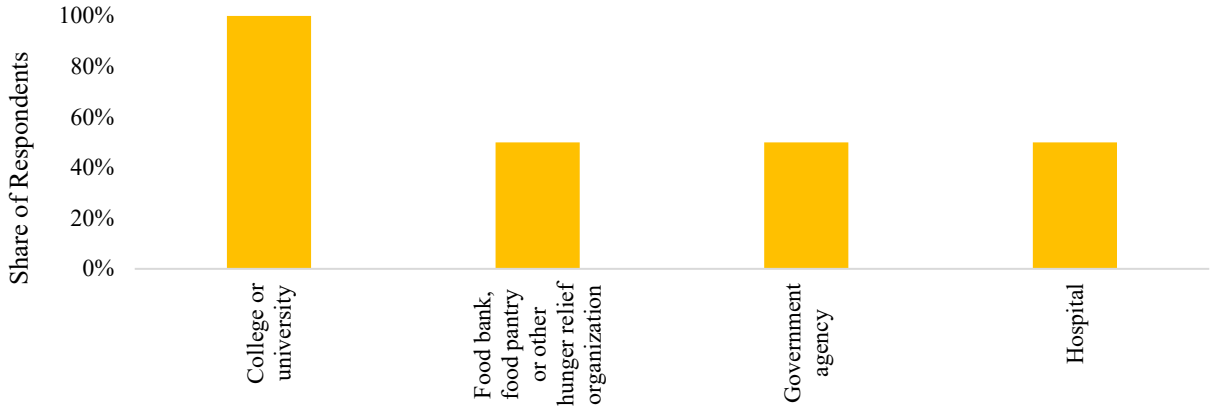
* n = 2 for 2019 and 2020

Question: What types of food products did your farm produce to sell to any market outlet in the year(s) noted? Please mark all that apply.
Source: Missouri Farm to Institution Survey (2021)

Both abandoners relied heavily on direct-to-consumer marketing arrangements. During 2019 and 2020, the two abandoners said they earned at least 90% of their total agricultural product revenue from direct-to-consumer sales. They generated other revenue through direct sales to restaurants, hotels or caterers. In the past, though, the abandoners had sold food products to varied institutions. Exhibit 1.4.2 presents the share of abandoners who said their farms had sold food to certain institutions at some point in the past.

Abandoners' farms had sold vegetables to these institutions, and they both had sold food to institutions for less than two years. To reach institutions, abandoners sold food directly to those institutional markets. At most, institutional sales represented less than 20% of one abandoner's annual food product sales. For the other abandoner, institutional sales had represented as much as 20% to 39% of their farm's annual food product sales.

Exhibit 1.4.2 – Institutions Where Abandoners Had Sold Food Products



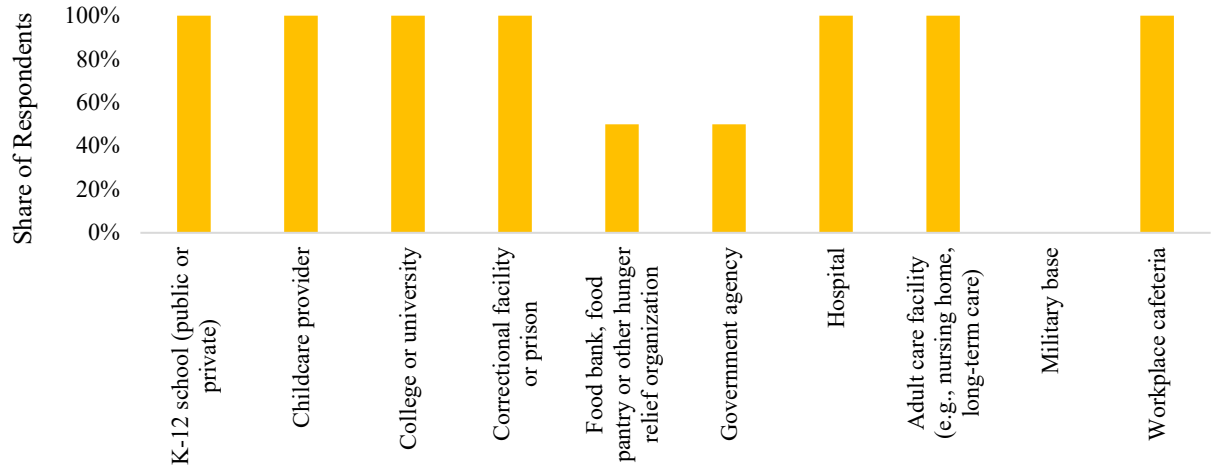
* n = 2

Question: To which of the following institutions has your farm ever sold food products? Please mark all that apply.
Source: Missouri Farm to Institution Survey (2021)

One abandoner provided input about why his or her farm stopped selling food products to institutions. The respondent cited two reasons: institutions bought too little, and institutions weren't interested in developing long-term relationships with farms.

The two abandoners expressed interest in resuming sales to institutions, and they named several types of institutions as market opportunities that they had interest in serving during the next three years. Exhibit 1.4.3 shows both abandoners had interest in selling to K-12 public or private schools, childcare providers, colleges or universities, correctional facilities or prisons, hospitals, adult care facilities (e.g., nursing homes, long-term care facilities) and workplace cafeterias.

Exhibit 1.4.3 – Institutions Abandoners Said They Had Interest in Serving in the Next Three Years

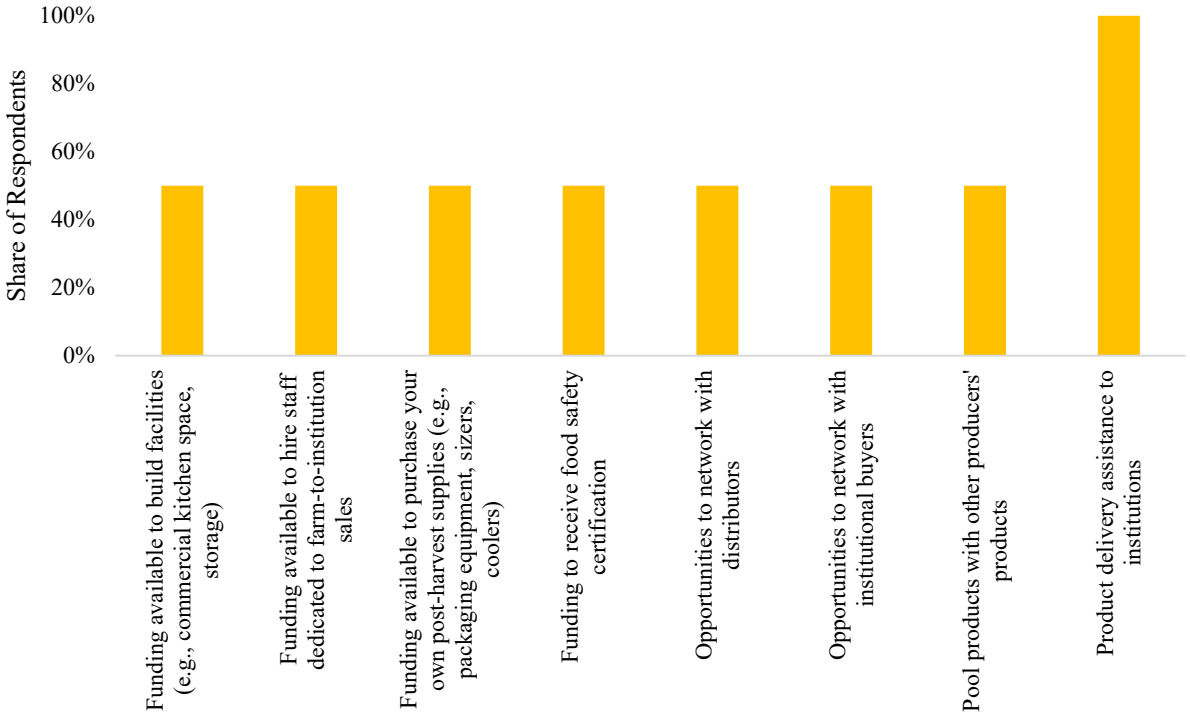


* n = 2

Question: To which of the following institutions is your farm interested in selling food products in the next three years? Please mark all that apply.
Source: Missouri Farm to Institution Survey (2021)

Exhibit 1.4.4 highlights factors that abandoners said would cause them to reconsider selling food to institutions. Both said product delivery assistance to institutions would encourage them to reconsider selling to institutions. Other factors named were funding available to build facilities, funding available to hire staff, funding available to purchase post-harvest supplies, funding to receive food safety certification, opportunities to network with distributors, opportunities to network with institutional buyers and pooling products with other producers' products.

Exhibit 1.4.4 – Factors That Would Encourage Abandoners to Reconsider Selling Food Products to Institutions

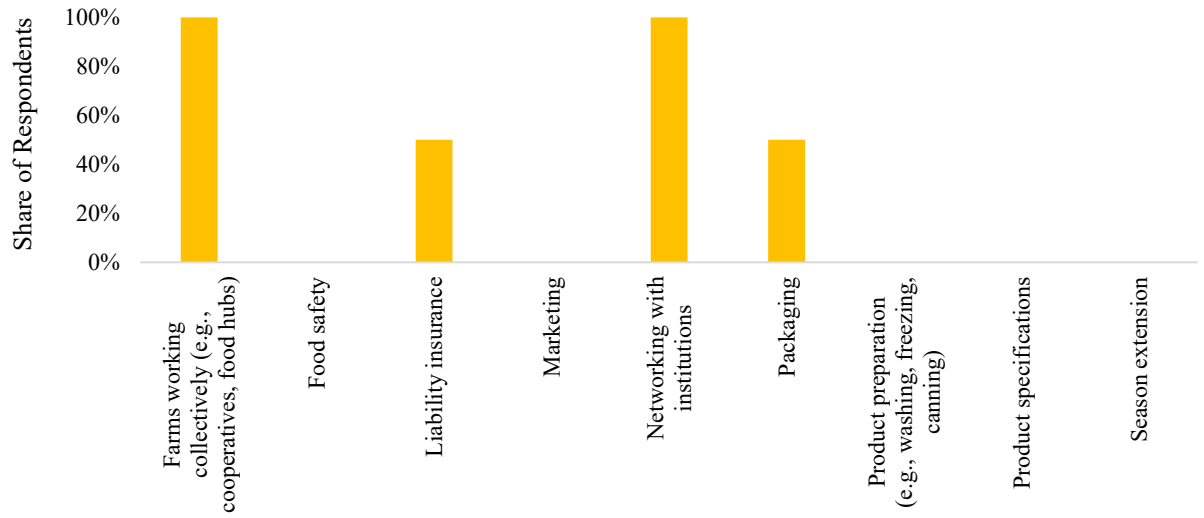


* n = 2; factors not named by any abandoners were as follows: clear product purchase specifications, funding available to purchase your own season extension supplies (e.g., high tunnels, heaters), funding available to purchase technology (e.g., e-commerce system, financial recordkeeping software), institutions pay a higher price, readily available infrastructure to lease (e.g., freezers, commercial kitchen), work collaboratively with other producers to share costs (e.g., insurance, equipment) and nothing.

Question: Which of the following would encourage your farm to consider selling food to institutions again? Please mark all that apply.
Source: Missouri Farm to Institution Survey (2021)

Abandoners cited some interest in participating in training that would help them with farm-to-institution marketing. Exhibit 1.4.5 lists specific training topics and the share of abandoners who had interest in participating in training on each topic. Both named farms working collectively and networking with institutions as interest areas. Liability insurance and packaging were also noted as training topics of interest to abandoners.

Exhibit 1.4.5 – Farm-to-Institution Training Topics of Interest to Abandoners

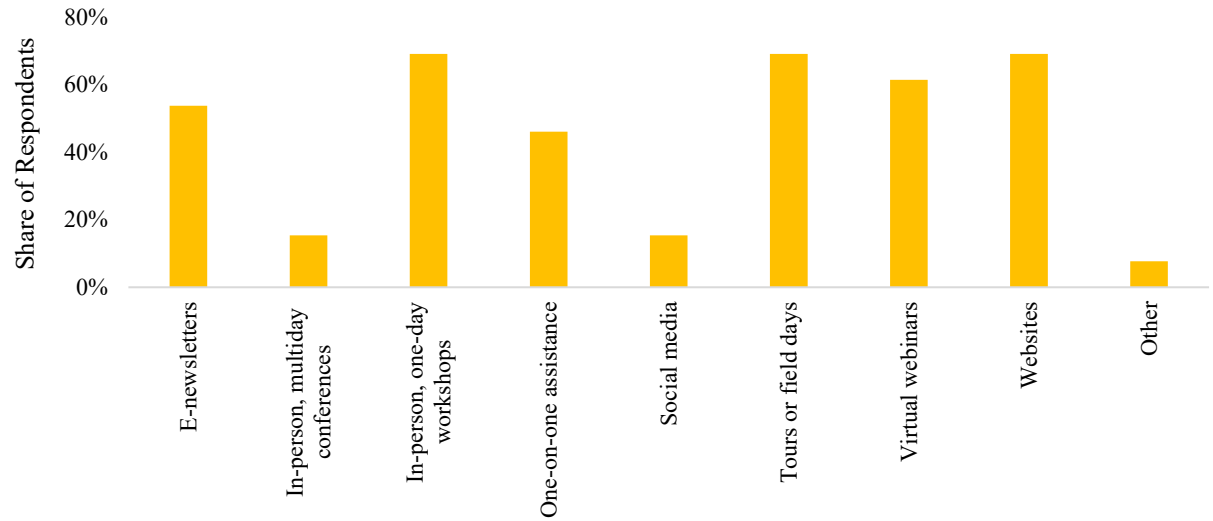


* n = 2

Question: On which of the following topics would you like to receive training to help your farm participate in farm-to-institution marketing? Please mark all that apply.
Source: Missouri Farm to Institution Survey (2021)

The formats that abandoners would most prefer for farm-to-institution training are in-person, multiday conferences; in-person, one-day workshops; one-on-one assistance; and tours or field days. Exhibit 1.4.6 reports that both abandoners said they would access farm-to-institution training materials in these four formats.

Exhibit 1.4.6 – Farm-to-Institution Training Formats of Interest to Abandoners



* n = 2

Question: Which of the following formats would you use to access training on farm-to-institution topics? Please mark all that apply.
Source: Missouri Farm to Institution Survey (2021)

Of the abandoners participating in the survey research, one had no more than five years of farming experience — a beginning farmer. The other had between 16 years and 20 years of experience. One respondent was a male, and the other was a female. One was a 35- to 44-year-old, and the other was a 45- to 54-year-old. Both operate farms that participate in the Missouri Grown program. In terms of their operations' gross sales of agricultural products, one respondent earned less than $25,000 in 2019 and 2020. The other earned between $100,000 and $249,999.

1.5 NONADOPTERS

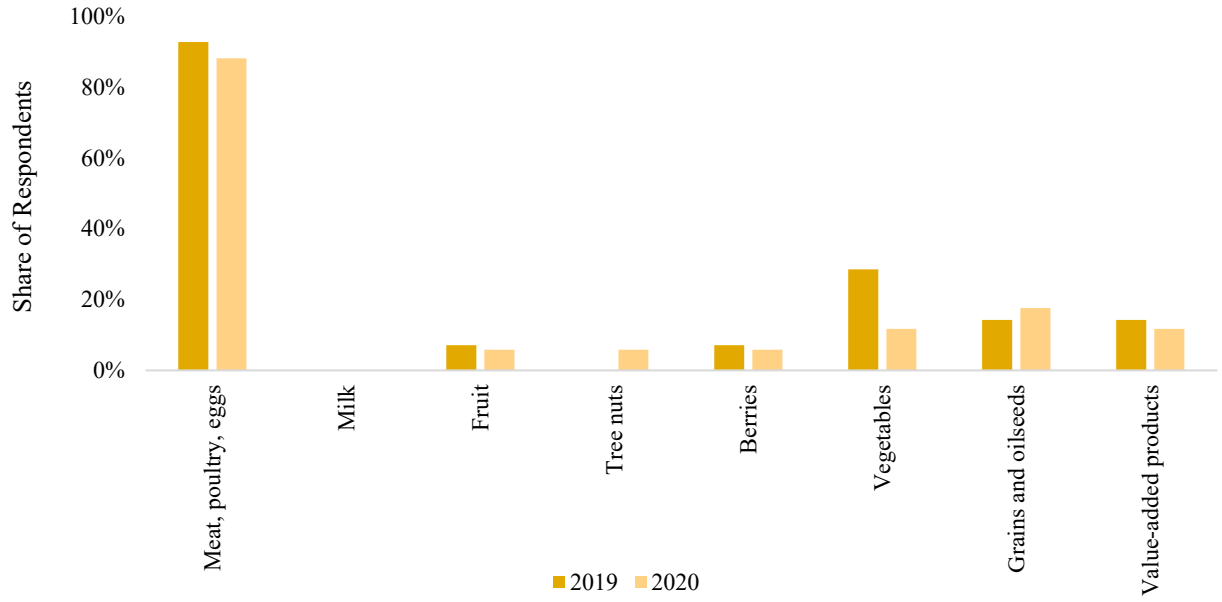
"Nonadopter" Defined

Farms operated by nonadopters had never sold food products to institutions.

Nonadopters responding to the survey most commonly produced meat, poultry and eggs. Exhibit 1.5.1 illustrates that nearly all nonadopters providing responses for 2019 and 2020 said they produced meat, poultry or eggs. In 2019, vegetables ranked as the second most popular product raised by nonadopters. In 2020, grains and oilseeds ranked second. Relatively few producers — 14% in 2019 and 12% in 2020 — created value-added agricultural products. Some nonadopters also participated in producing fruit, berries and tree nuts.

Of the 14 respondents who provided a response about their 2019 production, nearly 80% said meat, poultry or eggs sales contributed most to their overall sales. The survey collected 2020 responses from 17 respondents, and two-thirds of them said meat, poultry or eggs contributed the most their farms' sales in that year.

Exhibit 1.5.1 – Food Products Nonadopters Sold to Any Market Outlet, 2019 and 2020

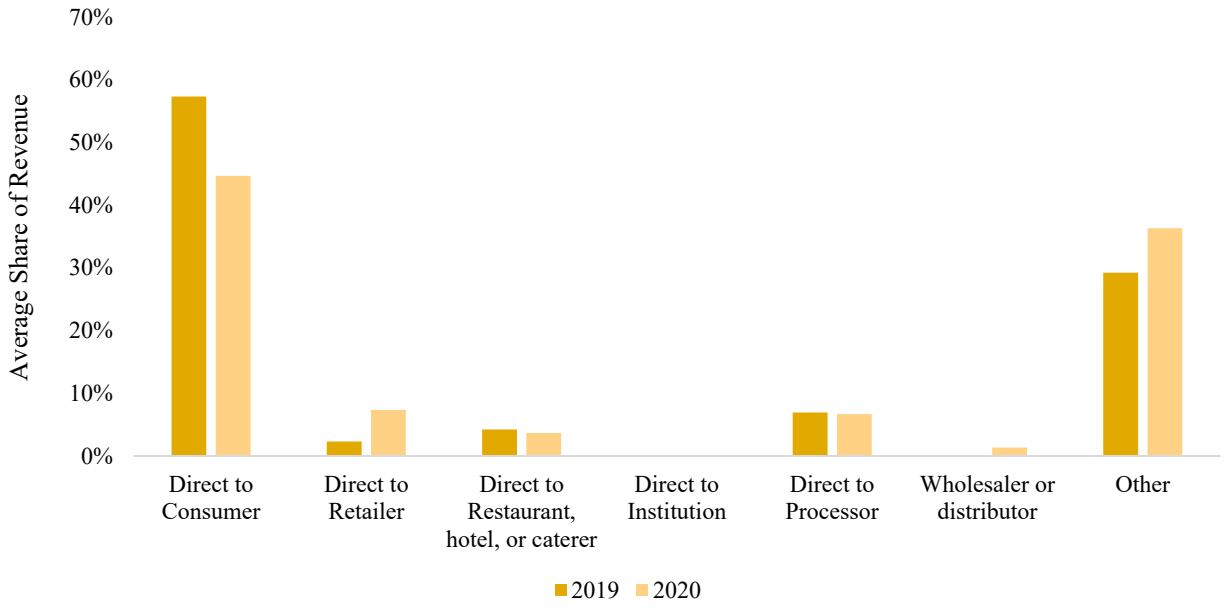


* n = 14 for 2019; n = 17 for 2020

Question: What types of food products did your farm produce to sell to any market outlet in the year(s) noted? Please mark all that apply.
Source: Missouri Farm to Institution Survey (2021)

To understand the market outlets nonadopters use to market the products they raise, they reported the share of total agricultural product revenue generated by market outlet. Exhibit 1.5.2 shares that nonadopters primarily relied on direct-to-consumer sales and "other" market outlets. "Other" may include transactions made with sale barns, elevators or cooperatives. For 40% of nonadopters responding about 2019 and 29% of nonadopters responding about 2020, they exclusively collected agricultural product revenue from direct-to-consumer sales arrangements.

Exhibit 1.5.2 – Share of Food Product Sales Generated by Market Outlet, 2019 and 2020

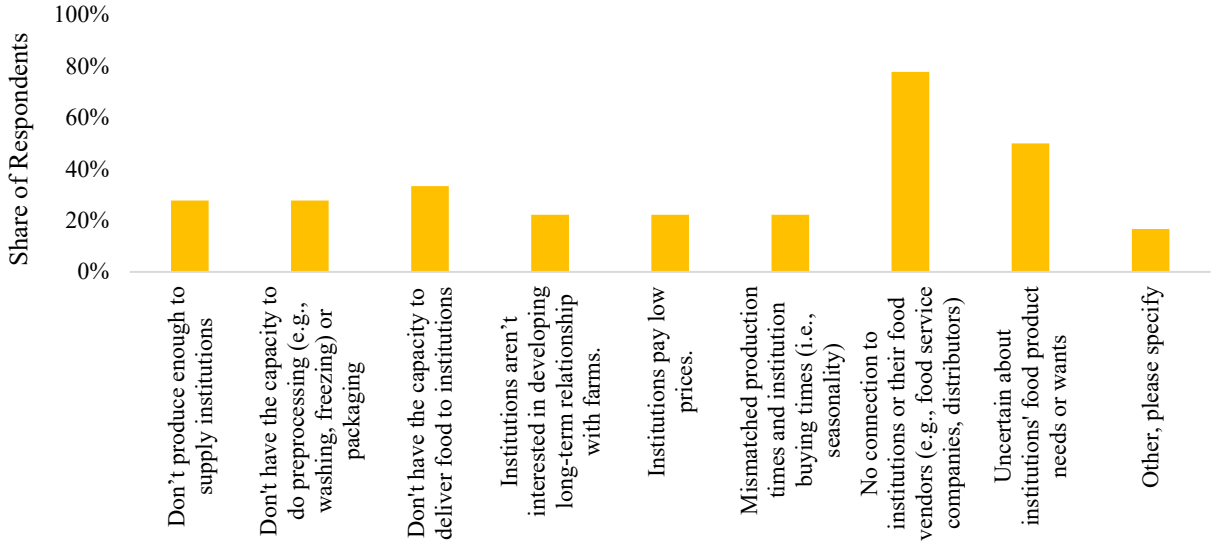


* n = 14 for 2019; n = 15 for 2020

Question: Of the products your farm sold in 2019, what percentage of those sales was generated from the following market outlets? The total must add to 100.
Source: Missouri Farm to Institution Survey (2021)

In terms of why nonadopters hadn't sold food products to institutions, at least half of respondents identified two barriers: no connection to institutions or their food vendors, 78%, and uncertainty about what food products institutions would want or need, 50%. Exhibit 1.5.3 highlights other reasons that kept nonadopters from selling food products to institutions. Two respondents who selected "other" mentioned that the paperwork or permits involved in selling food to institutions were barriers. Another respondent indicated no desire to sell to institutions.

Exhibit 1.5.3 – Reasons Why Nonadopters Hadn't Sold Food to Institutions

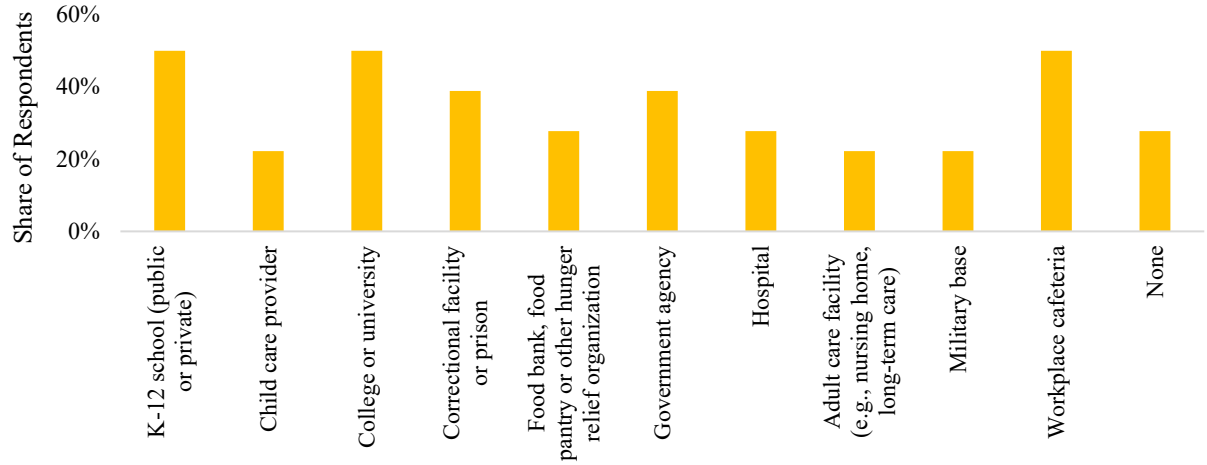


* n = 18; note, no respondents selected the following as reasons for not selling food products to institutions: don't meet institutions' food safety requirements; inadequate liability insurance; and institutions buy too little.

Question: For what reasons has your farm not ever sold food products to institutions? Please mark all that apply.
Source: Missouri Farm to Institution Survey (2021)

To determine nonadopters' interest in institutional sales, they selected institutions where they had interest in making food sales during the next three years. Half indicated interest in three institutions: K-12 public or private schools, colleges or universities and workplace cafeterias. Nearly 40% said they had interest in selling to correctional facilities or prisons and government agencies. See Exhibit 1.5.4. Note, 28% of respondents had no interest in selling to institutions.

Exhibit 1.5.4 – Share of Nonadopters Interested in Selling Food to Certain Institutions in the Next Three Years

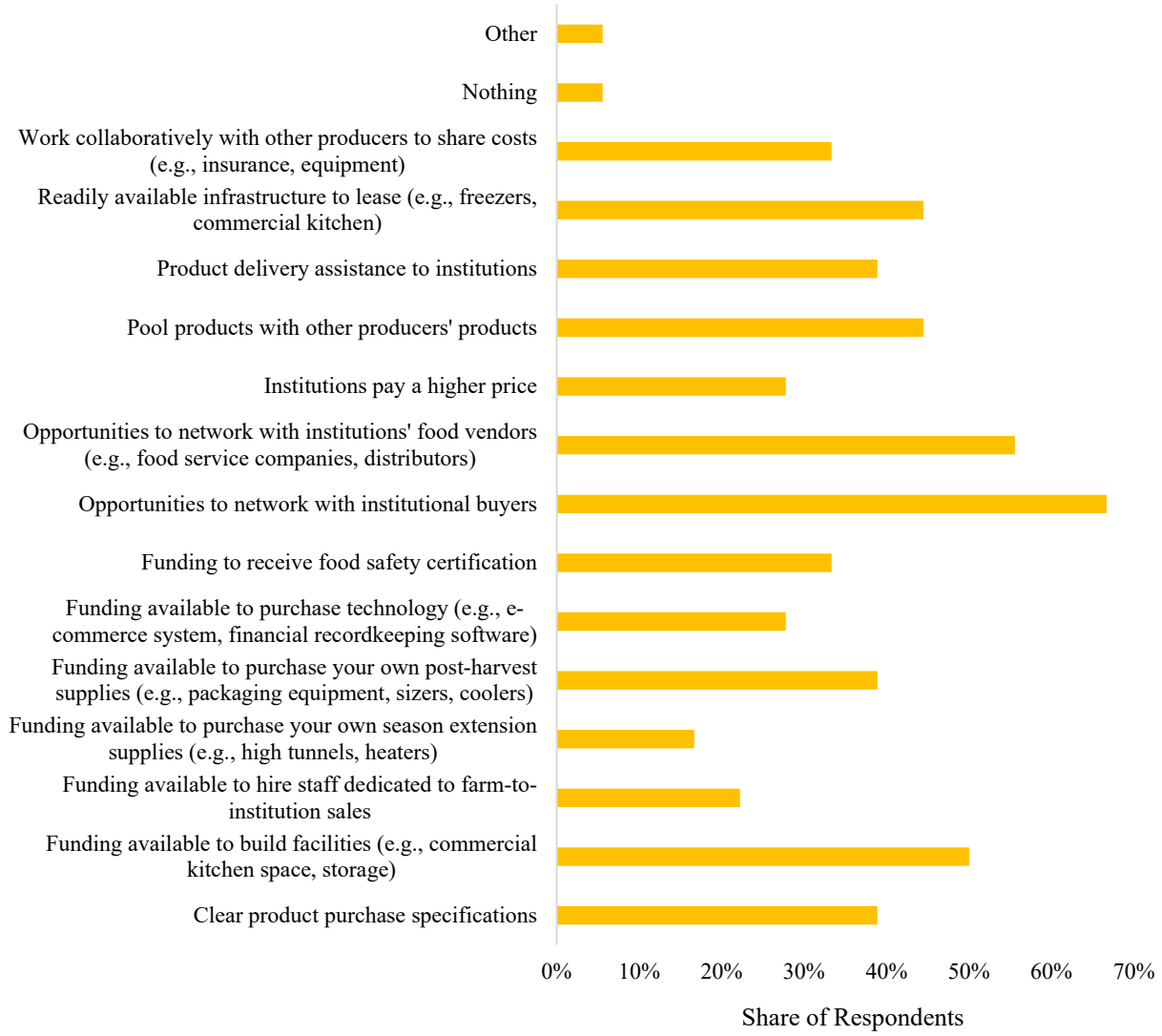


* n = 18

Question: To which of the following institutions is your farm interested in selling food in the next three years? Please market all that apply.
Source: Missouri Farm to Institution Survey (2021)

Nonadopters identified several items that would encourage them to sell food to institutions. The top response — cited by 67% of nonadopters — was finding opportunities to network with institutional buyers. See Exhibit 1.5.5. Of those responding, 56% identified opportunities to network with institutions' food vendors, such as food service companies and distributors, as a factor that would encourage them to sell to institutions. Half said funding available to build facilities, such as a commercial kitchen or storage space, would be an encouragement. Two items were selected by 44% of nonadopters: pool products with other producers' products and readily available infrastructure such as freezers or commercial kitchens to lease.

Exhibit 1.5.5 – Factors That Would Encourage Nonadopters to Sell Food to Institutions



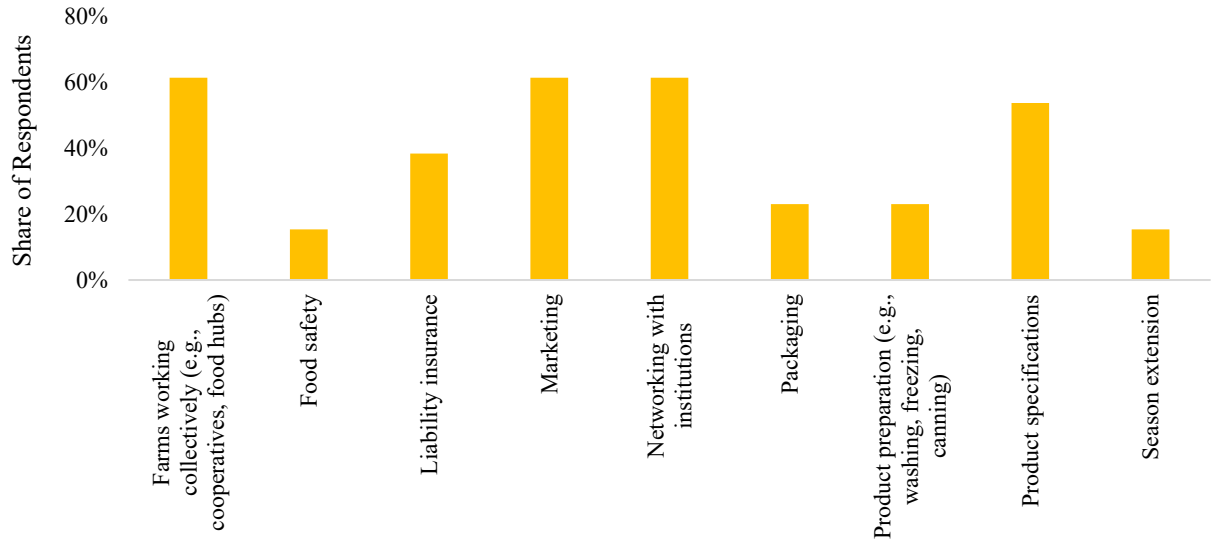
* n = 18

Question: Which of the following would encourage your farm to consider selling food to institutions? Please market all that apply.
Source: Missouri Farm to Institution Survey (2021)

Exhibit 1.5.6 summarizes several farm-to-institution training topics and the share of nonadopters who said they had interest in participating in such training. At least half of nonadopters identified the following topics as interests:

- Farms working collectively (e.g., cooperatives, food hubs), 62%
- Marketing, 62%
- Networking with institutions, 62%
- Product specifications, 54%

Exhibit 1.5.6 – Farm-to-Institution Training Topics of Interest to Nonadopters



* n = 13

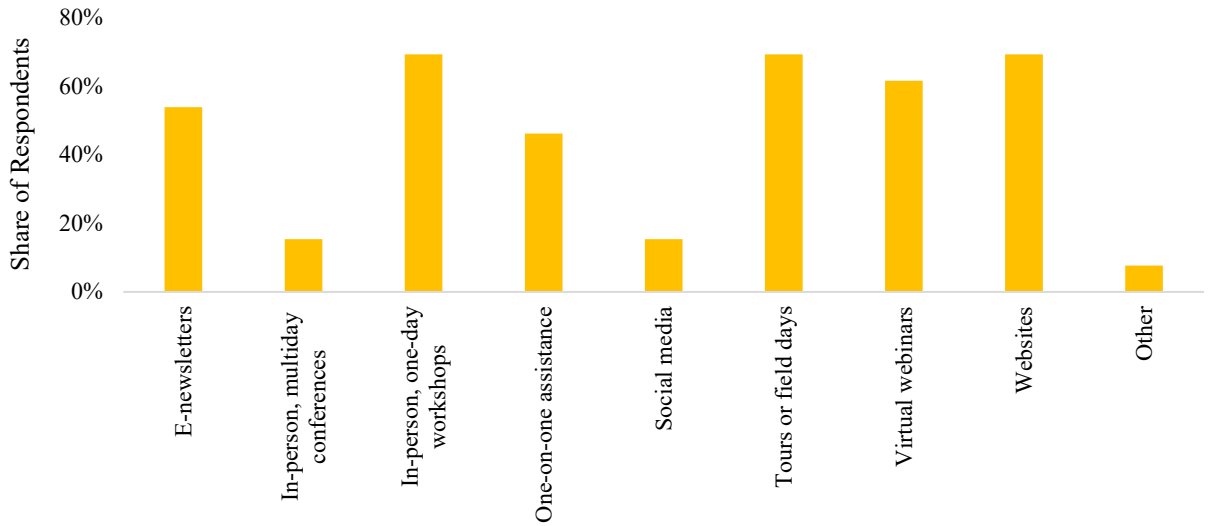
Question: On which of the following topics would you like to receive training to help your farm participate in farm-to-institution marketing? Please mark all that apply.
Source: Missouri Farm to Institution Survey (2021)

In terms of how to deliver farm-to-institution training, Exhibit 1.5.7 illustrates the training formats nonadopters said they would use to access farm-to-institution training. At least half of nonadopters said they would access farm-to-institution training in these formats:

- In-person, one-day workshop, 69%
- Tours or field days, 69%
- Websites, 69%
- Virtual webinars, 62%
- E-newsletters, 54%

One individual selected "other" and noted an interest in on-demand online training modules.

Exhibit 1.5.7 – Farm-to-Institution Training Formats of Interest to Nonadopters

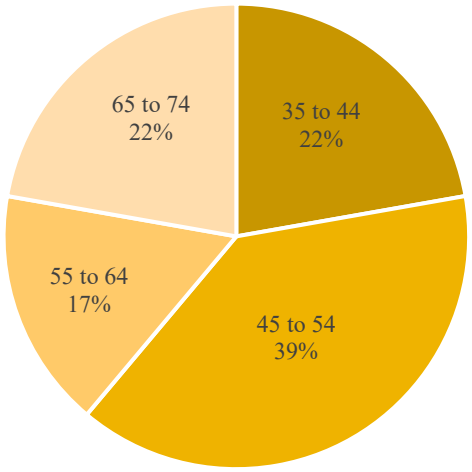


* n = 13

Question: Which of the following formats would you use to access training on farm-to-institution topics? Please mark all that apply.
Source: Missouri Farm to Institution Survey (2021)

Of the nonadopters responding, 78% were males, and 22% were females. Most — 83% — were experienced farmers who had operated a farm for at least 11 years, but 17% had six years to 10 years of farming experience. Two-thirds of responding nonadopters did not participate in the Missouri Grown program, but one-third did participate. Exhibit 1.5.8 presents the age distribution for nonadopters. Six in 10 responding nonadopters were 35- to 54-year-olds. The other nonadopters ranged in age from 55 to 74.

Exhibit 1.5.8 – Nonadopter Age Distribution

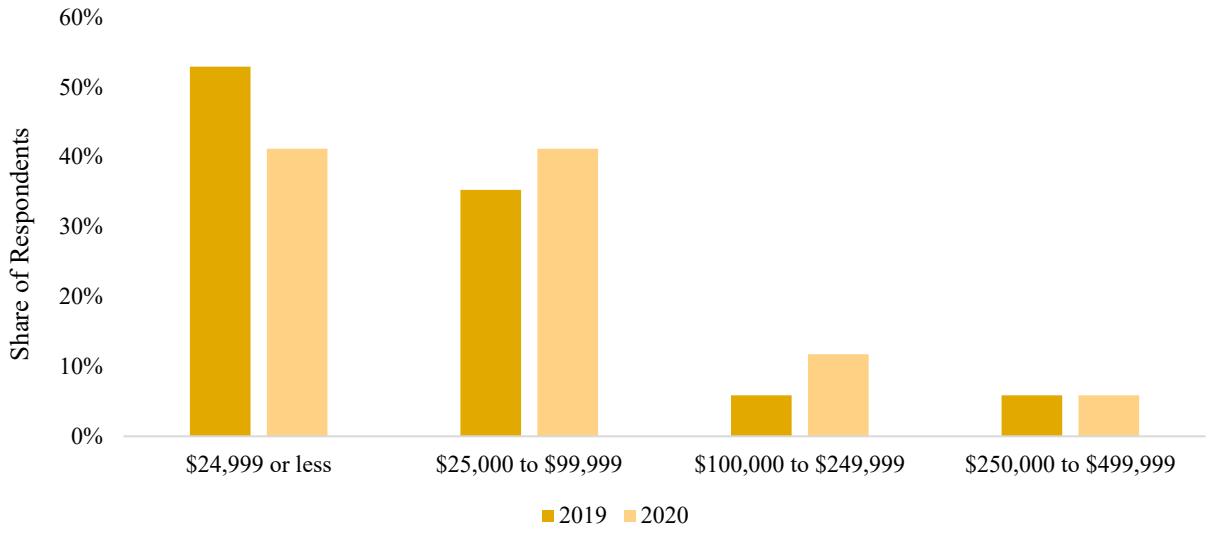


* n = 18

Question: What is your age?
Source: Missouri Farm to Institution Survey (2021)

When selling agricultural products in 2019, Exhibit 1.5.9 summarizes that a majority of nonadopters earned less than $25,000 in gross sales. Most nonadopters in 2020 earned less than $25,000 or $25,000 to $99,999 in gross sales.

Exhibit 1.5.9 – Nonadopter Average Gross Sales of Agricultural Products



* n = 17 for 2019; n = 17 for 2020

Question: Which of the following categories best reflects your farm's average gross sales of agricultural products in 2019 and 2020?
Source: Missouri Farm to Institution Survey (2021)

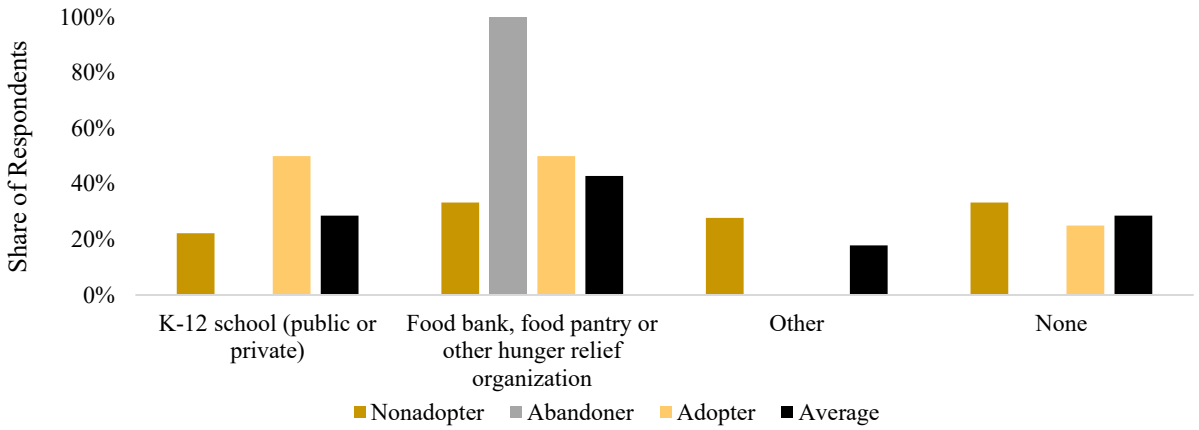
1.6 Food Donations to Institutions

In addition to collecting information about producers' food product sales to institutions, the survey asked producers several questions about their experience with donating food to institutions. Both respondents who had abandoned selling food products to institutions had at some point donated food products raised on their farms. Three-quarters of adopters had donated food products they raised, and two-thirds of nonadopters had donated.

Exhibit 1.6.1 presents the share of respondents who said they had donated at some point to various institutions. The average respondent had most commonly donated food they raised on their farms to food banks, food pantries or other hunger relief organizations.

Farm-raised products most commonly donated to institutions were meat, poultry and eggs; vegetables; and fruit. Of the eight individuals responding, 75% said they had donated "firsts." One-quarter said they had donated firsts and seconds. Across all respondents, half said they had no more than two years of total experience with donating farm-raised food to institutions. The other half had donated for at least five years, not necessarily consecutively. Of those who had donated at some point to a food bank, food pantry or other hunger relief organization, all had donated directly to organizations. Other pathways used were coordinating with a gleaning program or volunteers and participating in a farm cooperative that sells to institutions.

Exhibit 1.6.1 – Respondent Participation in Donating Food Raised on Their Farms to Institutions

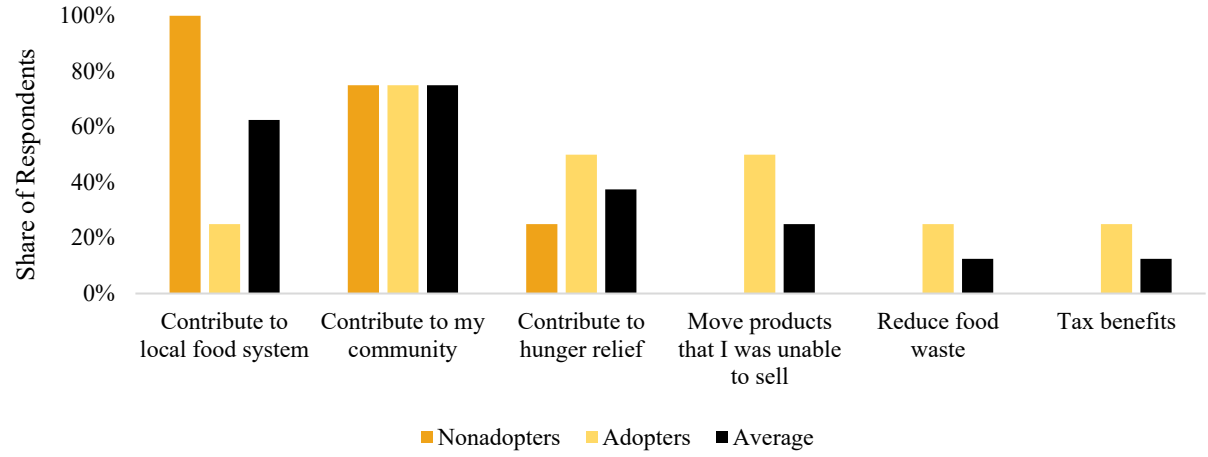


* n = 18 for nonadopters; n = 2 for abandoners; n = 8 for adopters

Question: To which of the following institutions has your farm ever donated food products raised on your farm?
Source: Missouri Farm to Institution Survey (2021)

Respondents who had donated farm-raised products to institutions cited several reasons that motivated those donations. Three-quarters said they donated to contribute to their communities, and more than 60% said they donated to contribute to their local food systems. See Exhibit 1.6.2.

Exhibit 1.6.2 – Reasons Respondents Had Donated Farm-Raised Food to Institutions

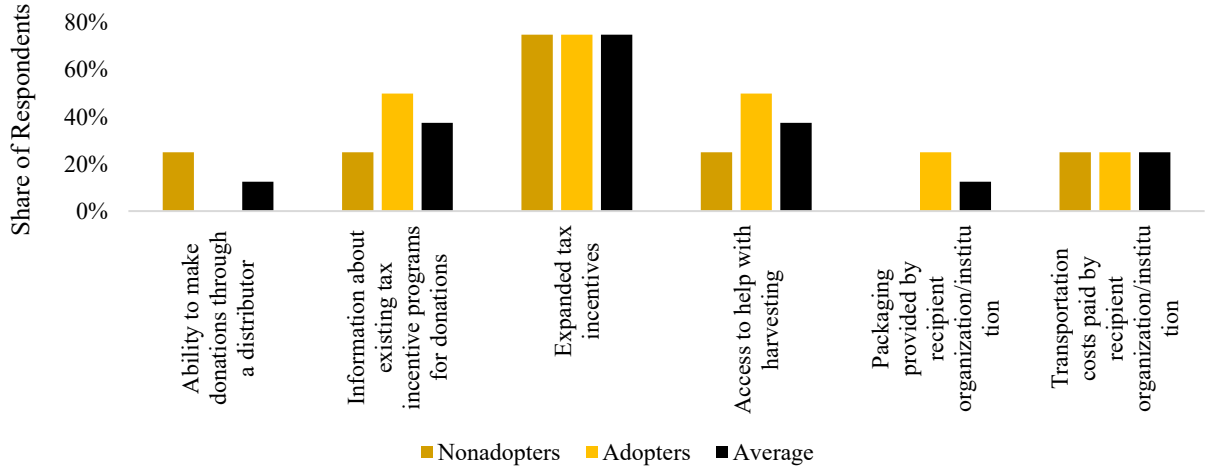


* n = 4 for nonadopters; n = 4 for adopters; n = 0 for abandoners

Question: Why has your farm donated to institutions? Please mark all that apply.
Source: Missouri Farm to Institution Survey (2021)

A few factors would encourage respondents to continue donating or donate more farm-raised food products to institutions. Exhibit 1.6.3 shares that 75% of respondents said expanded tax incentives would encourage them to donate. Nearly 40% of respondents said information about existing tax incentive programs and access to help with harvesting are factors that would encourage donation.

Exhibit 1.6.3 – Factors that Would Encourage Respondents to Continue Donating or Donate More Farm-Raised Food to Institutions

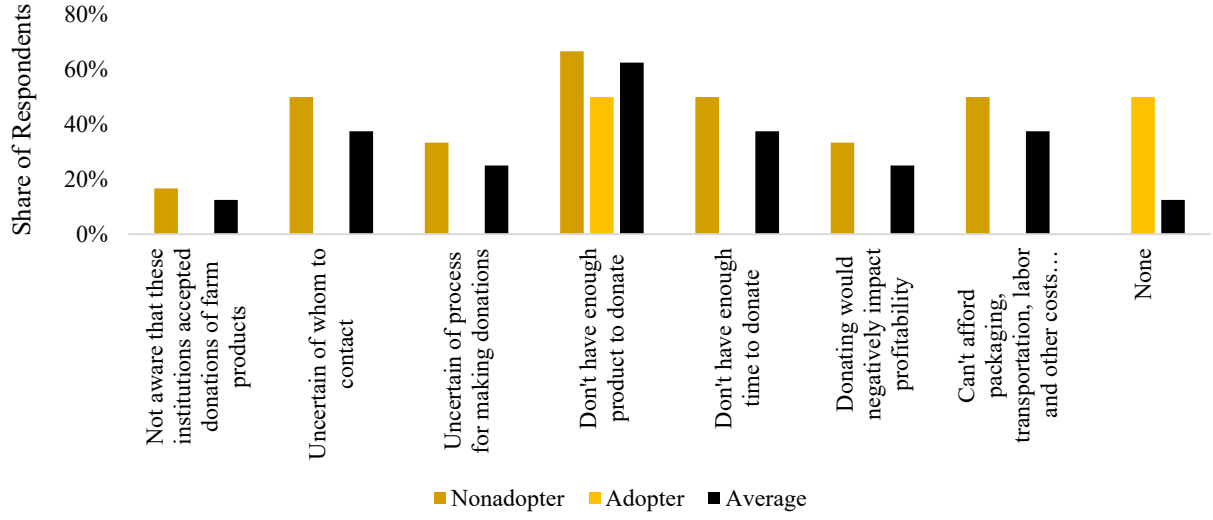


* n = 4 for nonadopters; n = 4 for adopters; n = 0 for abandoners

Question: Which of the following would encourage you to continue donating or donate more food raised on your farm to institutions? Please mark all that apply.
Source: Missouri Farm to Institution Survey (2021)

In terms of why respondents hadn't donated products their farms raised to institutions, Exhibit 1.6.4 illustrates that the most commonly cited reason was not having enough product to donate. Other reasons noted by at least one-third of respondents were uncertainty about whom to contact; don't have enough time to donate; and can't afford packaging, transportation, labor and other costs incurred for donated farm products.

Exhibit 1.6.4 – Reasons Respondents Hadn't Donated Farm-Raised Food to Institutions

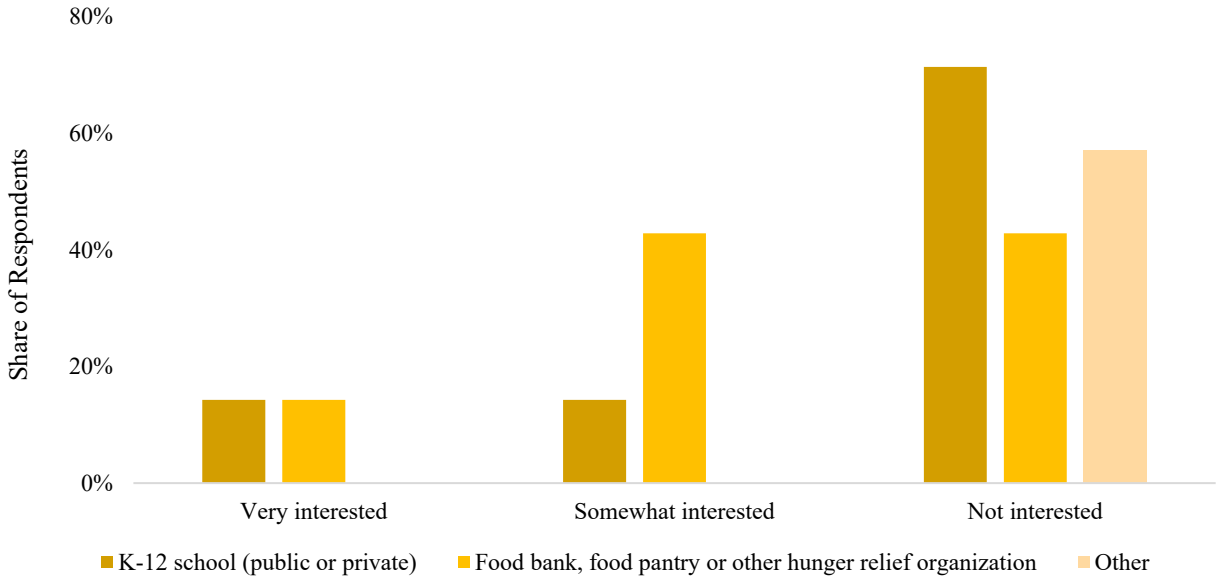


* n = 6 for nonadopters; n = 2 for adopters; n = 0 for abandoners

Question: For what reasons have you not ever donated food products raised on your farm to institutions?
Source: Missouri Farm to Institution Survey (2021)

Looking forward, of respondents who hadn't previously donated, most expressed interest in donating farm-raised food to food banks, food pantries or other hunger relief organizations. Of the seven individuals responding, more than half indicated they were very interested or somewhat interested in donating to these types of institutions. See Exhibit 1.6.5.

Exhibit 1.6.5 – Interest in Donating to Institutions in the Next Three Years Among Those Who Hadn't Donated Previously

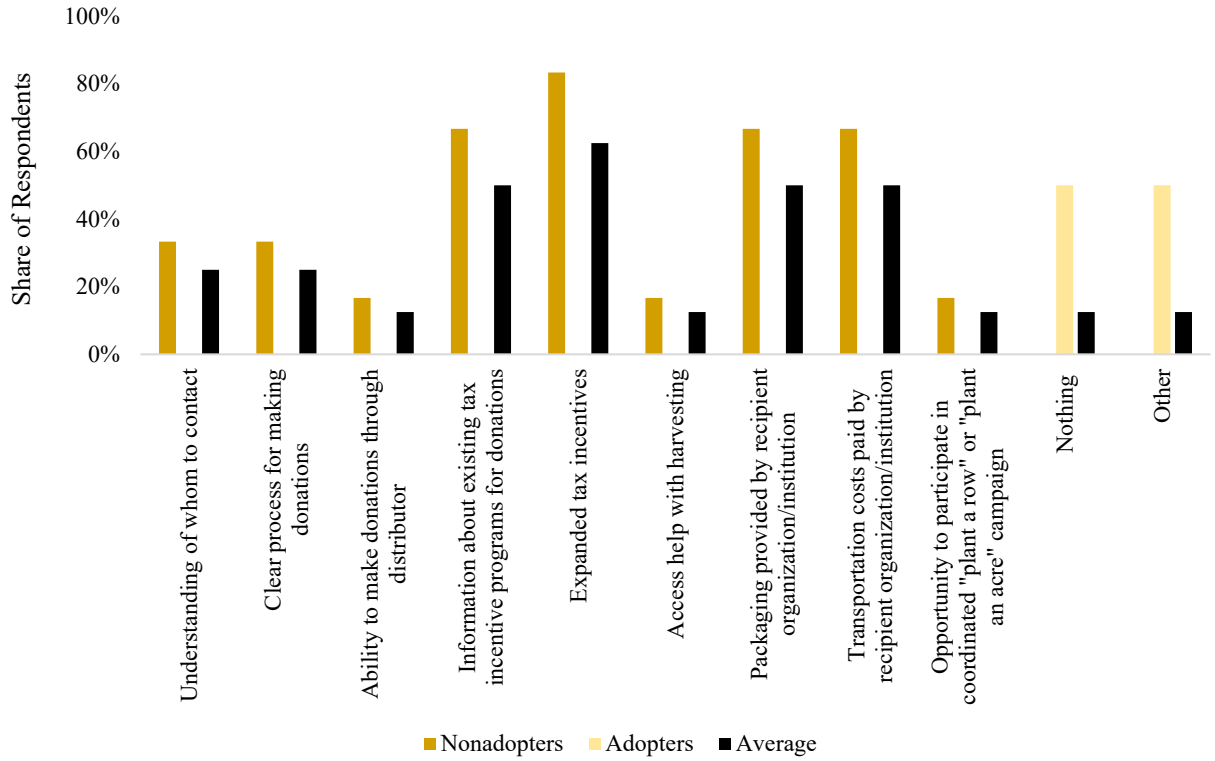


* n = 7

Question: In the next three years, what's your farm's interest level in donating farm-raised food products to the following institutions?
Source: Missouri Farm to Institution Survey (2021)

In terms of what would encourage farms to consider donating farm-raised food products to institutions, Exhibit 1.6.6 highlights that 63% said expanded tax incentives. Half selected information about existing tax incentive programs, packaging provided by recipient organization or institution and transportation costs paid by recipient organization or institution as factors that would encourage them to consider donating farm-raised food.

Exhibit 1.6.6 – Factors that Would Encourage Respondents to Consider Donating Farm-Raised Food to Institutions



* n = 6 for nonadopters; n = 2 for adopters

Question: Which of the following would encourage you to consider donating farm-raised food products to institutions?
Source: Missouri Farm to Institution Survey (2021)

Chapter 2

Missouri Farm-to-Institution Stakeholder Interview Summary

Authors:

Alice Roach, Senior Research Associate, MU Division of Applied Social Sciences
Jill Moreland, Program Director, MU Division of Applied Social Sciences
Joe Parcell, Director, MU Division of Applied Social Sciences
Bill McKelvey, Senior Project Coordinator, MU Division of Applied Social Sciences
Hannah Anderson, Student Intern, MU Division of Applied Social Sciences

Table of Contents:

1.1 MISSOURI FARM-TO-INSTITUTION INTERVIEWS

Multiple stakeholders play a role in facilitating and promoting farm-to-institution activity. They include government agencies, businesses that aggregate and distribute food, community educators and the institutions that purchase food to prepare for the audiences they serve.

For this project, 15 such stakeholders from 14 organizations participated in interviews meant to shed light on institutional food purchase decision-making and possible approaches to increase farm-to-institution sales in Missouri. Of the 15 participating interviewees, nine represented institutions, and six were other stakeholders engaged in farm-to-institution efforts.

The following themes emerged from these interviews. Drawing on these findings, several points below suggest opportunities Missouri may consider to increase participation in farm-to-institution programs and procurement.

1.2 CONNECTIONS

- **Generate sales and supplier leads**. For institutions, knowing which farms would have interest in selling food to them represents a hurdle to farm-to-institution procurement. One interviewee said, "I'm not opposed to using them (local farms). I just need to find them." A supplier directory may provide institutions with a starting point of who's a potential supplier. By adding their farms to the directory, growers may attract new institutional buyers. One interviewee mentioned that a directory possibly would make institutions feel more comfortable when reaching out to farms because simply being listed in the directory would suggest a farm's interest in working with institutions.

- **Match a farm's supply to an institution's demand**. Institutional sales present a scale challenge for some farms due to some institutions' size and food demand. By starting small and incrementally growing sales, farms may better manage their institutional commitments. Plus, they can gain the experience and track record needed to prove themselves as reliable suppliers. Such "managed growth" shows consistency that appeals to funders (e.g., granting agencies, loan officers).

  To start small, possible markets include working with a small-scale foodservice operation (e.g., one school building, one dining hall) or supplying ingredients for one meal an institution serves each week. One institution represented in the interviews had a challenge in meeting the minimum order amount set by its local food supplier. Small-scale institutions or the suppliers serving them may consider cooperative ordering (i.e., nearby institutions collaborate on ordering) to reach an order size that works for the suppliers in terms of managing delivery costs and logistics.

- **Re-engage following the pandemic**. The COVID-19 pandemic imposed limits on farm-to-institution efforts as some institutions closed or introduced new health and safety protocol. During this time, farm-to-institution initiatives that had been gaining steam

were forced to change or stop. To reset and generate renewed momentum for farm-to-institution programming, an opportunity may exist to assemble stakeholders and provide new ideas and resources to help them get started or resume farm-to-institution initiatives.

- **Leverage agricultural connections**. A couple of interviewees involved in procuring food had personal farm experience in their families. They mentioned how the family tie allowed them to understand food production. Institutional contacts who have agricultural connections may appreciate sourcing from farms and serve as farm-to-institution proponents to other institutions who don't have decision makers familiar with farms.

- **Encourage collaboration**. Recent grant-funded work has led to coordinated efforts designed to support farm-to-school and farm-to-early care initiatives in Missouri. Plus, some institutions noted collaborating with other like institutions to exchange ideas. To encourage broader farm-to-institution participation and knowledge-sharing, Missouri could assemble a working group that includes representation from multiple types of institutions such as schools, childcare centers, workplace cafeterias, adult care facilities, colleges and universities. Although each type of institution has distinctive needs, collaboration may lead to more diversified market opportunities for growers and create a team where institutional stakeholders can learn from one another and help one another.

  Collaboration among growers may also support more institutional sales. By pooling products from multiple farms, the group may have a better opportunity to meet buyer demand if one producer has a product shortage. One interviewee mentioned that buyers consider a "fill rate" when buying food — in other words, how much of product demand could one vendor fill. A group could possibly achieve a fill rate that's more preferred by an institution. In one interview, the individual mentioned that the collaborative model works particularly well for commodity-type products. If a farm has a very niche item or specializes in one ingredient, then the interviewee suggested that buyers may have more of an incentive to work directly with the one grower alone.

  Several interviewees mentioned points related to collaboration having the potential to reduce transaction costs. For example, interviewees acknowledged that working with an organization that represents multiple growers would allow their institutions to simplify interactions to fewer points of contact. Another mentioned the importance of foodservice efficiency and how working with multiple suppliers would introduce inefficiencies into food sourcing. In another conversation, an interviewee described collaboration would require compromise. That is, farmers must have a willingness to give up something (e.g., decision-making, autonomy) to collaborate with peers.

  If not collaborating with other farms, then finding a pathway to work with distributors, which could offer more local product within their portfolios, may appeal to institutions. Through this approach, institutions could continue buying from existing suppliers but have improved access to local options, according to an interviewee. This pathway enables farmers to focus on growing, and the distributor would manage marketing.

- **Offer training to build key skills**. Two school foodservice representatives who participated in the survey expressed interest in preserving local food harvested in-season, so they could use that food at other points during the year. To do this, one said the school would need support related to ordering enough local product, getting it to the school and preparing it for storage. Another mentioned a need for teaching foodservice staff the needed knife skills and cooking techniques. The school would also need the equipment and space to do this work, and it would require funding to pay for foodservice staff for the time they spend in training. Interviewees also stated interest in local food procurement guidance from their local health departments.

- **Incorporate farm-to-institution principles in various institutional settings**. Selling food to institutions' foodservice operations represents just a single farm-to-institution pathway. Some institutions open their doors to the public — more like a restaurant — and others host market days, mini food shows, local foods dinners or other special events that could serve as an entry point for farms to introduce their products to new customers.

  These venues also create an opportunity to marry a product with an experience. For example, senior centers or retirement communities may host a farmers market where residents can find food they remember from their childhoods, or a hospital may plan a mini food show where the chef uses certain local ingredients that also are available at an on-site farmers market. An interviewee mentioned that workplaces are some of the best local product promoters because employees view access to local food — both in dishes available at work and markets hosted on site — as an employment benefit.

1.3 PRODUCTS

- **Prioritize quality**. More than one interviewee appreciated the quality of locally sourced food products. A few interviewees mentioned that product quality may make purchase decisions slightly less price-sensitive, though other interviewees stressed that price is a purchase consideration. One mentioned the importance of finding the right price point for buying a certain percentage of its food from farmers — alluding to the idea that food sourced from farms may have a price premium, but it's possible to dedicate a certain budgeted amount to food sourced from farms and purchase the balance from other sources. Others said that local and nonlocal products have had comparable prices.

- **Make options available that have had some preprocessing**. Seasonality affects fresh product availability for Missouri institutions. Accessing frozen local food would work well for some institutions. The institutions may have the capacity to freeze product themselves, but they would need to plan and coordinate freezing efforts. Even when an institution uses a fresh product, it may need to invest in more preprocessing (e.g., washing, cutting) if it buys food from a farm than it would if it bought food from other vendors. The institution may not have the workforce to handle these tasks, or its workforce may not have the skills needed to prepare food products.

- **Offer the basics, but add some diversity**. Institutions commonly named products such as lettuce, watermelon, peppers and apples as those available to purchase locally. Local product diversity was mentioned as an interest. For diverse products to be available, though, the community and its farmers must have experience, interest or opportunities related to producing those diverse products. Some communities don't have such variety in their local food production.

  Interviewees also mentioned interest in sourcing more novel products such as yuca, Aronia berry, asparagus and pawpaw but also cited a need for more locally grown tomatoes and black diamond seedless watermelon — more traditional crops grown in Missouri. Interviewees also mentioned interest in local meat and protein products. One also mentioned plant-based proteins as an interest.

- **Offer a consistent product**. Product consistency was mentioned as a challenge that institutions may experience when sourcing any local food. One school foodservice representative stressed that consistency is important in order for students to accept food. That said, one institution mentioned being open to using "misfit food." A school foodservice representative, the individual viewed such products as an educational opportunity to show students that food tastes the same, even if it looks different. Institutions concerned about product consistency may value a grading service or certification. Raw foods or processed items could then be marketed as satisfying a certain consistent standard.

- **Understand nutritional considerations**. Depending on the institution, meals may need to meet nutritional guidelines. Adult care facilities serve as one example as registered dieticians must approve menus, and an interviewee mentioned an interest in knowing how local food ingredients align with the nutritional demands. Another interviewee mentioned how child nutrition products must meet certain nutrition standards, which sellers must verify.

- **Meet buyer expectations**. Several interviewees mentioned the importance of farms being familiar with good agricultural practices and meeting food safety standards. Other interests mentioned by interviewees included using organic practices or minimal pesticides, securing an appropriate liability policy and packaging food products in a standardized way. Interviewees also mentioned sustainability. In one context, the term referred to food production practices. In another, an interviewee said sustainability is important because the institution must count on food suppliers year after year.

1.4 PROCESS

- **Teach the basics of farm-to-institution procurement**. One interviewee mentioned not knowing the requirements involved in purchasing from farms. Conversations about how to purchase would help. Sample contracts or agreements may make the procurement process easier to implement. Plus, explaining a typical contract process — one

interviewee noted that institutions may have multiyear contracts with noncompete clauses — and how to become a recognized vendor may prepare farms for institutional sales.

- **Plan in advance**. Preseason planning helps to ensure farms produce enough food for institutions to use. One institution described talking with a grower-supplier before that grower purchases seed. That conversation shapes what and how much seed the grower orders. Another mentioned the lead times for menu development. For examples, meals served in the spring and summer start with menu planning in February. Thus, producers need to be part of conversations early and not wait until they have product available to sell. If they're possible to implement, then preseason commitments give farms more certainty for how to market product during the year.

- **Educate about the payment process**. The payment process institutions follow may require more steps, paperwork and time than what farms experience when they sell to other market outlets. Often, each institution also has its own unique process. Institutions interested in buying more local goods may consider how to standardize their processes, so growers have fewer learning curves when selling to different institutions.

- **Simplify transportation and logistics for suppliers**. If an institution has multiple foodservice sites (e.g., school district with multiple school buildings), then farmers delivering product may need to stop at multiple sites. Centralized warehouses that serve multiple kitchens may simplify transportation requirements for farms fulfilling orders made to institutions. The institution may then have additional logistics responsibilities to transport food from a centralized warehouse to individual facility locations. One interviewee mentioned how transportation costs have skyrocketed and fewer truck drivers are hauling product. These factors can make local purchasing more attractive.

- **Educate about food**. Several interviewees mentioned that they combine educational activities with farm-to-institution procurement. In terms of how to support farm-to-institution initiatives, one school foodservice representative named more help with promoting local products in cafeterias as an interest area. The school already uses stickers, coloring sheets and other marketing materials as they're available. A few interviewees mentioned how gardens at institutions can help to form connections with food. One had interest in seeing more involvement with school gardens and possibly recruiting gardeners or farms to donate a row or acre to the school and teaching the students about food production.

Chapter 3

Farm-to-Institution State-by-State Case Studies

Authors:

Alice Roach, Senior Research Associate, MU Division of Applied Social Sciences
Jill Moreland, Program Director, MU Division of Applied Social Sciences
Joe Parcell, Director, MU Division of Applied Social Sciences
Bill McKelvey, Senior Project Coordinator, MU Division of Applied Social Sciences
Hannah Anderson, Student Intern, MU Division of Applied Social Sciences

Table of Contents:

3.1 INTRODUCTION

This chapter explores how several states have approached farm-to-institution programming to include more farms and reach more institutions and consumers. Based on secondary research, the summaries explain initiatives and incentives that 16 states have implemented to bolster farm-to-institution sales and the partners who have participated in farm-to-institution program planning and implementation.

The case studies feature farm-to-institution programs designed to connect farms and multiple types of institutions. The following key denotes the various farm-to-institution initiatives included in the analysis.

Exhibit 3.1.1 – Farm-to-Institution Efforts Explored in State-by-State Case Studies

3.2 ARIZONA

Farm to Hospital

An ***"Increasing Local Food in Hospitals and Clinics for Health and Nutrition"*** continuing education course is offered by the Western Region Public Health Training Center and the University of Arizona Continuing Nursing Education program. Participants learn how to form local food procurement strategies, work with farms that adhere to food safety practices and connect low-income consumers to farmers markets hosted at hospitals. Those who participate in the self-paced online course may receive continuing education credits (Western Region Public Health Training Center).

With this course and two companion courses, the Western Region Public Health Training Center intended to reach health department officials. Content in the other courses focused on teaching about how to develop community gardens and school gardens and how to work with Native populations on healthy eating and choosing local foods (Govindarajan and Gardner).

Farm to School

Organized by the Arizona Department of Education, the ***Farm to Summer Challenge*** motivates summer school food service programs to use local foods, educate students about local food or Arizona agriculture and promote farm-to-school activities in the community. The challenge ran for three weeks during June 2021 (Arizona Department of Education 2021 c). The department recognized five schools or school districts as 2021 challenge awardees (Arizona Department of Education 2021). The challenge rules stated for summer meal programs to incorporate at least three local food items into a reimbursable meal, teach about local food or Arizona agriculture during at least two educational activities and inform the community about farm-to-summer activities at least once (Arizona Department of Education 2021 c).

Shortly after it named the 2021 summer challenge awardees in October 2021, the Arizona Department of Education introduced its 2022 Farm Fresh Challenge. Open to all child nutrition programs, the challenge would run from Oct. 1, 2021, to April 29, 2022. Any program that completes the three challenge activities in one week's time would be named a "challenge champion." The three challenges ask child nutrition programs to serve at least three local food items in the one-week challenge time period, offer related educational activities at least twice and create and distribute at least one promotional message to share about challenge activities within the community (Arizona Department of Education 2021 a).

Farm to Institution

The ***Sun Produce Cooperative*** formed in 2017. For its producer-members, the co-op coordinates fruit and vegetable production. Post-harvest, Sun Produce Cooperative aggregates the farms' produce and distributes it to customers. At first, the co-op sold produce to one school

(VoyagePhoenix 2019). Since then, it has supplied fruits and vegetables to multiple Phoenix-area schools (Sun Produce Cooperative 2020 b). During the pandemic, the co-op and partner organizations pivoted to offer local produce in meals students could access via curbside pickup. In particular, they offered locally produced rainbow carrots in sack lunch meals and reached an estimated 50,000 students (Saria 2020).

The co-op has also introduced ***FarmRaiser***, which operates as a weekly produce subscription bag. To offer the program, the co-op partners with schools, businesses and municipalities (VoyagePhoenix 2019). The program may serve as a "corporate wellness" initiative for these organizations, which recruit participants and order bags for those participants. Partner organizations choose the bag size, price and product selection that work best for their clientele. Typically, sessions run for three weeks to eight weeks. Bags cost $11 to $25 each. Product selection varies, but items incorporated include vegetables, fruits, herbs, eggs and beans. If partner organizations want to treat the subscription program as a fundraiser, then they can recruit volunteers to pack the bags. Doing so will allow the partner organization to receive 10% of bag sales (Sun Produce Cooperative 2020 b). In some cases, the co-op contributes to produce bags offered to low-income seniors and hospital patients who receive Medicaid benefits. It also has donated produce to the AZ Food Bank Network (Sun Produce Cooperative 2020 b).

To finance its work, the co-op has rented a truck and paid a part-time driver using grant funds from Vitalyst Health Foundation and Maricopa County Cooperative Extension. The Maricopa County Department of Public Health also has supported the co-op by directing half of a food system coordinator's time to order management and administrative responsibilities. Another volunteer has also contributed time (VoyagePhoenix 2019). An October 2020 job posting indicated the co-op would like to hire a full-time manager (Sun Produce Cooperative 2020 a).

References

Arizona Department of Education. 2021 a. "2022 Farm Fresh Challenge." *Arizona Department of Education*. Accessed Nov. 16, 2021, at https://www.azed.gov/hns/2022-farm-fresh-challenge?fbclid=IwAR0lfY7I8yGuA4vDwhw4HtixhsKWy09PDlPKp0UfYPszjR9CQr48IdblzoU.

Arizona Department of Agriculture. 2021 b. *Arizona Department of Education*. Accessed Nov. 16, 2021, at https://www.facebook.com/AZDeptofEducation.

Arizona Department of Education. 2021 c. "Farm to Summer Challenge Registration." *Arizona Department of Education*. Accessed June 2021 at https://www.azed.gov/hns/farm-summer-challenge-registration-0.

Good Food Finder AZ. "Feed Phoenix." *Good Food Finder AZ*. Accessed Nov. 17, 2021, at https://www.goodfoodfinderaz.com/feed-phoenix.

Govindarajan, Lubna, and Deborah Gardner. "Challenging Food Insecurity in the Desert Southwest." *National Network of Public Health Institutes*. Accessed Nov. 16, 2021, at https://nnphi.org/challenging-food-insecurity-in-the-desert-southwest/.

Mallory, Chris. 2020. “Phoenix Didn’t Just Feed the Hungry. It Saved Farms and Restaurants.” *Bloomberg CityLab*. Accessed June 2021 at https://www.bloomberg.com/news/articles/2020-12-17/phoenix-used-food-aid-program-to-save-small-businesses-as-well.

Saria, Lauren. 2020. “5,000 Pounds of Carrots: 50,000 School Kids.” *Edible Phoenix*. Accessed Nov. 17, 2021, at https://mydigitalpublication.com/publication/?m=12964&i=659170&p=22&fbclid=IwAR1lnnga9oc7YdGR802vByPK6p_7N5jcRvSLqjzKOU-trSH5d_zslN-CEDY&ver=html5.

Sun Produce Cooperative. 2020 a. *Sun Produce Cooperative*. Accessed Nov. 17, 2021, at https://www.facebook.com/sunproducecoop.

Sun Produce Cooperative. 2020 b. *Sun Produce Cooperative*. Accessed June 2021 at https://www.sunproducecoop.org/.

VoyagePhoenix. 2019. “Meet Cindy Gentry.” *VoyagePhoenix*. Accessed Nov. 17, 2021, at http://voyagephoenix.com/interview/meet-cindy-gentry-sun-produce-co-op-serves-maricopa-county-plus-pima-county/.

Western Region Public Health Training Center. 2020. “Increasing Local Food in Hospitals and Clinics for Health and Nutrition.” *The University of Arizona*. Accessed June 2021 at https://wrphtc.arizona.edu/training-npao/increasing-local-food-hospitals-and-clinics-health-and-nutrition.

3.3 CONNECTICUT

Farm to School

Several stakeholders participate in ***The CT Farm to School Collaborative***, which since 2016 has functioned as a working group that meets monthly to advance Connecticut’s farm-to-school activities. The collaborative has two main goals. The first reads, “By 2032, 100% of CT ECE Centers and K-12 schools will have access to tangible, sustainable processes that connect education, agriculture and nutrition, where at least 25% of food service is sourced locally.” The second emphasizes giving students food system experiences in the classroom, cafeteria and in outdoor settings. University of Connecticut Extension and FoodCorps CT coordinate the effort. Other participating organizations include the state’s education and agriculture departments. Collaborative stakeholders formed three action teams. Each focuses on a unique priority area: resources and funding, ease of use and education (Connecticut Farm to School).

The collaborative has several initiatives underway to move it toward achieving its goals. It promotes the annual CT Grown for CT Kids Week, which included a HardCORE Apple and Pear Challenge to encourage participants to choose local apples and pears. In 2022, it plans to launch

the CT Farm to School Institute. School participants will take a year to focus on farm-to-school professional development (Connecticut Farm to School).

Farm to School

The CT Farm to School Collaborative advocated for the ***CT Grown for CT Kids*** grants program, which the state included in its budget bill meant to fund the government through June 30, 2023. According to an analysis of the bill, the state's agriculture department will coordinate the CT Grown for CT Kids program. Eligible applicants include schools and others that have support from school administrators, school nutrition professionals, educators and the community. Applicants may seek financial support for equipment, resource or material purchases; eligible expenses would include local food and gardening supplies. Grant awards may also support professional development and training or piloting purchasing systems and programs (Connecticut General Assembly 2021). Some reporting indicates the program would receive $250,000 in annual funding (FoodCorps 2021).

Farm to School

Coordinated by UConn Extension, ***Put Local on Your Tray*** connects local farms and local schools. The program gives schools the option to commit to the "Local Tray Pledge" and choose farm-to-school goals for their food service programs. The Put Local on Your Tray team provides support to districts, so they can reach their goals. During 2020-21, 92 towns or school districts participated in Put Local on Your Tray (University of Connecticut).

To support schools, Put Local on Your Tray publishes an online farm directory, which as of August 2021 listed 52 local farms interested in selling food to schools. Schools can use this directory to reach out to those farms. Put Local on Your Tray promotes several seasonal campaigns designed to drive use of more local in-season foods. Examples include Rooting for Winter, which focuses on root vegetables such as beets and potatoes; Smoothie Slurp, which is celebrated during National Dairy Month in June; and Dip Into Summer!, which encourages trying summer vegetables with different dips (University of Connecticut).

Farm to Early Care and Education

An effort of the state's public health department, Put Local on Your Tray and the CT Farm to School Collaborative, the ***Farm to Early Care and Education Program*** assists programs serving children younger than kindergartners with planning and implementing farm-to-early childhood programming (Connecticut Department of Public Health, UConn Extension and the Farm to School Collaborative). It's a module of the state's Go NAPSACC online system, which provides information and tools meant to encourage healthy eating and physical activity among young children (Center for Health Promotion and Disease Prevention 2018).

Selected applicants participate in a yearlong program to self-assess their farm to early care and education activity, create a plan, monitor progress and then self-assess the experience. Teams receive support from a technical assistance consultant, and they receive some funding — $250 or $750, depending on the number of children served — to use toward implementing their plans. Acceptable activities that participants may feature in their plans include buying local food, creating on-site gardens and teaching children about agriculture and nutrition (Connecticut Department of Public Health, UConn Extension and the Farm to School Collaborative).

References

Center for Health Promotion and Disease Prevention. 2018. "Go NAPSACC." *University of North Carolina at Chapel Hill*. Accessed at https://putlocalonyourtray.uconn.edu/wp-content/uploads/sites/1607/2021/01/Go-NAP-SACC-F2ECE-Flyer-2020.pdf.

Connecticut Department of Public Health, UConn Extension and the Farm to School Collaborative. "CT Farm to Early Care and Education Program Application Guidance and Instructions." *Connecticut Department of Public Health, UConn Extension* and the *Farm to School Collaborative*. Accessed at putlocalonyourtray.uconn.edu/wp-content/uploads/sites/1607/2021/03/F2ECE-Application-Guidance-and-Instructions_English-March-2021.pdf.

Connecticut Farm to School. Accessed at https://www.ctfarmtoschool.org/.

Connecticut General Assembly. 2021. "OLR Bill Analysis: SB 1202." *Connecticut General Assembly*. Accessed at https://cga.ct.gov/2021/BA/PDF/2021SB-01202-R02SS1-BA.PDF.

FoodCorps. 2021. "State Policy Wins For Farm To School And School Meals: Your June/July Policy Brief." *FoodCorps*. Accessed at https://foodcorps.org/state-policy-wins-for-farm-to-school-and-school-meals-your-june-july-policy-brief/.

University of Connecticut. "Put Local on Your Tray." *University of Connecticut*. Accessed at https://putlocalonyourtray.uconn.edu/.

3.4 LOUISIANA

Farm to School

The Louisiana Department of Education and Louisiana State University AgCenter partner to deliver the state's farm-to-school program. Branded as ***Seeds to Success***, the program offers varied resources to farm-to-school stakeholders. For example, stakeholders may request training related to school gardening, farm-to-school classroom education and local food procurement. With respect to procurement, Seeds to Success helps schools to identify suppliers and make purchases. Its website includes a local food sources contact list. Additionally, it has published a

local food purchasing assessment. Schools can complete the assessment to prepare for speaking with farms and other local food suppliers. This process enables schools to identify and communicate their needs and interests (Louisiana Farm to School Program 2021).

To support producers, Seeds to Success has developed a similar tool. Formatted as a checklist, the tool guides produce growers through considerations involved in selling products to schools. The checklist presents questions that producers may answer with "yes" or "no" responses. Questions touch on topics such as production practices, product handling and worker health and hygiene. Producers can use completed checklists to introduce themselves to school food service directors and facilitate discussion about moving food products into schools (Seeds to Success).

Louisiana's farm to school program has pursued several other forms of outreach. Annually, it hosts a conference. The 2020 event featured programming related to education, school gardens and local procurement (Bogren 2020). Plus, with grant funding received in 2021, the state planned to invest in a Louisiana Farm to School ambassadors' network, which would offer training opportunities and expand farm-to-school's footprint across Louisiana (Armand 2021).

Farm to School

Grant funds awarded by USDA's Specialty Crop Block Grant Program enabled the Louisiana Department of Agriculture and Forestry to implement a ***Louisiana School Gardens*** initiative. To improve Louisiana specialty crop awareness, access and consumption among young people, the initiative provided financial support for school gardens. Community group or school applicants could request as much as $800 to reimburse school garden expenses (Louisiana Department of Agriculture and Forestry 2018). Funds could be used to create or expand school gardens (Louisiana Department of Agriculture and Forestry 2018).

When selecting garden proposals to receive funding, the initiative prioritized projects that would meet at least one of these criteria: locate in a low-income area or food desert; serve and involve low-income audiences; and engage extension professionals, master gardeners, garden club members or other community organizations (Louisiana Department of Agriculture and Forestry).

Thirty schools participated in the program, and directly, those schools reached more than 1,800 students. Each participating school had a coordinator to oversee garden activities (Louisiana Department of Agriculture and Forestry 2018). Although the funding opportunity has ended, the Louisiana School Gardens website outlines key questions schools can ask when selecting a garden site (Louisiana Department of Agriculture and Forestry).

Farm to Workplace

The Franciscan Missionaries of Our Lady Health System, based in Baton Rouge, started Healthy Lives in 2011. A wellness program, Healthy Lives works with employers to promote employee health (Franciscan Missionaries of Our Lady Health System 2021).

Healthy Lives services include health screenings and health coaching. It also offers a **Farm to Work** program, which follows a model similar to community supported agriculture. Employees who work at participating workplaces may enroll in Farm to Work, which offers seasonal, locally grown produce each week during two 10-week seasons: summer and fall. In a given season, employees may choose the 10-box plan, which provides a weekly produce box, or the five-box plan, which offers a produce box in alternating weeks. To participate, a workplace location must have at least 20 boxes per delivery. Also, a point of contact at the workplace must receive box shipments and track who picks up boxes (Franciscan Missionaries of Our Lady Health System 2021). Although Farm to Work began as a service offered to employees in the Franciscan Missionaries of Our Lady Health System, it has since expanded to reach workers in other health care settings and industries other than health care (Saucier 2016).

Participating employees pay $5 to enroll per season plus a $25-per-box charge. Each box contains 10 to 12 produce items. The farm supplying Farm to Work with food aggregates some produce from other growers to ensure subscribers receive fruit and vegetable variety (Franciscan Missionaries of Our Lady Health System 2021). Between 2014 and 2016, the program delivered roughly 16,000 boxes (Saucier 2016). With subscribers, Farm to Work also shares recipes, storage guidelines and other tips (Franciscan Missionaries of Our Lady Health System 2021).

Farm to Early Care and Education

The ***New Orleans Food Policy Action Council*** (FPAC) coordinates a Farm to Early Childcare Education program meant to help early care and Head Start centers as they educate young children about nutrition and sustainable food (New Orleans Food Policy Action Council).

Online, the council posts a toolkit that centers can reference when beginning "farm to ECE" programs. The toolkit recommends a five-step process to get started. Two steps involve conducting self-assessments using Go NAPSACC, a system that groups across the country use to plan children's health education. In the toolkit, FPAC lists resources that care centers may use to implement farm to ECE programs. Additionally, centers may request technical assistance to help with planning menus, communicating with families and training teachers. The toolkit provides some initial tips related to menu planning. For one, it suggests snacks as an entry point when revising menus, and it provides some healthy snack ideas to consider as examples (New Orleans Food Policy Advisory Committee).

References

Armand, Jacey. 2021. "Louisiana farm to school programs receive USDA grants." *LSU AgCenter*. Accessed Oct. 28, 2021, at https://www.lsuagcenter.com/articles/page1628781773258.

Bogren, Richard. 2020. "Louisiana Farm to School 2020 Conference to be 'Virtually Everywhere.'" *LSU AgCenter*. Accessed Oct. 28, 2021, at https://www.lsuagcenter.com/profiles/rbogren/articles/page1598989309594.

Franciscan Missionaries of Our Lady Health System. 2021. "Healthy Lives." *Franciscan Missionaries of Our Lady Health System*. Accessed Oct. 28, 2021, at https://ourhealthylives.org.

Louisiana Department of Agriculture and Forestry. "Louisiana School Gardens." *Louisiana Department of Agriculture and Forestry*. Accessed Oct. 19, 2021, at https://louisianaschoolgardens.com/.

Louisiana Department of Agriculture and Forestry. 2018. "Louisiana Specialty Crop Program Final Performance Report." *Louisiana Department of Agriculture and Forestry*. Accessed Oct. 28, 2021, at https://www.ams.usda.gov/sites/default/files/media/LA15FinalReport3419.pdf.

New Orleans Food Policy Action Council. Accessed at nolafoodpolicy.org.

New Orleans Food Policy Advisory Committee. "Farm to ECE Tool Kit." *New Orleans Food Policy Advisory Committee*. Accessed Oct. 19, 2021, at http://www.nolafoodpolicy.org/uploads/images/FarmtoECEToolkit.pdf.

Saucier, Lindsey. 2016. "Farm to Work." *Country Roads*. Accessed Oct. 28, 2021, at https://countryroadsmagazine.com/cuisine/Louisiana-foodways/farm-to-work/.

Louisiana Farm to School Program. 2021. "Seeds to Success." *LSA AgCenter*. Accessed Oct. 28, 2021, at https://seedstosuccess.com.

Seeds to Success. "Checklist for Producers Selling Produce to Local K-12 Schools." *Seeds to Success*. Accessed Oct. 28, 2021, at https://www.lsuagcenter.com/~/media/system/c/1/1/7/c117dc185110d3a73aef5940bdc9a35f/farmer%20checklist%20and%20conversation%20guide%202021%20updatedpdf.pdf.

3.5 MAINE

Farm to Institution

In 2018, Maine enacted "An Act To Expand the Local Foods Economy by Promoting Local Foods Procurement." It sets a goal for state institutions to make local food and food products represent 20% of the food and food products they use (128th Maine Legislature 2018). Schools may receive local food procurement support through the ***Local Foods Fund***, which took effect in July 2021. An earlier iteration of the fund was titled the Local Produce Fund (Maine Department of Education b).

The Local Foods Fund provides matching dollars to schools when they purchased eligible Maine-grown foods. For every $3 schools pay for eligible foods, the fund offers a $1 match. During the 2021-22 fiscal year, school administrative units may receive as much as $5,000 each.

The maximum increases to $5,500 if a school food service representative attends a local foods training. Schools may receive the matching funds when they purchase produce, value-added dairy, protein or minimally processed foods. They may buy these foods from farmers; farm co-ops; or local food hubs, processors or food service distributors. In terms of how it pays claims, the fund has an "as first received, first paid" policy (Maine Department of Education b).

 **Farm to Institution**

The state's education department partnered with the Maine Farm to School Network to introduce the ***Harvest of the Month*** program in 2019. The effort began as a pilot (National Farm to School Network b). It has since continued to encourage institutions to source food from local farms (Maine Department of Education a).

On its website, the state education department lists a harvest of the month calendar for the year. Featured products include Maine potatoes, protein, wild blueberries, cucumbers, tomatoes and root vegetables. Schools, summer programs and child and adult care food programs can pledge to participate. Producers who complete an online form indicate they're interested in supplying food to participating institutions (Maine Department of Education a).

 **Farm to Institution**

The Maine Farm to Institution (MEFTI) and Maine Farm to School Network in 2019 offered a ***Maine Farm to Institution Innovation Grants for Grassroots Projects*** program. Applicants could request small amounts of financial support meant to encourage procuring local food. No request appeared to exceed $4,500, and most requested much less funding. Allocating the funding to awardees followed a shared gifting process, described as one "where they decided together how much to allocate to each project based on each project's needs." Awardees included schools, a community association and a soil and water conservation district (National Farm to School Network a).

 **Farm to Institution**

A story from Bike Maine describes the ***Maine Farm and Sea Cooperative*** as the country's "first farm-to-institution food service cooperative" (Maine Cyclist 2016). The co-op formed in 2015 when University of Maine students voiced that they wanted the school to offer more local food options and a group of Mainers proposed that the university source 20% of its food locally. The co-op, which has consumer-, producer- and employee-members, didn't secure the dining services contract with the university, but the university chose to buy 20% of its food locally. Since then, the co-op has pursued contracts with other institutions, and it offers local food consulting services to institutions (Maine Farm and Sea Cooperative).

The Maine Farm and Sea Cooperative has its own nine-step implementation guide to help buyers navigate how to add local food to their menus (Maine Farm and Sea Cooperative). Its work has

also extended to live events. During the BikeMaine ride, Maine Farm and Sea Cooperative has offered food service management services, which has included sourcing local ingredients and planning, preparing and serving meals (Maine Cyclist 2016).

References

128th Maine Legislature. 2018. "An Act To Expand the Local Foods Economy by Promoting Local Foods Procurement." Accessed at https://www.mainelegislature.org/legis/bills/bills_128th/chapters/PUBLIC437.asp.

Maine Cyclist. 2016. "New BikeMaine Partners Bring Connectivity, Caffeine, and Food." *Maine Cyclist*. Accessed at 3q29wyy9g0b10lc803pvqqg1-wpengine.netdna-ssl.com/wp-content/uploads/2019/08/Maine-Cyclist-Fall-2016.pdf.

Maine Department of Education. a. "Maine Harvest of the Month." Accessed at https://www.maine.gov/doe/harvestofthemonth.

Maine Department of Education. b. "Local Foods Fund." *Maine Department of Education*. Accessed at https://www.maine.gov/doe/schools/nutrition/programs/localfoods/producefund.

National Farm to School Network. a. "Maine Farm to School Network" Accessed at https://www.mainefarmtoschoolnetwork.org/.

National Farm to School Network. "Maine Harvest of the Month Program." *National Farm to School Network*. Accessed at https://www.mainefarmtoschoolnetwork.org/harvest-of-the-month.

3.6 MASSACHUSETTS

Farm to School

Massachusetts Farm to School champions farm-to-school efforts in the state. An August 2019 report explained that state government appropriated $120,000 annually to the nongovernmental organization since 2014. State government included this farm-to-school funding in the state agriculture department's budget (Farm to Institution New England et al. 2019).

The organization has coordinated several programs focused on enhancing farm-to-school activity in the state. For example, schools may apply to participate in the yearlong ***Massachusetts Farm to School Institute***, which involves attending a fall retreat, creating a "farm to school action plan" with elements such as local procurement and curriculum, pairing school teams with coaches to support plan implementation and networking with peers. When schools complete the institute in good standing, they have an opportunity to request funding to support them in implementing a post-institute farm-to-school plan. The Henry P. Kendall Foundation provides financial support for the grant program (Massachusetts Farm to School b).

Massachusetts Farm to School also coordinates a ***Harvest of the Month*** program, which is a collaborative effort with Blue Cross Blue Shield of Massachusetts, Massachusetts Department of Agricultural Resources and the Massachusetts Division of Marine Fisheries. Harvest of the Month helps schools incorporate seasonal local food into their menus. It also hosts an online "Where to Find Local Food" directory that schools can use to identify local food options (Massachusetts Farm to School a).

Farm to Hospital

Located in Boston, ***Brigham and Women's Hospital*** receives local food through its Brigham Food Services division. The hospital and 10 others have collaborated to locally source ingredients such as salad greens. Brigham and Women's Hospital in October 2020 described this partnership as a "pilot initiative" that includes hospitals in Massachusetts and Rhode Island. Additionally, Brigham Food Services has sought to work with local vendors to procure blueberries, broccoli, zucchini and other foods (Brigham and Women's Hospital 2020).

Farm to School

The Massachusetts Coalition for Local Food and Farms represents nine "buy local" groups organized regionally throughout the state. At least two of those organizations describe farm-to-school involvement (Massachusetts Coalition for Local Food and Farms). ***Sustainable Nantucket*** operates a farm-to-school program meant to support schools in serving more local produce, and it has a community committee that provides oversight. The organization has its own Harvest of the Month program, which features an ingredient and farm each month. It also encourages schools' use of local foods through grants, garden education, farm-to-school camps and a gleaning program (Sustainable Nantucket). In 2012, Sustainable Nantucket described how it operated its gleaning program. Volunteers harvest unsalable produce from participating local farms. Then, they participate in cleaning and preserving the produce for Nantucket Public Schools to use throughout the school year. In 2011, the gleaning effort led to donating more than 1,000 pounds of produce (Minihan 2012).

In Martha's Vineyard, the ***Island Grown Initiative*** helps school cafeterias source more local food; teaches students about food, farming and nutrition; operates school gardens; and facilitates field trips to farms. The group describes that its Harvest of the Month program debuted in 2012-13 as the state's first and has served as a model for other similar efforts (Island Grown Schools).

References

Brigham and Women's Hospital. 2020. "From farm to hospital bedside." *Brigham and Women's Hospital*. Accessed August 2021 at https://www.facebook.com/watch/?v=1015357435597388.

Farm to Institution New England, Vermont Law School, Center for Agriculture & Food Systems and USDA National Agricultural Library. 2019. "Regional Trends in New England Farm to

Institution Procurement Policy." *Farm to Institution New England, Vermont Law School, Center for Agriculture & Food Systems* and *USDA National Agricultural Library*. Accessed August 2021 at https://www.farmtoinstitution.org/sites/default/files/imce/uploads/Regional-Trends-in-New-England-Farm-to-Institution-Procurement-Policy.pdf.

Island Grown Schools. "Martha's Vineyard Island Grown Farm to School." *Island Grown Schools*. Accessed at http://islandgrownschools.org/.

Massachusetts Coalition for Local Food and Farms. Accessed at https://www.localfoodma.org/.

Massachusetts Farm to School. a. "Harvest of the Month." *Massachusetts Farm to School*. Accessed August 2021 at https://www.massfarmtoschool.org/get-involved/harvest-of-the-month/.

Massachusetts Farm to School. b. "Massachusetts Farm to School Institute. *Massachusetts Farm to School*. Accessed August 2021 at http://www.massfarmtoschool.org/farm-school-institute-2019-20/.

Minihan, Kathleen. 2012. "Growing Gardens, Healthy Kids, & Community." *Sustainable Nantucket*. Accessed August 2021 at https://sustainablenantucket.org/wp-content/uploads/2012/02/NantucketGrown-2012-DRAFT-3.pdf.

Sustainable Nantucket. "The Farm to School Program." *Sustainable Nantucket*. Accessed at https://www.sustainable-nantucket.org/fts.

3.7 MICHIGAN

Farm to Institution

Created in 2010, the ***Michigan Good Food Charter*** included 25 priorities to help make accessing food from nearby farms as easy as procuring food from other sources. The charter's vision includes increasing the extent to which Michigan's food system creates an economic impact, provides healthy food and opens entrepreneurial opportunities while preserving natural resources. Three groups led the charter's development: the C.S. Mott Group for Sustainable Food Systems at Michigan State University, Food Bank Council of Michigan and Michigan Food Policy Council. The W.K. Kellogg Foundation provided funding (Colosanti et al. 2010).

One of the charter's 25 priorities focuses on galvanizing the state's institutions to use more Michigan-raised and -processed foods. One goal named that 20% of food sourced by Michigan institutions should have been grown, produced or processed in the state by 2020 (Colosanti et al. 2010). Many programs have emerged to work toward this goal; this summary highlights a few of these programs designed to promote institutions' use of Michigan foods.

To monitor progress toward the food charter, the Michigan Good Food Charter Shared Measurement Project formed. The metrics intend to communicate how food access, food sales and food-related job creation have changed (Michigan State University).

Farm to Institution

"Cultivate Michigan" has worked toward supporting stakeholders to meet the Michigan Good Food Charter's goal for institutions' local food sourcing. Described as a "statewide local food purchasing campaign" hosted by the Michigan Farm to Institution Network, Cultivate Michigan offers free membership to Michigan institutional food buyers (Cultivate Michigan 2021).

By participating, institutions can connect with professionals who may assist them with farm-to-institution efforts, and they can access resources that teach how to buy, use and market seasonally sourced local foods. Annually, Cultivate Michigan promotes four seasonal foods, which have included beef, kale, blueberries, potatoes, winter squash, garlic and beets. For these foods, promotional materials include posters, recipe ideas and buying guides. Plus, the campaign coordinates tours at farms, processors and distribution facilities (Cultivate Michigan 2021). Member institutions can track how much food they purchase from local sources. To collect this data, institutions participate in quarterly surveys, which direct the results to a data dashboard specific to each institution (Cultivate Michigan 2021).

Michigan State University, MSU Extension, a leadership team and an advisory committee coordinate the campaign, which has received funding from the W.K. Kellogg Foundation, Kresge Foundation and Americana Foundation (Cultivate Michigan 2021).

Farm to Institution

"Michigan Farm to Freezer" began in 2014 as an effort to freeze produce that schools could serve to students during the off-season when local fresh products wouldn't be available (Batory 2020). Additionally, the effort has roots in workforce development as it initially collaborated with Goodwill Northern Michigan and used its incubator facility (Produce Processing).

Michigan Farm to Freezer has continued prioritizing workforce development. The business' two partners — one a farm manager and the other who ran school lunch programs — invested in the business and watched it grow. According to a January 2020 story from *Edible Wow*, the business operates from a 14,000-square-foot warehouse capable of processing and freezing produce, which reaches the facility not long after harvest. Working with several Michigan farms, Michigan Farm to Freezer purchases all of a crop it needs for the year (Batory 2020). It focuses on sourcing product from small to mid-sized farms (Michigan Farm to Freezer 2021). At one time, the warehouse freezer space could house as many as 700 pallets. The flash-freezer has the capacity to process as much as 3,000 pounds in no more than a 90-minute interval (Batory 2020).

Michigan Farm to Freezer offers diverse frozen products, including apples, asparagus, blueberries, peaches and rhubarb. Its product portfolio also features several organic frozen

vegetables, vegetable mixes and a smoothie blend, and the business has expanded to serve grocery stores and offer freezing services. Marketed to home cooks, it has a "Simply Seasoned" line, which includes pie fillings and seasoned vegetables. Freezing services available to client businesses include blast-freezing, flash-freezing and storing frozen products (Michigan Farm to Freezer 2021). More than 100 institutions and 300 grocery stores buy from Michigan Farm to Freezer (Batory 2020). The business has also launched an e-commerce site for shoppers to buy frozen fruit and vegetables available at earthy.com/pages/michigan-farm-to-freezer.

Farm to Institution

Based in Traverse City, Michigan, ***Taste the Local Difference*** operates as a local food marketing agency. On its website, the agency provides an ***Institutional Sales Directory*** that lists farms interested in fulfilling institutional sales. Food buyers at institutions can search by keyword or location to find farms and then connect with them. Farm listings include what the farm grows and its location, growing practices and contact information. A ***Farm to School Directory*** helps schools identify farms that may welcome on-farm field trips, school garden assistance or agricultural presentations. The agency also offers marketing services to help farms and other food businesses promote their products and businesses (Taste the Local Difference).

Farm to Institution

Michigan farmers could apply for zero-interest, five-year loans to build season-extending hoophouses through the ***Hoophouses for Health*** program, which ran from 2011 to 2018. Funded by the W.K. Kellogg Foundation, the program required participating farmers to repay their loans in produce, which could be made available to families, schools or early childhood education centers. To reach families, farmers could offer products at farmers markets and accept Health Market Cards as payment. The cards were distributed to families accessing Head Start services or engaging with other community partners. If repaying a loan by sharing food products with schools, then the farmer would document delivery information and submit those records to qualify for repayment (Michigan Farmers Market Association 2021).

More than 66 farmers added hoophouses. Produce directed to schools and early childhood education centers exceeded 41,000 pounds. The Michigan Farmers Market Association, Michigan State University Center for Regional Food Systems and Michigan State University horticulture department administered the program (Michigan Farmers Market Association 2021).

Farm to Early Care and Education

At Michigan State University, the Center for Regional Food Systems began a ***Farm to ECE Procurement Pilot*** in 2019 to encourage local foods procurement among early care and education providers. The three participating communities shared experiences with one another during routine meetings. They also received mini-grants to support implementation of their own farm-to-early care and education action plans. During the pilot, one participating group

purchased a CSA membership, which included a monthly produce box, educational materials and access to the farmer who could answer questions. The group indicated interest in continuing the CSA participation into 2021 (Shedd, Bombrisk and Mensch 2021).

Farm to Hospital

Started by Cherry Capital Foods, the ***Michigan Grab n' Go*** program offers locally sourced food choices for hospitals to incorporate in their menus, reach-in coolers or shelves. Hospitals may purchase "grab-and-go" options from two separate categories. For serving in the cafeteria or providing in coolers, the Grab n' Go Deli options would require some preparation. Items include seasonal fresh fruit, hard cheeses with dried cherries, spelt berry grain bowls and hard-boiled eggs. For stocking in coolers or shelves, the Grab n' Go Retail items would provide a local pre-packaged food choice for the hospital's foodservice customers. Example products include protein bars, dried fruit, flatbread crackers and snack mixes — value-added products — branded by other food companies. Cherry Capital Foods describes itself as "the largest purveyor of Michigan only products," which means hospitals may access multiple Michigan-sourced products from one order (Cherry Capital Foods).

References

Batory, C. 24 January 2020. "Farm to Freezer Provides Fresh, Local Products for Michiganders Year-Round." *Edible WOW*. Accessed Sept. 20, 2021, at https://ediblewow.ediblecommunities.com/shop/farm-freezer-provides-fresh-local-products-michiganders-year-round.

Borgman, Mariel. 2020. "Michigan's Cucumber Crunch, a Summertime Farm to Institution Celebration." *Michigan State University, MSU Extension Community Food Systems*. Accessed Sept. 1, 2021, at https://www.canr.msu.edu/news/michigan-s-cucumber-crunch-a-summertime-farm-to-institution-celebration.

Cherry Capital Foods. "Michigan Grab n' Go." Cherry Capital Foods. Accessed Sept. 22, 2021, at https://cherrycapitalfoods.com/grabngo.

Colasanti, K., P. Cantrell, S. Cocciarelli, A. Collier, T. Edison, J. Doss, V. George, M. Hamm, R. Lewis, C. Matts, B. McClendon, C. Rabaut, S. Schmidt, I. Satchell, A. Scott and S. Smalley. 2010. "Michigan Good Food Charter." C.*S. Mott Group for Sustainable Food Systems at Michigan State University*, *Food Bank Council of Michigan* and *Michigan Food Policy Council*. Accessed Aug. 30, 2021, at https://www.canr.msu.edu/michiganfood/uploads/files/charter.pdf.

Cultivate Michigan. 2021a. "Celebrate Cucumbers with a Crunch." *Cultivate Michigan*. Accessed Sept. 15, 2021, at https://www.cultivatemichigan.org/news/2020/08/18/celebrate-cucumbers-crunch.

Cultivate Michigan. 2021b. *Cultivate Michigan*. Accessed Sept. 21, 2021, at https://www.cultivatemichigan.org.

Michigan Cherry Slurp. Accessed Sept. 22, 2021, at https://www.cultivatemichigan.org/sites/default/files/u480/2019_CherrySlurpToolkit_FINAL.pdf.

Michigan Farm to Freezer. 2021. Accessed Sept. 1, 2021, at https://mifarmtofreezer.com.

Michigan Farmers Market Association. 2021. "Hoophouses for Health." Michigan Farmers Market Association. Accessed Sept. 22, 2021, at https://mifma.org/for-vendors/hoophouses-for-health/#Schools.

Michigan State University. "Michigan Good Food Charter Shared Measurement Project." *Michigan State University*. Accessed Sept. 20, 2021, at https://www.canr.msu.edu/michigan_good_food_charter_shared_measurement_project/index.

Produce Processing. "Michigan Farm to Freezer creates new customers with value-added processing." Produce Processing. Accessed Sept. 22, 2021, at https://produceprocessing.net/article/michigan-farm-freezer-creates-new-customers-value-added-processing/.

Shedd, Meagan K. Heidi Bombrisk and Lindsay Mensch. 2021. "Pivoting Practice: Early Care and Education Food Procurement During a Pandemic." *Michigan State University Center for Regional Food Systems*. Accessed Sept. 22, 2021, at https://www.canr.msu.edu/resources/pivoting-practice-early-care-and-education-food-procurement-during-a-pandemic.

Taste the Local Difference. Accessed Sept. 1, 2021, at https://www.localdifference.org.

3.8 MINNESOTA

Farm to School

Coordinated by the Minnesota Department of Agriculture, the Minnesota farm-to-school grants offer funding to schools new to buying local food and those with more experience (MN Farm to School). For the 2022 fiscal year, the state would invest as much as $748,000 total in these grants to encourage school nutrition programs to use more Minnesota-produced foods. Qualifying foods would be those made from at least 80% Minnesota-produced and -processed ingredients. The programs prioritize reimbursing schools for unprocessed or minimally processed food purchases. Examples include fruit, vegetables, meat and dairy but not fluid milk. Eligible public and private schools must participate in the National School Lunch Program and serve K-12 students (Minnesota Department of Agriculture a). For awards made during the 2022 fiscal year, schools

would know whether they received funds by roughly January 2022. Then, they would have until August 2023 to purchase local products (MN Farm to School).

Through the ***First Bite Mini Grant*** program, schools can experiment with buying food from local producers. To be eligible, they must not have received a First Bite Mini Grant or a Full Tray Grant in the previous year. Applicants may request between $2,500 and $5,000, and the program requires no match (Minnesota Department of Agriculture a).

Schools with more farm-to-school procurement experience may apply to the ***Full Tray Grant*** program. The requested funding should support schools through expanding their Minnesota-produced food procurement and sourcing from additional local farms. A formula determines the funding a school is eligible to receive. For 10 months of the year, schools can receive $0.10 per meal served per month. For the 2022 fiscal year, the number of meals — breakfast and lunch — to use in the equation would be the number served in October 2019. At most, a school could receive $35,000. Recipients would need to provide a dollar-for-dollar cash match (Minnesota Department of Agriculture b).

First Bite and Full Tray awardees may request additional funds to ***purchase equipment*** that would enable them to pursue farm-to-school efforts. Eligible expenses include the equipment itself and related shipping and installation. Applicants may request as much as $25,000. A one-to-one match is required. The match may cover part of the equipment expenses or additional food costs (Minnesota Department of Agriculture a).

Farm to School

The Minneapolis Public Schools Culinary & Wellness Services team supports several farm-to-school efforts. With respect to school gardening, it packages seeds that schools may request to plant and harvest at school gardens, including the district's education farm in northern Minneapolis. The seeds produce what the district calls the ***Farm to School Fabulous Five***. The five crops — green beans, kohlrabi, butternut squash, radishes and kale — are well-adapted to Minnesota, incorporated in school meals and used to teach students about topics such as nutrition and science. Funds from a USDA Farm to School grant allowed the school to offer the seed packets (Minnesota Public Schools).

With respect to local procurement, the district chooses partner farms, which operate on a small or medium scale. To learn about growers interested in serving the school system, Minneapolis Public Schools invites producers, producer groups and other stakeholders to submit requests for proposals. It initiates this process during the winter, and selected entities would be partners in the next school year. To help navigate the bidding process, the school hosts an informational webinar open to anyone interested. The school selected 15 farms, cooperatives and food hubs as 2021-22 partners (Minneapolis Public Schools).

Farm to Early Care and Education

Announced in November 2020, Minnesota received a $90,900 competitive grant from the nonprofit ***Association of State Public Health Nutritionists*** to support farm to early care (ECE) and education efforts. Nine other states had funding awarded in the same cycle. The grants were part of a cooperative agreement with the Centers for Disease Control and Prevention (Minnesota Ag Connection 2020). Called the Farm To ECE Implementation Grant, the funding award allowed Minnesota to invest in several ECE initiatives. Those include expanding the Farm to ECE network to include providers, creating ECE resources in four languages, piloting a Farm to ECE mini grant program and improving access to online Farm to ECE training (ASPHN).

Farm to School

Monthly, the Minnesota Farm to School Leadership Team hosts a one-hour ***"office hours"*** session for anyone to join. During the virtual meeting, the team offers technical assistance related to farm-to-school and early care education programming. It opens the sessions to interested stakeholders, including farmers, schools, early care providers, parents, teachers and public health professionals. The leadership team formed in 2011 as an initiative of University of Minnesota Extension and the Minnesota Department of Health. Since that time, nine other groups have participated. They include government agencies, a health insurance company and a nonprofit think tank (University of Minnesota Extension).

Farm to Early Care and Education

The community food systems team at the ***Institute for Agriculture & Trade Policy*** collaborated with Head Start programs beginning in 2013 to incorporate farm-to-Head Start programming into its services. Such programming includes educating students about food and farming, hosting food-related events for families and purchasing locally produced food for children. A story from August 2019 reported that the institute had reached one-third of the state's Head Start programs. On its website, the institute highlights seven case studies to describe how various Head Start locations adopted farm-to-Head Start efforts (Costello 2019).

One of those case studies features ***Reach-Up Head Start***, located in St. Cloud (Costello 2019). Reach-Up Head Start sources fruits and vegetables from central Minnesota farmers. The center's monthly menus denote ingredients procured through farm-to-Head Start channels (Reach-Up Head Start). The connection between Reach-Up and the Institute for Agriculture and Trade Policy began in 2016, and Reach-Up prioritized local procurement for meals and snacks. It limited local sourcing from the three counties it served, and to forge connections with growers, the nutrition services coordinator visited farms to pick up product. Later, the program started buying from food hubs and other suppliers that had the capacity to deliver. Reach-Up strategically plans which local foods to include in menus throughout the year to build enthusiasm among the children they serve. To start and end the year, Reach-Up chooses a food the young

people will recognize — to encourage buy-in and end on a high note — and it fills the middle of the school year will less familiar items (Costello, VanSlooten and Kramer 2019).

References

ASPHN. "Farm to Early Care and Education Grantee Programs." *ASPHN*. Accessed Dec. 2, 2021, at https://asphn.org/farm-to-ece-grantees-programs/.

Costello, Katie. 2019. "Exploring Farm to Head Start Access Minnesota: Lessons from IATP's Farm to Head Start Partners." *Institute for Agriculture & Trade Policy*. Accessed Dec. 2, 2021, at https://www.iatp.org/blog/201908/exploring-farm-head-start-across-minnesota-lessons-iatps-farm-head-start-partners.

Costello, Katie, Erin McKee VanSlooten and Kelly Kramer. 2019. "Reach Up Head Start Program." *Institute for Agriculture & Trade Policy*. Accessed Dec. 3, 2021, at https://www.iatp.org/documents/reach-head-start-program.

Minneapolis Public Schools. "Farm to School." *Minneapolis Public Schools*. Accessed Dec. 2, 2021, at https://nutritionservices.mpls.k12.mn.us/f2s_program.

Minnesota Ag Connection. 2020. "Farm to Early Care and Education Grant to Expand in 10 States." *Minnesota Ag Connection*. Accessed Dec. 2, 2021, at http://minnesotaagconnection.com/story-state.php?Id=1320&yr=2020.

Minnesota Department of Agriculture. a. "AGRI Farm to School First Bite Mini Grant." *Minnesota Department of Agriculture*. Accessed Dec. 2, 2021, at https://www.mda.state.mn.us/sites/default/files/docs/2021-08/f2sfirstbiteFY22.pdf.

Minnesota Department of Agriculture. b. "AGRI Farm to School Full Tray Grant." *Minnesota Department of Agriculture*. Accessed Dec. 2, 2021, at https://www.mda.state.mn.us/sites/default/files/docs/2021-08/f2sfulltrayFY22.pdf.

MN Farm to School. Accessed Dec. 2, 2021, at https://www.farmtoschoolmn.org/.

Reach-Up Head Start. "Parents." *Reach-Up Head Start*. Accessed Dec. 2, 2021, at https://reachupinc.org/parents/.

University of Minnesota Extension. "Farm to school." *University of Minnesota Extension*. Accessed Dec. 2, 2021, at https://extension.umn.edu/school-and-child-care-nutrition/farm-school.

3.9 MONTANA

Farm to School

Each month, the ***Montana Harvest of the Month*** program highlights Montana-raised crops and animal products in schools and communities. In 2020-21, showcase ingredients included cherries, brassicas, grains, beef, leafy greens and dairy. To promote a given month's showcase ingredient, participants must at least serve the food and share Harvest of the Month materials. They may also consider facilitating taste tests and offering educational opportunities. Participating sites may include Montana K-12 schools, afterschool programs, Summer Food Service Programs, early care and education facilities and healthcare institutions. They receive free educational materials and training for participating (Montana State University b).

The program began as a yearlong pilot in 11 schools that featured 10 foods grown locally. During fall 2016, sites throughout the state first had an opportunity to participate (FoodCorps 2016). An online map accessed in July 2021 denoted more than 40 institutions participate in the program (The National Center for Appropriate Technology 2021).

Present-day program partners include the Montana Office of Public Instruction, Montana Team Nutrition Program, Montana State University Extension, FoodCorps Montana and Montana Department of Agriculture. Several groups and grant programs have provided funding for the program. They include USDA, the Montana Healthcare Foundation, Northern Pulse Growers Association, Montana Grains Foundation and Montana Department of Public Health and Human Services (Montana State University b). For schools interested in participating in the Montana Harvest of the Month program, ***Gallatin Valley Farm to School*** provides technical assistance. Its staff collaborate with school food service personnel to identify ingredient supplies, create recipes that use local ingredients and conduct taste tests (Gallatin Valley Farm to School).

Helena Food Share has implemented the Montana Harvest of the Month. Each month, its emergency food assistance reaches 1,500 families, and its daily food distribution to families averages nearly 6,000 pounds (Helena Food Share). Helena Food Share began its Harvest of the Month programming as a pilot. With support from the city, the organization accessed a Charlie Cart (Matsunami 2019). The cart serves as a "mobile teaching kitchen" where staff can do cooking demonstrations, offer product samples and increase exposure and trial of the Montana-raised ingredients featured through the Harvest of the Month program (Helena Food Share).

Farm to School

A variety of sponsors and partners hosted the ***Montana Farm to School Summit*** in August 2021. Targeted to farm-to-school stakeholders, the summit enabled these stakeholders to network, and it offered educational workshops, shared Montana farm-to-school successes and included tours. Participants had the option to attend in-person or virtually. They could also earn continuing education credits by attending the in-person program or listening to virtual sessions live. Conference attendance would provide continuing education credits for school nutrition

professionals, participants with early childhood projects or teachers seeking OPI teacher professional development (Montana State University a).

Farm to School

The ***Reimaging School Lunch*** effort began in 2019. Designed as a four-part initiative, the effort has had a clear purpose to determine how to develop school lunches using all Montana-raised ingredients. It has focused on the Bitterroot Valley area but envisions how to involve all Montana schools in sourcing and using local ingredients. Through the four phases, stakeholders could voice perspectives about school lunch systems, connect with one another, prioritize ideas and develop recipes. The team received support from the Montana Department of Agriculture and Ravalli County Economic Development Authority, which the state had selected to operate a Food and Ag Resource Center (Cultivating Connections) — one of eight Montana centers focused on improving farmers' profitability and extending their reach (Myscofski 2021).

The two-year project sought to create recipes that schools could use to integrate more Montana-grown ingredients into their menus. Recipe development work took place in a test kitchen-like environment. After the project ended in June 2021, the state's agriculture department would offer the project's findings and recipes as open-source resources accessible to Montana schools (Myscofski 2021). During the project, the team sought recipe ideas widely. In March 2021, it hosted the Reimagining School Lunch Local Foods Cooking Challenge. At the event, participants could rotate through the test kitchen in shifts and experiment with their own recipes that featured Montana-raised ingredients. Children from a youth home served as taste-testers. Participants were asked to share their recipes (Homestead Organics Farm 2021).

Farm to Early Care and Education

Located in Bozeman, the ***Montana State University Child Development Center*** incorporates several farm to early care and education practices into its programming and food sourcing. For example, the center maintains a garden where children participate in raising their own vegetables, such as kale and carrots, and trying those items after harvest. To add more local foods to meals and snacks, the center also sources produce from Towne's Harvest Garden — a CSA operated by Montana State University students. Each summer, the center purchases from the CSA. Children and their parents may also visit the Towne's Harvest Garden to see what farm production in person (Frame 2015).

Farm to Correctional Facility

Nearly 200 inmates at the ***Montana State Prison*** raise cattle, produce milk, process milk into dairy products and make other foods. The prison's 1,600 beef cattle, which eat feed the prison produces, are sold to out-of-state buyers. At the dairy, the prison maintains 310 cows, which each average 100 pounds of daily milk production. At the processing center, the milk undergoes pasteurization, and some is used to make yogurt, cream and ice cream. Of the dairy's total milk

production, it sells 70% as a raw product to Darigold. The training inmates receive at the farm give them skills they may apply when their sentences end. For several state organizations, the prison's Food Factory makes items such as baked goods and uses some Montana-raised ingredients in such products (The National Center for Appropriate Technology 2012).

References

Cultivating Connections. Accessed June 2021 at https://www.cultivatingconnectionsmt.org/reimagining-school-lunch.

FoodCorps. 2016. "Montana's Harvest of the Month Program Expands." *FoodCorps*. Accessed June 2021 at https://foodcorps.org/montanas-hotm/.

Frame, Piper. 2015. "Small hands planting tiny seeds in Bozeman." *Montana Team Nutrition Program at Montana State University*. Accessed June 2021 at https://www.montana.edu/mtfarmtoschool/documents/successstories/MTF2S%20Success%20-%20Child%20Development%20Center.pdf.

Gallatin Valley Farm to School. Accessed June 2021 at https://www.gvfarmtoschool.org/local-food-in-schools.

Helena Food Share. Accessed June 2021 at https://helenafoodshare.org/.

Homestead Organics Farm. 2021. "Reimagining School Lunch Local Foods Cooking Challenge." *Homestead Organics Farm*. Accessed June 2021 at https://www.facebook.com/events/homestead-organics-farm/reimagining-school-lunch-local-foods-cooking-challenge/872595766916242/.

Matsunami, Kei. 2019. "Serving Local Food at Food Banks." *Farm to Cafeteria Network*. Accessed June 2021 at https://farmtocafeteria.ncat.org/2019/05/31/montana-food-bank-networks-hunger-relief-forum/.

Montana State University. a. "Farm to School Summit." *Montana State University*. Accessed June 2021 at https://www.montana.edu/mtfarmtoschool/summit.html.

Montana State University. b. "Montana Harvest of the Month." *Montana State University*. Accessed June 2021 at https://www.montana.edu/mtharvestofthemonth/.

Myscofski, Megan. 2021. "Project Outlines Possibility of Farm-To-School Lunches." *Montana Public Radio*. Accessed June 2021 at https://www.mtpr.org/montana-news/2021-04-15/project-outlines-possibility-of-farm-to-school-lunches.

The National Center for Appropriate Technology. 2012. "Food as Part of Reform in Montana State Prison." *Farm to Cafeteria Network.* Accessed June 2021 at https://farmtocafeteria.ncat.org/2012/12/05/homegrown-profile-food-as-part-of-reform-in-montana-state-prison/.

The National Center for Appropriate Technology. 2021. "Montana Harvest of the Month." *The National Center for Appropriate Technology*. Accessed June 2021 at https://mtharvestofthemonth.org/.

3.10 NEBRASKA

Farm to School

A project led by the Lyons, Nebraska-based nonprofit Center for Rural Affairs, ***Greenhouse to Cafeteria*** benefits 10 rural Nebraska schools (Center for Rural Affairs 2021a). The program supports schools with teaching in greenhouses and incorporating greenhouse-raised food into school cafeteria meals (Hortidaily). The center has published a toolkit that schools can use as they begin greenhouse-to-cafeteria programs. With the toolkit, schools can see greenhouse and production plan examples and get ideas about how to create teams to lead their school greenhouse efforts (Center for Rural Affairs 2021a). Published in November 2019, the downloadable online toolkit walks through how to start and manage a farm-to-cafeteria program. It lists USDA, the Nebraska FFA Association and University of Nebraska Extension as sponsors and funders. Access the toolkit at cfra.org/sites/default/files/publications/from-greenhouse-to-cafeteria-a-toolkit-for-creating-and-revamping-greenhouse-programs-in-nebraska-schools.pdf.

To support the effort, a statewide peer network has plans to form. Participating greenhouse instructors can then share information with one another (Center for Rural Affairs 2021a). In 2021, the center unveiled the Greenhouse to Cafeteria Award to recognize schools for greenhouse-based food production activities. Not only would the award program honor high-achieving school greenhouse programs, but it would also help the center understand school greenhouse projects underway throughout the state (Hortidaily).

Farm to Institution

Since 2018, Nebraska schools have participated in ***Nebraska Thursdays***. Each month, participants serve and promote local foods on the first Thursday. The Nebraska Department of Education and the Center for Rural Affairs coordinate the program. Any school aligned with the National School Lunch Program may participate. Nebraska Thursdays schools receive materials to promote Nebraska foods, and they can access a recipe portal for meal ideas (Jespersen 2018).

In 2016, Omaha Public Schools first adopted the Nebraska Thursdays model. It has purchased and served local meat, produce and breads (Center for Rural Affairs 2021b). The program operated as a five-school pilot in 2017-18. The USDA Farm to School Grant Program provided financial resources for the pilot stage (Jespersen 2018). Program participants in 2017/18 bought $2.7 million in local food (Galatas 2019). A fall 2020 story from the Nebraska Dry Bean Growers Association reported more than 60 Nebraska districts participated in Nebraska

Thursdays (The Nebraska Dry Bean Growers Association 2020). The Nebraska Dry Bean Commission has assisted the program by financing school mini-grants, offering matching dollars to schools and providing giveaways. Its commitment has extended to education. It and the Culinary Institute of American trained school food service managers about how to use dry beans during workshops held in 2018 and 2019 (USDA Food and Nutrition Service 2021).

CEDARS, a child service organization, has also adopted Nebraska Thursdays. It follows the Nebraska Thursdays principles each week. Nebraska-grown foods featured on CEDARS menus include beef, watermelon and corn. In August 2019, CEDARS indicated the program benefits from produce donations (CEDARS 2019).

Farm to School

In May 2021, Nebraska's governor approved the ***Nebraska Farm-to-School Program Act***. The act assigned the program's administrative responsibilities to the state's agriculture and education departments. The latter would receive $100,000 annually to fund personnel and other expenses. The program would encourage sourcing locally grown food for school meals and snacks, connect schools with Nebraska farms, create hands-on food production and preparation learning opportunities, support schools with adding local foods to nutrition plans and train stakeholders about how to implement farm-to-school efforts (Nebraska Legislature 2021).

Farm to Institution

The eight-state Mountain Plains region hosts an annual ***"Crunch Off"*** in October as part of Farm to School Month. The event encourages residents in the eight participating states — Colorado, Kansas, Missouri, Montana, Nebraska, North Dakota, South Dakota and Wyoming — to choose locally grown "crunchable" fruits or vegetables, such as apples, pears, beets and radishes. The state with the most crunches per capita wins. Residents form "crunch teams" with others from their schools, workplaces, early care centers, neighborhoods or other groups to boost participation. Nebraska won the challenge in 2019 (University of Nebraska-Lincoln 2021). It kept its title in 2020 when 4.13% of the state chose to "crunch" into local foods. To support producers and schools with participating, the Nebraska Department of Education offers resources on its website (Nebraska Department of Education).

Farm to School

Since September 2010, the ***Ag Sack Lunch Program*** has provided a sack lunch to Nebraska fourth-graders who travel annually to the state capitol. Students receive a meal and hear a 15-minute presentation about how agriculture contributes to Nebraska's economy. Meals include ingredients made from foods Nebraska produces, and students at the University of Nebraska-Lincoln give the presentations. Each fourth-grader also takes home an agriculture-focused card game (Nebraska Farmer). Several commodity organizations support the program: the Nebraska Soybean Board, Nebraska Pork Producers, Nebraska Corn Board and Nebraska Beef Council

(Nebraska Soybean Board). More than 46,000 fourth-graders have participated in the program since it began (Lincoln Journal-Star). In 2021-22, the program has resources to reach 5,250 students during in-person events and 1,500 students during virtual programs (The Ag Sack Lunch Program).

References

CEDARS. 2019. "Nebraska Thursdays Bring Local Produce to CEDARS." *CEDARS*. Accessed at https://cedarskids.org/news/news.html/article/2019/10/15/nebraska-thursdays-bring-local-produce-to-cedars.

Center for Rural Affairs. 2021a. "Greenhouse to Cafeteria." *Center for Rural Affairs*. Accessed at https://www.cfra.org/greenhouse-cafeteria.

Center for Rural Affairs. 2021b. "Nebraska Thursdays." *Center for Rural Affairs.* Accessed at https://www.cfra.org/nebraska-thursdays.

Galatas, Eric. 2019. "Food Security." *KFOR*. Accessed at https://www.kfornow.com/food-security/.

Hortidaily. "Nominations for first-ever Greenhouse to Cafeteria Aware now accepted." *Hortidaily*. Accessed at https://www.hortidaily.com/article/9293436/nominations-for-first-ever-greenhouse-to-cafeteria-award-now-accepted/.

Jespersen, David. 2018. "NDE Launches Nebraska Thursdays, Local Foods for Nebraska Schools." *Nebraska Department of Education*. Accessed at https://www.education.ne.gov/press_release/nde-launches-nebraska-thursdays-local-foods-for-nebraska-schools/.

Lincoln Journal-Star. 2020. "Ag Sack Lunch Program for 4th-graders in 11th year." *Lincoln Journal-Star*. Accessed at https://journalstar.com/niche/neighborhood-extra/ag-sack-lunch-program-for-4th-graders-in-11th-year/article_5c1f27ac-716a-5a81-ad3b-c014806dd55a.html.

Nebraska Farmer. 2011. "AG Sack Lunch Program Educates Fourth-Graders." *Nebraska Farmer*. Accessed at https://www.farmprogress.com/story-ag-sack-lunch-program-educates-fourthgraders-9-48865.

Nebraska Department of Education. a. "Nebraska Crunch Off." *Nebraska Department of Education*. Accessed at https://www.education.ne.gov/ns/farm-to-school/mountain-plains-crunch/.

Nebraska Legislature. 2021. "LB396 – Adopt the Nebraska Farm-to-School Program Act." *Nebraska Legislature*. Accessed at https://nebraskalegislature.gov/bills/view_bill.php?DocumentID=44091.

Nebraska Soybean Board. “Nebraska Ag Sack Lunch Program.” *Nebraska Soybean Board*. Accessed at https://nebraskasoybeans.org/education/ag-sack-lunch.

The Ag Sack Lunch Program. Accessed at http://brokawmarketing.wufoo.com/forms/ag-sack-lunch-reservation-form/.

The Nebraska Dry Bean Growers Association. 2020. “Gering Public Schools celebrate October as National Farm to School Month and Nebraska Thursdays.” *The Bean Bag*. Accessed at http://beangrower.com/uploads/3/4/3/6/34369283/autumn_2020_bean_bag.pdf.

University of Nebraska-Lincoln. 2021. “Nebraska Crunch Off.” *University of Nebraska-Lincoln*. Accessed at http://buylocalnebraska.org/nebraska-crunch.

USDA Food and Nutrition Service. 2021. “Spilling the Beans on Local Food in Schools!” *The Dirt: News and Notes from FNS’s Office of Community Food Systems*. Accessed at https://content.govdelivery.com/accounts/USFNS/bulletins/2d9f026.

3.11 NEW HAMPSHIRE

Farm to School

Part of the University of New Hampshire’s Sustainability Institute, the ***New Hampshire Farm to School*** initiative pursues several paths to connect farm-to-school stakeholders — from farmers to school personnel. It works on advancing systems for local food procurement, developing educational materials, incorporating farm-to-school topics in curriculum and policies and sharing farm-to-school stories. It has offered a three-day ***NH Farm to School Summer Institute*** open to communities interested in seeing more local food used in institutions such as schools and hospitals. After attending the institute, participants benefit from support provided by the NH Farm to School initiative team (University of New Hampshire Sustainability Initiative).

In October, the initiative celebrates farm-to-school month with weekly activities and a photo contest. Its new ***NH Farm to School Network*** features partners such as government agencies, nonprofits, teachers, food service companies and procurement firms. The network engages partners to consider how to fund projects, identify resources and connect stakeholders (University of New Hampshire Sustainability Initiative).

New Hampshire Farm to School also coordinates a ***New Hampshire Harvest of the Month*** program open to school classrooms, cafeterias or schools (New Hampshire Harvest of the Month). In 2020, it also released an ***Indigenous NH Harvest Calendar curriculum*** with partners to teach students about indigenous foods and Native American culture (Food Connects 2020). The two partner groups were NH Indigenous Collaborative Collective and the Cowasuck Band of the Pennacook-Abenaki People (New Hampshire Farm to School).

Farm to Hospital

At ***Huggins Hospital*** in Wolfeboro, New England farms have provided all ingredients used in the daily hospital menu, according to reporting from 2015 (Roessler 2015). The facility has served local foods such as antibiotic-free meat, produce and seafood. A 2016 story from *Food Service Director* quantified that 85% of the meat purchased by the hospital had the antibiotic-free label, and the hospital had worked for two years to incorporate more local food into its menu items (Berta 2016). The hospital serves patients, staff and visitors. Plus, community residents treat its café as "a destination restaurant" in the area (Food Management 2016).

A Local Food Promotion Program grant supported the hospital's buy local efforts (Healthcare Facilities Today). The hospital has sourced its antibiotic-free meat from Miles Smith Farm, which raises its own animals and aggregates meat from other local farmers (Food Management 2016). As part of sourcing antibiotic-free meat, the hospital has done some education about antibiotic resistance — particularly among employees (Roessler 2015). The farm and hospital also offer a "buyers club" to enable hospital employees to buy discounted product (Food Management 2015).

Farm to Institution

The ***New Hampshire Farm to Restaurant Connection*** has a vision to connect farms, food businesses and restaurants in the state. This vision aligns with the group's mission to support the state's farms and economy. It also promotes New Hampshire foods to some institutions, such as restaurants, schools and hospitals (New Hampshire Farm to Restaurant Connection 2021).

The group has a map online of farms that may supply food to restaurants and institutions. The map also depicts locations of restaurants linked to the initiative. Restaurants have the option to participate in a certification process that communicates restaurant commitment to local sourcing (New Hampshire Farm to Restaurant Connection 2021).

References

Berta, Dina. 2016. "How foodservice operators are keeping up with demand for transparency." *Foodservice Director*. Accessed at foodservicedirector.com/operations/how-foodservice-operators-are-keeping-demand-transparency.

Food Connects. 2020. "Introducing the Indigenous NH Harvest Calendar Curriculum." *Food Connects.* Accessed at https://www.foodconnects.org/news-2/2020/8/10/introducing-the-indigenous-nh-harvest-calendar-curriculum.

Food Management. 2015. "Meat, the Neighbors." *Food Management*. Accessed at https://www.food-management.com/news-trends/meat-neighbors.

New Hampshire Farm to Restaurant Connection. 2021. Accessed at http://www.nhfarmtorestaurant.com/.

New Hampshire Farm to School. "Indigenous Harvest Calendar." Accessed August 2021 at https://nhfarmtoschool.org/indigenous-harvest-calendar/.

New Hampshire Harvest of the Month. Accessed August 2021 at https://www.nhharvestofthemonth.org/.

Roessler, Kurt. 2015. "Small Steps Lead to Big Change at Huggins Hospital." *Food Solutions New England*. Accessed at https://foodsolutionsne.org/small-steps-lead-to-big-change-at-huggins-hospital/.

University of New Hampshire Sustainability Initiative. "New Hampshire Farm to School." *University of New Hampshire Sustainability Initiative*. Accessed at https://nhfarmtoschool.org/.

3.12 OKLAHOMA

Farm to School and Early Care and Education

Using funds from a USDA Specialty Crop Block Grant, Oklahoma's Department of Agriculture, Food and Forestry introduced a ***school garden kit program*** for schools and early childhood centers in 2021. The gardens would give young people an opportunity to participate in food production and learn to appreciate healthy eating. The seven selected recipients participated in a two-year program that provided funding and resources to create and maintain their own on-site gardens (Oklahoma State Department of Agriculture, Food and Forestry 2021a). Materials available to the recipients included curriculum, equipment, plants and seeds. For a two-year period, an annual $2,000 per recipient could be used to pay a garden coordinator (Oklahoma Department of Agriculture, Food and Forestry 2021b).

Farm to School

Since 2015, the ***Tahlequah Farmers Market*** has operated a farmers market at participating schools. Students — third-graders have been a focus — would receive fruit and vegetable information and recipes, and they could shop from farmers market vendors using "veggie bucks" distributed to them and their own cash. This experience opens market opportunities for farmers, and the students have an opportunity to practice how to make food purchase decisions, support local farm businesses, choose healthy foods and manage money (Tahlequah Farmers Market). In the mini markets' inaugural year, more than 650 students participated and purchased $7,500 in produce (Cherokee Nation Health Services Public Health Programs 2016).

During 2021, students visiting a school market would receive 12 veggie bucks, which would buy four items portioned into $3 increments. Students who didn't use all 12 veggie bucks at the on-site school market could shop with those bucks later at the community farmers market (Crawford 2021). Partners, a Centers for Disease Control and Prevention grant (Tahlequah Farmers Market) and a USDA grant (Crawford 2021) funded the program. The Tahlequah B.E.S.T. Coalition and Cherokee Nation Healthy Nation initiated the program (Tahlequah Farmers Market).

An effort of Oklahoma State University Extension's Community Nutrition Education Programs, the ***Farm to You*** exhibit provides a free nine-station walk-through educational experience to first- to sixth-graders. The 40-foot by 40-foot traveling exhibit educates students about agriculture and nutrition. Stations cover topics such as Oklahoma farmland, the food value chain and the digestion process. Participating schools recruit volunteers to assist with setting up and tearing down the exhibit (Oklahoma State University Extension 2021). From 2008 to December 2020, Farm to You reached nearly 155,000 students (Oklahoma State University 2020).

As an alternative to the traditional traveling Farm to You exhibit, schools may elect to participate in a virtual program, which allows classrooms to experience the Farm to You exhibit stations via a Zoom connection (Oklahoma State University Extension 2021). The virtual option, which provides a 90-minute presentation to students, debuted as a pilot in fall 2020 during the COVID-19 pandemic. Oklahoma State projected that the pilot would reach roughly 1,300 students (Oklahoma State University 2020).

At Oklahoma State University (OSU), the dining services group and the Robert M. Kerr Food and Agricultural Products Center (FAPC) have partnered on a ***Farm to University Dining*** initiative. Select Made in Oklahoma businesses that produce or process foods locally have introduced their products through campus dining and catering services, and they have visited campus to provide free samples and build awareness of their products. FAPC, which supports Oklahoma businesses in entering new markets, has helped to select Made in Oklahoma businesses to participate (Gross 2009).

A program developed by the Oklahoma Department of Agriculture, Food and Forestry, Made in Oklahoma serves as a statewide branding initiative for Oklahoma entrepreneurs who make food or handcrafted products (Made in Oklahoma 2020). At the university, the dining services group and FAPC have also coordinated an annual Made in Oklahoma Day in partnership with the Made in Oklahoma Coalition. During the on-campus event, participating businesses offer free product samples to students, faculty and staff (Gross 2015).

Farm to Institution

On its website, the Oklahoma Farm to School program offers calculators to inform farm-to-school participation. Formatted in Excel, a ***distribution cost calculator*** can approximate the cost associated with delivering food using a farmer-owned truck. The fully customizable calculator enables users to tailor input variables, such as delivery size, labor hourly rate, delivery distance and vehicle use information, to their specific operations. Ultimately, the calculator helps users to estimate operating costs per mile or trip, distribution costs per produce unit delivered and a "farm gate" margin (Oklahoma Department of Agriculture, Food and Forestry).

Called the ***produce calculator***, a second Excel spreadsheet helps farmers and food service professionals to convert a number of servings into farm-level poundage, based on data from USDA's Food Buying Guide for Child Nutrition Programs. The calculator includes conversions for various fruit and vegetable products. Users may also enter a price per pound, and the calculator restates the price on a per-serving basis. Access these calculators at okfarmtoschool.com/growers-tools/tips-tools-and-guidelines-for-food-distribution-and-food-safety (Oklahoma Department of Agriculture, Food and Forestry).

References

Cherokee Nation Health Services Public Health Programs. 2016. "Partnerships to Improve Community Health Annual Report 2016." *Cherokee Nation Health Services Public Health Programs.* Accessed Sept. 29, at http://cherokeepublichealth.org/wp-content/uploads/2016/12/Cherokee_PICH2016_Digital-Spreads-FINAL.pdf.

Crawford, Grant D. 2021. "Farm Fresh Food: Tahlequah Farmers Market distributes 'veggie bucks' to coax third-graders into eating right." *Tahlequah Daily Press*. Accessed Sept. 29, 2021, at https://www.tahlequahdailypress.com/news/farm-fresh-food-tahlequah-farmers-market-distributes-veggie-bucks-to-coax-third-graders-into-eating/article_e29fedd6-4bca-52d8-a50e-645f2bbd4317.html.

Gross, Mandy. 2009. "OSU features Made in Oklahoma Products." *Robert M. Kerr Food & Agricultural Products Center, Oklahoma State University*. Accessed Sept. 30, 2021, at http://dasnr54.dasnr.okstate.edu:8080/XFAPC-DISABLED/news/mio.html.

Gross, Mandy. 2015. "A Century of Quality Food Products." *STATE Magazine*. Accessed Sept. 30, 2021, at https://issuu.com/brandosu/docs/statefall2015/103.

Made in Oklahoma. 2020. *Oklahoma Department of Agriculture, Food and Forestry Market Development Series Division*. Accessed Sept. 30, 2021, at https://www.madeinoklahoma.net/.

Oklahoma State Department of Agriculture, Food and Forestry. "Oklahoma Farm to School Program." *Oklahoma State Department of Agriculture, Food and Forestry*. Accessed Oct. 4, 2021, at http://okfarmtoschool.com/growers-tools/tips-tools-and-guidelines-for-food-distribution-and-food-safety/.

Oklahoma State Department of Agriculture, Food and Forestry. 2021a. "Oklahoma Farm to School Program offers school garden kits." *Morning Ag Clips*. Accessed Aug. 24, 2021, at https://www.morningagclips.com/oklahoma-farm-to-school-program-offers-school-garden-kits/.

Oklahoma State Department of Agriculture, Food and Forestry. 2021b. "Oklahoma Schools Receive Garden Kits Through the 20210 Specialty Crop Block Grant." *Oklahoma State Department of Agriculture, Food and Forestry*. Accessed Sept. 29, 2021, at https://ag.ok.gov/oklahoma-schools-receive-garden-kits-through-the-2020-specialty-crop-block-grant/.

Oklahoma State University. 2020. "Farm to You exhibit testing virtual pilot program." *Oklahoma State University*. Accessed Oct. 4, 2021, at https://news.okstate.edu/articles/agriculture/2020/gedon_farm-to-you.html.

Oklahoma State University Extension. 2021. "Farm to You." *Oklahoma State University Extension*. Accessed Oct. 4, 2021, at https://extension.okstate.edu/programs/farm-to-you/index.html.

Tahlequah Farmers Market. "Farm to School." *Tahlequah Farmers Market*. Accessed Aug. 24, 2021, at http://www.tahlequahfarmersmarket.org/farm-to-school.html.

3.13 OREGON

Farm to School

The ***Oregon Harvest for Schools*** campaign focuses on teaching students and families about Oregon foods. As part of the campaign's Harvest of the Month program, participating schools serve a different local fruit or vegetable every month of the school year. Through the campaign, the Oregon Department of Education provides various resources, such as in-class activity ideas, posters, stickers, coloring pages, newsletter template and recipes, that schools can incorporate into their curriculum and outreach to families. As funding permits, schools may request these resources for free (Oregon Department of Education b).

Additionally, the campaign has developed a video series. Each installment presents a short educational message about a particular Oregon-grown food. Videos cover how the food products are grown, harvested and used (Oregon Department of Education b). To create the videos, the Oregon Department of Education and Oregon State University Extension partnered. In total, the effort would create 50 videos to publish during a multiyear period (Siegel 2019).

In 2021, Oregon Harvest for Schools trained producers who have farm-to-school involvement to create video testimonials about their experience. Hosted by the Oregon Department of Agriculture, the training would provide growers, ranchers, seafood harvesters and food

processors and distributors with skills they could use to create short videos that promote their farm-to-school participation. Schools would play the videos in their cafeterias. The state's agriculture and education departments may also promote participating farms and businesses using the videos. The agriculture department engaged a third-party marketing agency to deliver the training via a webinar (Oregon Department of Agriculture 2021).

Farm to School

The noncompetitive ***Farm to School Procurement Grant*** reimburses schools participating in the National School Lunch Program for buying certain Oregon-produced food products. The reimbursement depends on the number of meals, including lunches, breakfasts and snacks, served to children. In addition to schools, the following entities would be eligible to participate: organizations that sponsor child and adult food care programs or summer food service programs. Types of food eligible for reimbursement include fruits, vegetables, meat and grains raised in Oregon; seafood caught in Oregon; and food processed in Oregon. The state administered the program in 2019-20 and 2020-21, and it committed roughly $11 million in funding for the procurement program (Oregon Department of Education a).

To support schools in identifying suppliers, the state has maintained an ***Oregon Harvest for Schools Portal***. For nearly 50 foods, the portal lists farms offering these products. Users may customize their searches to identify suppliers who provide fresh or processed options (Oregon Harvest for Schools). The state has also organized counties into regional hubs. Each regional hub has at least one lead contact person, and some of these individuals — particularly those involved in procurement initiatives — may help to connect producers and schools (Oregon Farm to School and School Garden Network).

Farm to Institution

Oregon's ***Farm to Child Nutrition Program Education Grant*** enables eligible applicants to compete for funding they can use to implement school educational programs related to food, agriculture or gardening. Eligible entities include schools, early care food program participants, nonprofits, Indian tribes, food producers and summer food service program participants. To apply, at least 40% of a targeted entity's student population must qualify for free and reduced-price meals. Applicants could seek $10,000 to $100,000 in funding for regular grants and $2,000 to $10,000 in funding for mini grants (Oregon Department of Education a). A bill passed in 2019 provided $2.5 million for these educational program grants (Plaven 2019).

Farm to School

For the 2020-21 school year, the Oregon Department of Agriculture dispersed $250,000 in ***Farm to School Producer Equipment and Infrastructure Grants***. The six awards ranged from roughly $14,000 to $68,000, and they funded purchases such as cold storage facility space; well, pump house and irrigation investments needed to meet school food safety requirements; season-extension tunnels; and mixer equipment (State of Oregon).

Farm to Senior Center

The ***Providence Benedictine Nursing Center*** works with a farm community supported agriculture program to access fresh local food. The CSA vendor delivers the produce to the nursing center. For food needs that the CSA or other vendors don't offer, the center purchases them from large farms in the area (Providence Foundations of Oregon).

References

Oregon Department of Agriculture. 2021. "Oregon Harvest for Schools video testimonial training." *Morning AgClips*. Accessed at https://www.morningagclips.com/oregon-harvest-for-schools-video-testimonial-training/.

Oregon Department of Education. a. "Oregon Farm to CNP Grant." *Oregon Department of Education*. Accessed June 2021 at https://www.oregon.gov/ode/students-and-family/childnutrition/F2S/Pages/ORf2sGrant.aspx.

Oregon Department of Education. b. "Oregon Harvest for Schools." *Oregon Department of Education*. Accessed June 2021 at https://www.oregon.gov/ode/students-and-family/childnutrition/F2S/Pages/OregonHarvestforSchools.aspx.

Oregon Farm to School and School Garden Network. "Regional Hubs." *Oregon Farm to School and School Garden Network*. Accessed June 2021 at https://oregonfarmtoschool.org/regional-hubs/.

Oregon Harvest for Schools. "Oregon Harvest for Schools Directory." *Oregon Harvest for Schools*. Accessed June 2021 at https://portal.oregonharvestforschools.com/.

Plaven, George. 2019. "Oregon lawmakers expand Farm-to-School Program." *Capital Press*. Accessed June 2021 at https://www.capitalpress.com/state/oregon/oregon-lawmakers-expand-farm-to-school-program/article_b76103a4-9c3a-11e9-8fb6-2bb6b1519c48.html.

Providence Foundations of Oregon. "Farm to Table Program." *Providence Foundations of Oregon*. Accessed June 2021 at https://providencefoundations.org/farm-to-table-program/.

Siegel, Marc. 2019. "ODE Partners With OSU To Launch Video Series Teaching Students How To Eat Healthy And Where Their Food Comes From." *Oregon Department of Education*. Accessed Nov. 18, 2021, at https://www.oregon.gov/ode/about-us/Documents/Oregon%20Harvest%20for%20Schools%20Video%20Press%20Release%20Final.pdf.

State of Oregon. "Farm to School Program." *State of Oregon*. Accessed June 2021 at https://www.oregon.gov/oda/programs/MarketAccess/Pages/FarmtoSchool.aspx.

3.14 RHODE ISLAND

Farm to Institution

The ***"Relish Rhody" Rhode Island Food Strategy*** commits to New England's regional goal, which states that "50% of the food eaten in New England be produced in the region by 2060." This long-term plan includes five focus areas. One of those — the "Sustain & Create Markets for Rhode Island Food, Beverage Products" focus — includes a specific priority to form linkages between institutions and Rhode Island food products (Relish Rhody).

Farm to School

The state provides a ***farm to school income tax credit*** to individuals or entities that provide Rhode Island-grown produce to local education agencies. The tax credit's value totals 5% of the farm product costs. A local education agency must certify in writing the individual or entity's role in providing food to its agency (Rhode Island General Laws 2015). A 2013 bill introduced to the Rhode Island legislature sought to expand the tax credit program to include milk or milk products, but it didn't advance into law (RI State Legislature 2013).

Farm to Hospital

From 2015-16, six Rhode Island hospitals participated in the ***RI Health Care Local Food Challenge***. The challenge assessed hospitals on three components: increasing local food procurement, educating staff and communities about local foods and encouraging staff to use more local foods. Each quarter, hospitals self-reported their activities in these three challenge areas. A scorecard dictated how to assign points for certain activities. The winning hospital would receive a $1,000 prize. Health Care Without Harm, the challenge manager, would offer technical assistance to support hospitals in competing in the three challenge areas and document their efforts. Other partners included Farm Fresh Rhode Island, the Hospital Association of Rhode Island the Rhode Island Food Policy Council (Health Care Without Harm).

Farm to University

Beginning in 2018, the Henry P. Kendall Foundation sponsored the ***New England Food Vision Prize***, which invests in projects that may increase use of regionally sourced food on campus menus and grow students' regional food demand (Weinstein 2018). The effort aligns with the region's goal to raise by 2060 at least half of the food it consumes, and it asks that applicants from at least two campuses collaborate on their projects (Roger Williams University 2019).

Five teams received the award in 2018, and another five were selected in 2019. Each award includes $250,000 in funding. Because of the COVID-19 pandemic, the foundation didn't award prize recipients in 2020 (Henry P. Kendall Foundation b). Prize funds have supported diverse initiatives. For example, one involved purchasing equipment and securing other infrastructure that would allow Narragansett Creamery to make shredded mozzarella cheese and supply it to institutional buyers, such as Brown University and Roger Williams University in Rhode Island. The milk used to produce the cheese would originate from two dairy co-ops that aggregate milk from three New England states, including Rhode Island (Henry P. Kendall Foundation c).

Another two Rhode Island campuses — the Rhode Island School of Design and Johnson & Wales University — would use their New England Food Prize award to partner with Farm Fresh Rhode Island and convert "seconds" or surplus local produce into packaged processed foods. Branded with the "College Harvest" name, these products would be available to institutions such as colleges and universities (Henry P. Kendall Foundation a).

References

Health Care Without Harm. "The Rhode Island Health Care Local Food Challenge." *Health Care Without Harm*. Accessed at https://noharm-uscanada.org/content/us-canada/rhode-island-health-care-local-food-challenge.

Henry P. Kendall Foundation. a. "College Harvest." *Henry P. Kendall Foundation*. Accessed at https://www.kendall.org/college-harvest/.

Henry P. Kendall Foundation. b. "Food Vision Prize." *Henry P. Kendall Foundation*. Accessed at https://www.kendall.org/our-work/food-vision-prize/.

Henry P. Kendall Foundation. c. "Hanging by a Shred: Supporting Regional Dairy Farms through Increased Shredded Cheese Production." *Henry P. Kendall Foundation*. Accessed at https://www.kendall.org/hanging-by-a-shred/.

Relish Rhody. "Rhode Island Food Strategy." *Relish Rhody*. Accessed at http://dem.ri.gov/relishrhody/pdf/rifood17.pdf.

Rhode Island General Laws. 2015. "Title 44 – Taxation, Chapter 44-30 Personal Income Tax, Section 44-30-27 Farm to school income tax credit." *Rhode Island General Laws*. Accessed at https://law.justia.com/codes/rhode-island/2015/title-44/chapter-44-30/section-44-30-27.

RI State Legislature. 2013. “Rhode Island House Bill 5135.” *RI State Legislature*. Accessed at https://legiscan.com/RI/bill/H5135/2013.

Roger Williams University. 2019. “RWU Part of Team to Win $250,000 New England Food Prize.” *Roger Williams University*. Accessed at https://www.rwu.edu/news/news-archive/rwu-part-team-win-250000-new-england-food-prize.

Weinstein, Miriam. 2018. “Henry P. Kendall Foundation Announces 2018 New England Food Vision Prize.” *The New England Food Vision Prize, Henry P. Kendall Foundation*. Accessed at https://www.farmfreshri.org/henry-p-kendall-foundation-announces-2018-new-england-food-vision-prize/.

3.15 SOUTH CAROLINA

Founded in 2011, ***South Carolina Farm to School*** began as a two-year program. The Centers for Disease Control and Prevention provided the initial funding. Later, the state expanded its efforts to support other types of institutions and formed a South Carolina Farm to Institution umbrella organization (South Carolina Farm to School).

At one point, preschools and schools could apply to receive mini grants from the state’s farm-to-school program. The $4,000 grant awards would support activities related to purchasing and using South Carolina-grown fruits and vegetables, building understanding of the Certified SC Grown program, investing in agriculture and nutrition education and establishing and maintaining school gardens. Since 2017, South Carolina has prioritized training instead of making grant funding available (National Farm to School Network 2021).

Related to this shift to training, the South Carolina Farm to School website includes various educational resources. For example, it has published farm-to-school “getting started” guides for farmers, cafeterias and classrooms. The farmer and cafeteria guides recommend several steps to initiate farm-to-institution relationships. For example, the farmer guide helps producers to create a business profile, prepare for conversations with institutional buyers and develop sample contracts (South Carolina Farm to School).

Farm to University

The ***University of South Carolina*** will have one or two microfarms installed on its campus following an announced partnership between ***Babylon Micro-Farms*** and Aramark, a food, facilities and uniform services business that has an ongoing relationship with several universities. The microfarms will allow universities to grow food on site (Vertical Farm Daily).

Babylon's hydroponic systems may grow crops such as leafy greens, herbs and edible flowers. Examples include more common spinach and basil and less common wasabi arugula and red beet shoots. Users may choose from about 40 seed varieties that Babylon offers. From one unit, users may produce 8 pounds of product. Users can manage these systems through a phone app. To help institutions use the crops they harvest, a Babylon farm manager collaborates with an institution's nutrition team to plan meals or events tied to the products grown (Crain 2021).

At the universities where Babylon will install the microfarms, students will have an opportunity to participate in tending the microfarms. Plus, they'll receive recipes and learn about what's involved in running a microfarm (Vertical Farm Daily). In addition to the University of South Carolina, three other universities will have the Babylon systems installed: Virginia Commonwealth University, Lander University and Western Carolina University (Crain 2021).

Offered by Clemson Cooperative Extension, ***School Gardening for SC Educators*** equips teachers to succeed with school garden projects. The program has several components. To start, a five-week online course introduces participants to a gardening-oriented science, technology, engineering and math (STEM) curriculum that they can use for kindergarteners to eighth-graders. The course also teaches when to plant and harvest vegetable crops (Clemson Cooperative Extension 2021). Those who enroll can complete the course at their own pace (Dabbs 2021). The extension service encourages collaboration. It asks for schools to form three-person teams. Participating educators who complete the course may receive professional development credits (Clemson Cooperative Extension 2021). Horticulture and 4-H youth development agents lead the course (Dabbs 2021).

Participants have also attended a hands-on workshop after the five-week online course. There, they could apply skills introduced in the online course and included in the student STEM curriculum. For example, they may practice how to set up an irrigation system or start seeds. At the workshop, they could also learn about other available gardening resources, such as those from 4-H and farm bureau's ag in the classroom initiative (Clemson Cooperative Extension 2021). During fall 2021, the workshop took a virtual format. During the virtual event, participants learned where to find other resources and accessed a "lesson in a box kit." The enrollment cost was $75 per registrant (Dabbs 2021).

School Gardening for SC Educators also administers the state's ***School Garden and Education Instruction Assistance Program***, which awards a school garden kit to each selected school (Spearman 2020). The program has a twofold purpose: create hands-on learning opportunities for students and add local produce to meals schools serve. In 2021, 20 schools participated. In addition to receiving the garden kit, selected schools participated in hands-on and online training and received the garden STEM curriculum and other resources (Bhonsle 2021).

Supporters of these programs have included the Boeing Company, College of Charleston Food Systems and Change Initiative and South Carolina Department of Education (Spearman 2020).

Farm to Early Care and Education

Four Head Start centers participate in ***Farm to Belly***, a program that exposes children and their families to local foods and nutrition education. Centers host farmers markets stocked with produce raised in South Carolina, and they open these markets to families (Defendiefer 2021). Families also receive recipe bags, which include recipes and the fruits and vegetables needed to make those dishes. A produce company and the Clemson Student Organic Research Farm have raised ingredients included in these recipe kits (Greenville Health System 2018). At home, families cook the meals together. Farm to Belly supporters include the Greenville Health System; SHARE Head Start; and Feed & Seed, an advocacy organization (Defendiefer 2021).

Farm to Belly has also done work to make healthy food more accessible to families, so they can enjoy those foods more frequently. Using program evaluation data, Farm to Belly determined families' preferred produce and advocated for convenience stores, such as Spinx, to offer those top fruits and vegetables (Defendiefer 2021). Spinx has a "Fresh on the Go" menu that includes salads and fruit cups. It has purchased locally raised apples and watermelons, which it has packaged in fruit cups and sold as whole fruit (Del Conte 2017).

Located in Charleston, the Medical University of South Carolina ***Urban Farm*** is a half-acre farm. It raises fruits, vegetables, flowers and herbs. On Tuesdays, the Urban Farm opens its produce stand, which makes vegetables, fruit, herbs, cut flowers and seedlings available for free (Medical University of South Carolina).

The farm also focuses on education. It offers workshops, seminars, volunteer days, tours and events. Held seasonally, the farm's programs have had in-person and virtual participation options (Medical University of South Carolina). The farm also contributes to a STAR Children's Day Treatment Program, which engages children and teenagers in horticultural therapy. Young people who participate in the program have behavioral challenges. When working with the farm staff one day a week, they collaborate in small groups on garden activities. Their treatment also includes classroom activities with therapists, nurses and social workers (Bailey 2021).

References

Bailey, Christina. 2021. "Horticultural therapy growing into a key program at MUSC Urban Farm." *Charleston City Paper*. Accessed Nov. 18, 2021, at https://charlestoncitypaper.com/horticultural-therapy-growing-into-a-key-program-at-musc-urban-farm/.

Bhonsle, Meera. 2021. "Two Lex-Rich Five schools chosen to participate in hands-on gardening program." *Cola Daily*. Accessed Nov. 18, 2021, at https://www.coladaily.com/communities/columbia/two-lex-rich-five-schools-chosen-to-

participate-in-hands-on-gardening-program/article_0eebbba2-61a4-11eb-8a8c-9b065dd3088b.html.

Clemson Cooperative Extension. 2021. "School Gardening." *Clemson University*. Accessed Nov. 18, 2021, at https://www.clemson.edu/extension/school-gardening/school.html.

Crain, Jennifer. 2021. "Greens are growing—right in the dining hall." *Food Management*. Accessed Nov. 18, 2021, at https://www.food-management.com/colleges-universities/greens-are-growing-right-dining-hall.

Dabbs, Amy. 2021. "School Gardening for SC Educators." *Clemson Extension*. Accessed at https://www.eventbrite.com/e/fall-2021-school-gardening-for-sc-educators-online-course-tickets-169304565513.

Defendiefer, Anna. 2021. "Farm to Belly Addresses Food Equity with Kids in Greenville, South Carolina." *National Farm to School Network*. Accessed Nov. 18, 2021, at

Del Conte, Erin. 2017. "Spinx Goes Local." *CStoreDecisions*. Accessed Nov. 18, 2021, at https://cstoredecisions.com/2017/02/16/spinx-goes-local/.

Greenville. 2018. "Farm to Belly Changing Pediatric Eating Patterns in Greenville County." *Greenville*. Accessed Nov. 18, 2021, at https://www.greenville.com/news/2018/12/farm-to-belly-program-changing-pediatric-eating-patterns-in-greenville-county/.

Medical University of South Carolina. "The Urban Farm." Medical University of South Carolina. Accessed Oct. 11, 2021, at https://web.musc.edu/resources/health-and-wellness/ohp/urban-farm.

National Farm to School Network. 2021. "South Carolina." *National Farm to School Network*. Accessed Nov. 18, 2021, at https://www.farmtoschool.org/our-network/south-carolina.

South Carolina Farm to School. Accessed Oct. 11, 2021, at https://scfarmtoschool.com.

Spearman, Molly. 2020. "School Garden and Education Instruction Assistance Program." *South Carolina Department of Education*. Accessed Nov. 18, 2021, at https://ed.sc.gov/newsroom/school-district-memoranda-archive/school-garden-and-education-instruction-assistance-program1/school-garden-and-education-instruction-assistance-program-memo/.

Vertical Farm Daily. "US Vertical Farm Announces Partnership with University Campus." Vertical Farm Daily. Accessed Oct. 8, 2021, at https://www.verticalfarmdaily.com/article/9362176/us-vertical-farm-announces-partnership-with-university-campus/.

3.16 VERMONT

Farm to Institution

In February 2021, the Vermont legislature engaged the Vermont Sustainable Jobs Fund to update a state food system plan. The original plan included 25 goals to achieve between 2011 and 2020. One goal centered on institutional consumption (Vermont Sustainable Jobs Fund). Called ***Farm to Plate***, the updated plan was finalized in February 2021. It includes 15 goals to address through 2030. One of the 15 goals stressed making local food accessible, and two of its underlying objectives involved institutions. Namely, one objective names that local food will represent one-fifth of food spending for half of the state's K-12 schools. A second mentions for more state colleges to dedicate at least one-fifth of their food budgets to local purchases (Claro et al.).

Farm to School

Signed into law during 2021, an incentive program provides funding to Vermont schools that purchase local food. Beginning in 2021/22, the ***Local Foods Purchasing Incentive for Vermont Schools*** scales the incentives paid according to the share of food purchase costs that are local. The program offers tiered payments when schools spend 15%, 20% and 25% of their food budgets on local options. For example, when 15% of food purchase costs are local, the incentive would total $0.15 per lunch (Vermont Farm to School Network 2021 and Food Connects 2021). Schools report food purchase data at the supervisory union level (Food Connects 2021). Supervisory unions refer to administrative units that "facilitate prekindergarten through grade 12 curriculum planning and coordination" (Vermont General Assembly b).

The program applies the following "local" definitions for 2021/22. Raw products must be Vermont-produced. For processed foods, at least half of the ingredients must originate from Vermont. Plus, they must undergo processing in the state, or the manufacturer must be Vermont-headquartered. A local "unique food" — one that doesn't have raw materials produced in Vermont — should meet at least two of three criteria: 1) made from at least 50% Vermont-produced raw materials by volume, 2) underwent "substantial transformation" in Vermont and 3) manufactured by a company with Vermont headquarters. Note, fluid milk doesn't count toward incentive program goals. Food served for catering also doesn't count (Food Connects 2021).

Schools must satisfy several eligibility criteria to participate. Namely, they must create a local foods procurement plan, choose a local foods coordinator, track their local food purchases and report their performance as required (Food Connects 2021). The first year had a $500,000 cap on incentive payments (Vermont Farm to School Network 2021).

Farm to Institution

Schools and early arly care providers may request grant funding from the Vermont Agency of Agriculture, Food and Markets to support local food procurement and education (State of

Vermont Agency of Agriculture, Food and Markets 2021). In 2006, the Vermont General Assembly passed the bill to fund the grant programs and called it the ***Rozo Mclaughlin Farm-to-School Program*** (Vermont General Assembly a). Since the state enacted the program, it has diverted general funding to support farm-to-institution work and created funding opportunities for early care providers (State of Vermont Agency of Agriculture, Food and Markets 2021).

Vermont has recently offered three grant programs coordinated by the Vermont Agency of Agriculture, Food and Markets. First available in 2021, ***Community Supported Agriculture Grants*** encourage registered or licensed early childhood centers to purchase food from CSA programs spearheaded by in-state farms or farm collaboratives. Applicants could request funding to pay 80% of a CSA share purchase price. The program offsets CSA purchase costs for 33 early childhood organizations, and the state planned to make a second funding round available in winter 2022 (State of Vermont Agency of Agriculture, Food and Markets 2021).

Applicants to the ***Farm to School and Early Childhood Grant*** may request financial support and technical assistance. The grant program began funding projects in 2007. Applicants who receive standard awards receive $10,000 paid in three increments. To receive successive payments, applicants must demonstrate they have completed certain deliverables. If more than one entity participates, then grant awards may total as much as $15,000. Grantees may use funding to support their own specific goals. Overall, the grant program endeavors to use more local foods, improve agricultural literacy, encourage healthy eating, connect educators and agricultural stakeholders and help more children access child nutrition programs. The program expects teams to participate in roughly 29 hours of technical assistance, which includes customized coaching, procurement training, curriculum development assistance, child nutrition program training and garden workshops. The coaching component helps project teams make their own action plans, budget accordingly and connect with other technical assistance and support. Projects typically take 1.5 years to complete (State of Vermont Agency of Agriculture, Food and Markets 2021).

Called the ***Farm to School Vision Grant***, the third program supports two-year projects proposed by schools, eligible early care providers and nonprofits or community groups working with these types of institutions. Grantees may use awarded funds — between $5,000 and $38,000 per project — to address a farm-to-school challenge, and their projects should include youth. Examples of challenges that may be focus areas include climate change, COVID-19 and racial equity. A 25% match — cash, in-kind or both — is required. Solid proposals will also include multiple stakeholders, show potential for being scaled or replicated and have potential to make a long-term impact (State of Vermont Agency of Agriculture, Food and Markets 2021).

Farm to Hospital

The ***Health Care Share*** program offers a farm share to qualifying Vermont families. Selected by their health care providers, families receive items such as vegetables, herbs, recipes and nutritional information in their shares (The University of Vermont Health Network a). In total, a week's share includes 12 pounds to 15 pounds of produce. In some cases, shares may also include whole frozen chickens (Vermont Youth Conservation Corps). Depending on a family's underlying health conditions, the shares may be customized. For example, shares may include

items particularly well-suited for individuals who have diabetes or heart disease (Noyes 2018). In 2020, participating families received 14 shares — weekly shares during the main growing season and monthly shares in October and November. The program began in 2012, and through mid-2020, it had served more than 1,000 families (The University of Vermont Medical Center 2021).

The food products that families receive originate from the Vermont Youth Conservation Corps farm (The University of Vermont Health Network a). Participating youth work in teams to grow the food and deliver it (Vermont Youth Conservation Corps). The distribution points are health care facilities, where families pick up their shares (The University of Vermont Health Network a). In addition to the program's main farm campus, partnering farms work with corps members to grow and glean food. The youth also attend daily education time and meet weekly with leaders to focus on one-on-one personal development (Vermont Youth Conservation Corps).

The University of Vermont Medical Center also houses the ***Center for Nutrition and Healthy Food Systems***, which intends to teach health care providers about how to make their food service programs more sustainable. The center's work has included training hospital and school food service employees about how to use fresh food. Held during the summer, the two-day training helped to improve culinary skills (The University of Vermont Medical Center b).

Farm to Workplace

Skincare company ***Twincraft*** includes several perks in its employee compensation plans. For one, it subsidizes or provides free community supported agriculture shares in an arrangement with the Intervale Community Farm (Novak 2021). Available year-round, the shares make local foods such as vegetables, fruits, meat and bread accessible to Twincraft employees (Twincraft 2019). A nonprofit, the Intervalue Center has a food hub that collaborates with more than 70 farms to create weekly produce baskets. It also has an online shop that allows customers to pick and choose various goods, such as bakery items, dairy products, eggs, pantry goods and proteins, to add to a delivery (Intervale Food Hub 2021).

References

Claro, Jake, Sarah Danly, Becka Warren, Ellen Kahler, Abbey Willard and Kyle Harris. "2021-2030 Vermont Agriculture & Food System Strategic Plan." *Vermont Farm to Plate* and *Vermont Sustainable Jobs Fund*. Accessed Dec. 1, 2021, at https://www.vtfarmtoplate.com/assets/resource/files/Vermont%20Agriculture%20and%20Food%20System%20Strategic%20Plan%202021-2030.pdf.

Food Connects. 2021. "Local Purchasing Incentive FAQ." *Food Connects*. Accessed Nov. 30, 2021, at https://docs.google.com/document/d/1lpXsmob-NoiK0i6utGd7600DTp-m1D-A8uvX8ticfec/edit.

Intervale Food Hub. Accessed Dec. 2, 2021, at https://www.intervalefoodhub.com/.

Novak, Alison. 2021. "Vermont Employees Who Lean Into Family-Friendly Perks Find That Their Workforce Stays Strong." *Seven Days*. Accessed Dec. 2, 2021, at

https://www.sevendaysvt.com/vermont/vermont-employers-who-lean-into-family-friendly-perks-find-that-their-workforce-stays-strong/Content?oid=33582344.

Noyes, Amy Kolb. 2018. "'Health Care Share': Young People Grow Food To Supply Doctor-Recommended CSA." *Vermont Public Radio*. Accessed Dec. 2, 2021, at https://www.vpr.org/vpr-news/2018-04-06/health-care-share-young-people-grow-food-to-supply-doctor-recommended-csa.

State of Vermont Agency of Agriculture, Food and Markets. 2021. "Farm to School, Early Childhood and Institutions." *State of Vermont*. Accessed Nov. 30, 2021, at https://agriculture.vermont.gov/businessdevelopment/farm-school-early-childhood-and-institutions.

The University of Vermont Medical Center. a. "Health Care Share." *The University of Vermont Medical Center*. Accessed Dec. 2, 2021, at https://www.cvmc.org/about-cvmc/partnerships/health-care-share.

The University of Vermont Medical Center. b. "Healthy Food at the UVM Medical Center." *The University of Vermont Medical Center*. Accessed Dec. 1, 2021, at https://www.uvmhealth.org/medcenter/about-uvm-medical-center/environmental-leadership/sustainable-nutrition.

The University of Vermont Medical Center. 2021. "Free Vermont Health Care Share Program increases food security." *The University of Vermont Medical Center*. Accessed Dec. 2, 2021, at https://vermontbiz.com/news/2020/july/29/free-vermont-health-care-share-program-increases-food-security.

Twincraft Skincare. 2019. "Twincraft & the Intervale Center." *Twincraft Skincare*. Accessed Dec. 2, 2021, at https://www.twincraft.com/twincraft-skincare-news/twincraft-intervale-center-summervale.

Vermont Farm to School Network. 2021. "Vermont Enacts Local Food Purchasing Incentive for Schools: $500,000 Appropriated for Year One." *Vermont Farm to School Network*. Accessed Nov. 30, 2021, at https://vermontfarmtoschool.org/vermont-enacts-local-food-purchasing-incentive-schools-500000-appropriated-year-one.

Vermont General Assembly. a. "Title 6: Agriculture, Chapter 211: The Rozo Mclaughlin Farm-to-school Program." *Vermont General Assembly*. Accessed Nov. 30, 2021, at https://legislature.vermont.gov/statutes/section/06/211/04721.

Vermont General Assembly. b. "Title 16: Education, Chapter 7: Supervisory Unions." *Vermont General Assembly*. Accessed Nov. 30, 2021, at https://legislature.vermont.gov/statutes/fullchapter/16/007.

Vermont Sustainable Jobs Fund. "Strategic Plan Chapter 2: Goals & Data." *Vermont Sustainable Jobs Fund*. Accessed Dec. 1, 2021, at https://www.vtfarmtoplate.com/getting-to-2020.

3.17 WEST VIRGINIA

Farm to Institution

To support West Virginia farms and encourage institutions to raise their own food, the state passed the ***Fresh Food Act*** in 2019. The act included a mandate that state-funded institutions serve West Virginia-produced foods. For the produce, meat and poultry that West Virginia businesses could produce or supply, the act required state-funded institutions to source at least 5% from West Virginia producers or their own food production programs. The act would apply to institutions such as schools, state parks and correctional facilities (West Virginia Department of Agriculture 2019). In 2021, West Virginia's legislature passed a farm bill — the first in its history — that expanded the Fresh Food Act to include additional qualifying West Virginia foods (Donaldson 2021). The bill language states at least 5% of the food that state-funded institutions use must originate from West Virginia producers. It listed the following qualifying purchases: fresh produce; meat; poultry; milk; other dairy products; and other West Virginia-grown, -produced or -processed food (West Virginia Legislature 2021).

When implementing the original Fresh Food Act, West Virginia provided institutions time to meet the mandate (West Virginia Department of Agriculture 2019). The 5% mandate would ease into effect and be required by 2025 (Food Tank). Institutions could request a waiver. Even with a waiver, however, an institution would need to show it had invested effort into sourcing West Virginia-produced food and working toward satisfying the 5% mandate. To do this, institutions would file annual food purchasing reports with the state agriculture department. Those reports would detail food purchases and the dollar share originating from West Virginia sources (West Virginia Department of Agriculture 2019).

Each state-funded institution had a requirement to name a primary liaison to communicate with the West Virginia Department of Agriculture, which administers the act's implementation. Although the state set no noncompliance penalty, it reserved the right to alert the legislature about noncompliance incidences (West Virginia Department of Agriculture 2019).

Farm to Institution

Based in Maxwelton, West Virginia, the ***Turnrow Appalachian Farm Collective*** aggregates produce, meat, eggs, dairy products, flowers and value-added products from family-owned independent farms to sell to schools, wholesale distributors and other buyers. The collective's production managers coach the producers through forming production plans, which account for demand from the collective's buyers. Farmers deliver their food to drop-off locations. From that point, collective staff prepare the food for distribution and transport product to more than 100 customers (Turnrow Appalachian Farm Collective).

By participating in the collective, producers may access technical assistance and lower packaging costs. Additionally, the collective and the Greenville Farm Kitchen partner to offer producers access to an FDA-certified manufacturing facility where they can make value-added

products. To participate in the collective, producers join at one of two levels. With the first, producers annually pay $50 and sell through the collective after they complete onboarding activities. With the second, producers pay $175 initially. If their collective sales exceed $3,000 for the year, then they earn a 2% return on total sales (Turnrow Appalachian Farm Collective).

Historically, the collective's farm-to-school sales focused on salad bar items. After the COVID-19 pandemic began, school salad bars closed, and the collective had limited products available that schools continued to need. During this time, the collective increased its farm-to-school sales, but it only shipped apples. The hope was the farm-to-school relationships initiated during the pandemic would lead to opportunities for schools to source other local products after the pandemic ended (Food Tank 2020).

Farm to School

Using funds from a 2018 farm-to-school implementation grant from USDA, West Virginia initiated a process to plan its farm-to-school program's future. The resulting ***five-year strategic plan*** named a series of recommendations. The two foundational recommendations centered on formalizing a farm-to-school alliance and hiring a full-time farm-to-school coordinator at the West Virginia Department of Agriculture (Fourth Economy).

The plan also included several strategies. One included creating a two-year pilot program meant to improve farmer coordination. Research conducted while developing the plan identified a common challenge: equipping producers to provide the quantity of food schools need. Coordination would allow farmers to pool production and satisfy large orders schools would place. The recommended two-year pilot program — slated to begin in 2021/22 — would involve two to five counties identifying as many as 10 local producers who can specialize in supplying two to five crops to area schools. The participating farmers would plan their production collectively to meet school needs and articulate expectations for packaging, transportation and payment. Ultimately, the pilot has the potential to allow existing food co-ops, such as the Preston Growers Co-op and Turnrow Appalachian Farm Collective, to grow or stimulate new co-ops to begin (Fourth Economy).

Farm to School

A middle school in Lewis County, West Virginia, held its first ***farm-to-school picnic*** in August 2019. It sourced nine ingredients — from beef to wheat and tomatoes to pinto beans — from local farms. Using the wheat, the school made homemade hamburger buns, which required a notable time and labor investment. The school's nutrition supervisor indicated interest in planning more farm-to-school picnics at least on a quarterly basis (Young 2019).

Farm to Government Agency

When possible, West Virginia's state park system has used locally made products, including beverages and toiletries. In 2018, the state parks introduced a ***farm to table dinner series***. The summer event included dinners at eight West Virginia state parks. Each dinner's menu — starting with a salad and then progressing through a main entrée, sides and dessert — would exclusively feature West Virginia-produced foods and beverages. The parks would also offer wine and craft beer produced locally (Lawrence 2018). Due to the dinners' popularity, the series continued in 2019 (Brooks 2019). 2019's nine-event dinner series began in June and ended in September, and several locations had dedicated themes, such as "Hoedown on the Hill" (Parsons 2019). State parks resumed the dinners during summer 2021 (West Virginia State Parks 2021).

References

Brooks, Mary Catherine. 2019. "Twin Falls to host second 'Farm-to-Table' dinner." *Wyoming County Report*. Accessed Oct. 6, 2021, at https://www.wycoreport.com/news/local_news/twin-falls-to-host-second-farm-to-table-dinner/article_186b2092-b3b2-11e9-8919-6b58c9088c9a.html.

Donaldson, Sarah. 2021. "West Virginia lawmakers pass first farm bill for the state." *Farm and Dairy*. Accessed Oct. 10, 2021, at https://www.farmanddairy.com/news/west-virginia-lawmakers-pass-first-farm-bill-for-the-state/658947.html.

Food Tank. 2020. "Pandemic, Fresh Food Act Influencing Farm-to-School Efforts in West Virginia." *FoodTank*. Accessed Oct. 7, 2021, at https://foodtank.com/news/2020/12/pandemic-fresh-food-act-influencing-farm-to-school-efforts-in-west-virginia/.

Fourth Economy. "Growing Opportunity with West Virginia Farm to School: 2020-2025 Strategic Plan." *Fourth Economy*. Accessed Oct. 10, 2021, at https://agriculture.wv.gov/wp-content/uploads/2021/03/F2S-Strategic-Plan_FINAL.pdf.

Lawrence, Chris. 2018. "State Parks to host farm to table events." *MetroNews*. Accessed Oct. 6, 2021, at https://wvmetronews.com/2018/06/13/state-parks-to-host-farm-to-table-events/.

Parsons, Shyla. 2019. "Local Foods Feature at State Park Dinners." *West Virginia Public Broadcasting*. Accessed Oct. 6, 2021, at https://www.wvpublic.org/news/2019-06-12/local-foods-featured-at-state-park-dinners.

Turnrow Appalachian Farm Collective. Accessed Oct. 11, 2021, at http://www.turnrowfarms.org.

West Virginia Department of Agriculture. 2019. "Fresh Food Act Tuesday, December 17, 2019." *West Virginia Department of Agriculture*. Accessed Oct. 7, 2021, at https://www.youtube.com/watch?v=UxDHbZcfwLk.

West Virginia Legislature. 2021. “House Bill 2633.” *West Virginia Legislature*. Accessed Oct. 18, 2021, at https://www.wvlegislature.gov/Bill_Status/bills_text.cfm?billdoc=HB2633%20SUB%20ENR.htm&yr=2021&sesstype=RS&billtype=B&houseorig=H&i=2633.

West Virginia State Parks. 2021. “Farm to Table Dinners Return to West Virginia State Parks.” *West Virginia State Parks*. Accessed Oct. 10, 2021, at https://wvstateparks.com/farm-to-table-dinners-2021/.

Young, Rebecca. 2019. “First Farm to School Picnic a success in LC Schools.” *The Weston Democrat*. Accessed Oct. 6, 2021, at https://www.wvnews.com/westondemocrat/news/first-farm-to-school-picnic-a-success-in-lc-schools/article_35875d94-afbb-59fb-80fb-a069fae26775.html.

Chapter 4

Farm-to-Institution Models

Authors:

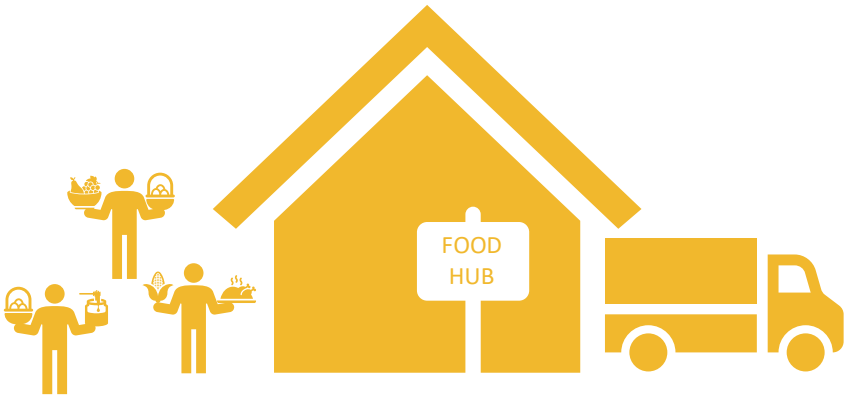
Alice Roach, Senior Research Associate, MU Division of Applied Social Sciences
Jill Moreland, Program Director, MU Division of Applied Social Sciences
Joe Parcell, Director, MU Division of Applied Social Sciences
Bill McKelvey, Senior Project Coordinator, MU Division of Applied Social Sciences
Hannah Anderson, Student Intern, MU Division of Applied Social Sciences

Table of Contents:

4.1 INTRODUCTION

Government agencies, community organizations and the private sector have collaborated to create models meant to facilitate institutional use of farm-raised food. This chapter describes such models that have been implemented in other states and regions. Based on secondary research, these summaries indicate possibilities for Missouri to consider.

4.2 FOOD HUB



A nonprofit, ***Farm Fresh Rhode Island*** began as a student project before it formalized as a 501(c)3 in 2007. The organization leads multiple programs designed to help the Northeast U.S. satisfy half of its food needs through local production by 2060. Several notable initiatives connect the farm community to institutional stakeholders (Farm Fresh Rhode Island).

First, the organization's ***Market Mobile*** program functions as a food hub. It aggregates food products grown and harvested on farms in Rhode Island, Massachusetts and Connecticut. Originally, restaurants were the target audience. Since then, institutions such as hospitals and schools have purchased from Market Mobile (Farm Fresh Rhode Island). In 2020, the food hub introduced a direct-to-home option during the pandemic (Coelho 2021).

To participate in the program, growers must apply. Eligible producers must at a minimum prove that they have received all necessary licenses and purchased liability insurance. Farms must agree to have an annual inspection meant to verify that a particular farm raises the products it says it raises and adheres to quality control practices. Market Mobile also urges farms to have certifications such as GAP. The food hub largely handles produce, but growers also sell dairy products, eggs, meat, seafood and herbs. As of November 2021, the top three produce items sold for the year were mushrooms, apples and potatoes (Farm Fresh Rhode Island).

Farms choose the prices to charge for the products they list on the online ordering platform. Customers can access product from multiple growers in one spot, so they benefit from the food hub's centralized ordering and invoicing system. Farm Fresh Rhode Island levies an 18% fee on sales to support the food hub's infrastructure, operations and administration. Farms deliver their products to the Farm Fresh Rhode Island packhouse, and the food hub takes responsibility for storage and transportation from that point (Farm Fresh Rhode Island).

The food hub's storage space has areas designated to hold products at varying temperatures. The packing and storage areas are part of a relatively new 60,000-square-foot facility located in Providence (Coelho 2021). At the three-acre site, Farm Fresh Rhode Island also hosts a year-round farmers market and houses a light processing space to convert local produce into value-added goods (McHugh 2020). Called ***Harvest Kitchen***, the processing space trains 16- to 19-year-olds to work in culinary jobs (Farm Fresh Rhode Island). Additionally, food entrepreneurs can lease space at the facility needed to grow their businesses. For example, a coffee business had plans to roast coffee beans at the facility and sell retail product from the site (McHugh 2020). To do its work, Farm Fresh Rhode Island employs multiple workers and engages volunteers who participate in the Americorps and VISTA programs (Coelho 2021).

In addition to its food hub work, Farm Fresh Rhode Island's ***Farm to School and Community Education*** program partners with the National Farm to School Network to educate Rhode Island residents about food. Farm-to-school programming includes cafeteria taste tests and after-school education. To further its farm-to-school efforts, Farm Fresh Rhode Island supports schools in procuring local food. Interested school food service representatives may engage Farm Fresh Rhode Island for resources such as purchasing assistance and food service-scaled recipes. With respect to its community education work, the organization provides educational experiences at venues such as senior centers and summer camps (Farm Fresh Rhode Island).

References

Coelho, Jamie. 2021. "Inside Farm Fresh Rhode Island's Game-Changing Growth." *Rhode Island Monthly*. Accessed Nov. 29, 2021, at https://www.rimonthly.com/inside-farm-fresh-rhode-islands-game-changing-growth/.

Farm Fresh Rhode Island. Accessed at https://www.farmfreshri.org/.

McHugh, Andrea E. 2020. "Farm Fresh RI's Food Hub Set to Open." *Edible Rhody*. Accessed Nov. 29, 2021, at https://ediblerhody.ediblecommunities.com/food-thought/farm-fresh-ri-s-food-hub-set-open.

4.3 LOCAL PROCUREMENT INITIATIVE

10 Cents a Meal
The program reimburses schools $0.10 for each served meal that contains select local ingredients. Funding has grown from $250,000 in the first year to $5 million in the latest budget.

Created in 2010, the ***Michigan Good Food Charter*** included 25 priorities to help make accessing food from nearby farms as easy as procuring food elsewhere. A charter priority involved creating a local produce reimbursement program for schools. The concept focused on offering $0.10 more per meal served, so schools could buy local produce (Colosanti et al. 2010).

Called ***"10 Cents a Meal for Michigan's Kids and Farmers,"*** the program has administrative oversight from the Michigan Department of Education. K-12 schools, early childhood centers and youth residential care institutions may participate. "10 Cents a Meal" operates as a matching

grants program. Participants can use awarded funds to purchase minimally processed fruit, vegetables and dry bean products (Conners et al. 2021).

The program began as a pilot in northwest Michigan (Conners et al. 2021). At first, it used private funding before the state invested in the program (Heslip 2021). In 2016/17, the program received $250,000 in state funding to reach 16 school districts and 48,000 students. For 2020/21, the state authorized expanding "10 Cents a Meal" to become a statewide effort and include early childhood centers as eligible participants. The program would also have $2 million in funding available (Conners et al. 2021). With the state funding and matching dollars combined, the program would at least generate a $4 million investment into Michigan's food system (Heslip 2021). An announcement released in January 2021 described that 138 schools, school districts and early childhood centers had received "10 Cents a Meal" grants to use during 2020/21, and the program would reach 406,000 children (Michigan Department of Education 2021).

In July 2021, the state's latest school budget became law, and it allocated $5 million for the 10 Cents a Meal program. Schools and child care providers have the opportunity to participate in the program (10 Cents a Meal for Michigan's Kids and Farms).

References

10 Cents a Meal for Michigan's Kids and Farms. Accessed Oct. 4, 2021, at https://www.tencentsmichigan.org/application_now_open_for_2021_22_school_year.

Colasanti, K., P. Cantrell, S. Cocciarelli, A. Collier, T. Edison, J. Doss, V. George, M. Hamm, R. Lewis, C. Matts, B. McClendon, C. Rabaut, S. Schmidt, I. Satchell, A. Scott and S. Smalley. 2010. "Michigan Good Food Charter." C.*S. Mott Group for Sustainable Food Systems at Michigan State University*, *Food Bank Council of Michigan* and *Michigan Food Policy Council*. Accessed Aug. 30, 2021, at https://www.canr.msu.edu/michiganfood/uploads/files/charter.pdf.

Conners, D., A. Harper, G. Ziegler, C. Matts, B. Kavanaugh, D. Coveyou, R. Schneider, N. Welty, E. Gavin and B. Seng. 8 April 2021. "10 Cents a Meal Info Session for Farms and Food Distributors." *Michigan State University*. Accessed Aug. 30, 2021, at https://www.canr.msu.edu/resources/10-cents-a-meal-info-session-for-farms-and-food-distributors.

Heslip, Nicole. 2021. "Ten Cents a Meal Bringing Michigan Produce Into Schools." *Brownfield*. Accessed Sept. 21, 2021, at https://brownfieldagnews.com/news/ten-cents-a-meal-bringing-michigan-produce-into-schools/.

Michigan Department of Education. 2021. "10 Cents a Meal Grants Awarded to 138 Statewide Applicants." *Michigan State University Center for Regional Food Systems*. Accessed Sept. 22,

2021, at https://www.canr.msu.edu/news/10-cents-a-meal-grants-awarded-to-138-statewide-applicants.

4.4 METRICS

The ***National Farm to Institution Metrics Collaborative*** has developed a process to gather and report standardized farm-to-institution metrics. The effort takes buy-in from institutions to record their food purchase activity. With those purchase records in hand, institutions can then evaluate their performance related to certain goals they may have set — for example, how much of their food should be procured from local vendors. Plus, they can better communicate about their local purchase behavior to stakeholders (National Farm to Institution Metrics Collaborative 2021).

A nationwide effort, the collaborative has more than 100 members from 30 states. Standardizing metrics collection and reporting means that purchase records from institutions throughout the country can be aggregated and used to present the collective impact of farm-to-institution activity. Additionally, because the collaborative engages stakeholders from throughout the country, it creates a community for sharing ideas and experiences. The collaborative hosts a quarterly call open to anyone interested in participating. It also maintains a listserv for sharing relevant information (National Farm to Institution Metrics Collaborative 2021).

To support institutions in reporting their purchase activity, the collaborative developed a tracking template and reporting calculator that institutions may use to organize purchase records anytime they buy food. The spreadsheet-based template asks institutions to note the purchase date and cost. Additionally, they should include details about the six criteria listed in the gold box (National Farm to Institution Metrics Collaborative 2021).

Six Farm-to-Institution Metrics Criteria

1. The ***type of food product*** purchased (e.g., produce, milk, eggs, meat and poultry)
2. The ***type of business*** supplying food (e.g., local independent farm, local food business)
3. Who ***owns*** the supplier's business (e.g., minority or woman owner)
4. The extent to which the supplier ***sources ingredients locally***
5. Whether the food includes ***identity-preserved ingredients***
6. The ***market channel*** used to buy food (e.g., direct from farm, food hub, co-op, distributor)

After institutions enter their purchase data, the spreadsheet autogenerates summaries of purchase activity (National Farm to Institution Metrics Collaborative 2021). Note, rather than imposing a certain definition for "local" purchases, institutions may self-define what they consider "local" when reporting local purchases. In some cases, reporting on all of these criteria may present a challenge if the institutions themselves don't completely manage all transactions. For example, when purchasing from a distributor, a given institution may not know all information about the

farm that originally supplied the food ingredients. Thus, institutions may need to work with those intermediaries to collect the appropriate information (Brewer et al. 2020).

The collaborative developed the purchasing metrics criteria during a pilot project that received USDA Agricultural Marketing Service funding (Brewer et al 2020). The one-year cooperative agreement for this work, which began in 2019, listed the University of Kentucky Research Foundation and USDA's Agricultural Marketing Service as parties (Brislen and O'Hara 2020). Since then, several groups have piloted the metrics. They include the Greater Cincinnati Food Policy Council, Northwest Food Hub Network, Farm to Institution New England and the Food Connection at the University of Kentucky (National Farm to Institution Metrics Collaborative 2021). The collaborative welcomed feedback about the metrics, so they could make improvements (Brislen and O'Hara 2020).

References

Brewer, J., Brislen, L., Chaifetz, A., Leighton, H., Matts, C., McKinney, C., O'Hara, J., Sirois,E., Stephens, L., Stewart, N. & White, T. 2020. "Establishing Standard Farm to Institution Reporting Metrics." National Farm to Institution Metrics Collaborative. Accessed Sept. 22, 2021, at https://ftimetrics.localfoodeconomics.com/wp-content/plugins/pdf-viewer-for-elementor/assets/pdfjs/web/viewer.html?file=https://ftimetrics.localfoodeconomics.com/wp-content/uploads/2020/09/FTI-Metrics-Report-Final.pdf&embedded=true#page=1&zoom=100,0,440.

Brislen, Lilian and Jeffrey O'Hara. 2020. "Farm to Institution Metrics: Harmonizing Farm to Institution Reporting Protocols (Summary)." *USDA Agricultural Marketing Service*. Accessed Nov. 17, 2021, at https://www.ams.usda.gov/sites/default/files/media/FarmtoInstitutionMetricsSummary11_2020.pdf.

National Farm to Institution Metrics Collaborative. 2021. "About the National Farm to Institution Metrics Collaborative." National Farm to Institution Metrics Collaborative. Accessed Sept. 3, 2021, at https://ftimetrics.localfoodeconomics.com/.

4.5 MULTISTATE COLLABORATION

When ***Farm to Institution New England (***FINE) formed in 2011, it had a goal to find how to work on farm-to-institution efforts in the Northeast across state lines. The organization's work would center on six states: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island and Vermont (Richman, Allison and Leighton 2019).

The organization began when regional farm-to-school programs, six New England agricultural commissioners, nongovernmental organizations and funders had a desire to partner. New England states have a shared culture, and many producers and distributors in the region already worked across state lines. FINE could contribute to the "New England Food Vision," a plan articulated by Food Solutions New England to improve regional food system development. The

plan sets a goal for the region to produce at least 50% of the food it needs by 2060. It has imported about 90% of the food it consumes (Richman, Allison and Leighton 2019).

Related to the food vision goal, FINE focuses on directing more regionally produced food through institutions, such as K-12 schools, colleges and healthcare facilities (Richman, Allison and Leighton 2019). For these institutions, FINE focuses on educating them and helping to make the local food buying process go as smoothly as possible (Henry P. Kendall Foundation 2020).

Farm to Institution New England

Since 2011, Farm to Institution New England has implemented plans and programs to help K-12 schools, colleges and healthcare facilities use more regionally produced food.

In an effort to reach its goal and give stakeholders a chance to connect and share ideas, FINE hosts events such as conferences, webinars and workshops, and it produces materials including case studies and newsletters. Through its work, it engages farm-to-institution stakeholders such as government agencies, institutions, farms, food distributors, food processors and foodservice operators (Farm to Institution New England 2021).

FINE has some work focused on special interest areas. For example, to support farm-to-college efforts, the ***Farm and Sea to Campus Network*** formed in 2015. The network states that its mission involves creating a community that supports supply chain transparency and on-campus food system education. It provides an opportunity for stakeholders to connect and collaborate (Farm to Institution New England 2021).

Funding agencies that have supported FINE include the American Farmland Trust, USDA, John Merck Fund and Henry P. Kendall Foundation. The initial budget in 2011 totaled $500,000. TSNE MissionWorks, a nonprofit, has also provided financial support to FINE (Richman, Allison and Leighton 2019).

References

Brewer, J., Brislen, L., Chaifetz, A., Leighton, H., Matts, C., McKinney, C., O'Hara, J., Sirois, E., Stephens, L., Stewart, N. & White, T. 2020. "Establishing Standard Farm to Institution Reporting Metrics." National Farm to Institution Metrics Collaborative. Accessed Sept. 22, 2021, at https://ftimetrics.localfoodeconomics.com/wp-content/plugins/pdf-viewer-for-elementor/assets/pdfjs/web/viewer.html?file=https://ftimetrics.localfoodeconomics.com/wp-content/uploads/2020/09/FTI-Metrics-Report-Final.pdf&embedded=true#page=1&zoom=100,0,440.

Henry P. Kendall Foundation. 2020. “Grantee Profile: Farm to Institution New England.” Henry P. Kendall Foundation. Accessed Sep. 8, 2021, at https://www.kendall.org/farm-to-institution-new-england/.

Farm to Institution New England. 2021. “History.” Farm & Sea to Campus Network. Farm to Institution New England. Accessed Sep. 3, 2021, at https://www.farmtoinstitution.org/farm-sea-campus-network-history.

Richman, Nessa J., Peter H. Allison and Hannah R. Leighton. 2019. *Farm to Institution New England: Mobilizing the Power of a Region’s Institutions to Transform a Region’s Food System*. In *Institutions as Conscious Food Consumers* (Sapna E. Thottahil and Annelies M. Goger, Eds.). Academic Press/Elsevier. Accessed Aug. 27, 2021, at https://www.farmtoinstitution.org/sites/default/files/imce/uploads/Institutions%20as%20Conscious%20Food%20Consumers_Ch.%208_FINE.pdf.

4.6 PUBLIC-PRIVATE PARTNERSHIP

Montana Food and Agriculture Development Network centers have assisted businesses focused on innovating and commercializing food, agricultural and renewable energy products (Mission West Community Development Partners 2020). The state’s department of agriculture has a role in operating the network’s four centers (Montana Department of Agriculture).

Located in western Montana, ***the Mission Mountain Food Enterprise Center*** (MMFEC) functions as a food processing-focused research and development facility. Affiliated with Mission West Community Development Partners, the center processes local foods into value-added goods. It undergoes inspections from the USDA, FDA and the Montana Department of Agriculture Organic Program (Mission West Community Development Partners 2021). The center makes value-added fresh and frozen produce, branded products and protein alternatives. Some products processed at the facility appear on institutions’ menus (Mission West Community Development Partners 2020).

The center promotes products such as breakfast bars and tomato-based sauce. More than 90% of the breakfast bars’ ingredients originate from Montana farms. The bars are available in three flavors: apple, apple-cherry and cherry. The Montana ’Mato Sauce blends canned tomatoes with Montana-raised carrots, butternut squash, leeks, onions and garlic. MMFEC also produces protein alternatives. Made from all Montana-raised ingredients, the beef-lentil crumble represents one of the center’s alternative protein products. Its potential uses include soups, sauces, tacos and nachos (Mission West Community Development Partners 2021). The center

developed the crumble after it recognized a need for supplying Montana beef into local schools at a price that would align with school budget constraints. A 2015 report from the Wallace Center at Winrock International, Common Market and Changing Tastes — and funded by the W.K. Kellogg Foundation — shared that the beef-lentil crumble had been adopted by three school districts (The Wallace Center at Winrock International, The Common Market, Changing Tastes and the W.K. Kellogg Foundation 2015).

MMFEC sources raw ingredients from local farmers, including ***Western Montana Growers Cooperative*** members (Mission West Community Development Partners 2020). In 2002, the co-op began as a grant-funded effort initiated by the Lake County Community Development Corporation (The Wallace Center at Winrock International, The Common Market, Changing Tastes and the W.K. Kellogg Foundation 2015). The co-op and MMFEC started their partnership through a pilot program. The pilot effort enabled the organizations to process five types of fruit and vegetable seconds, and the finished products were added to school meals (Henn et al. 2020).

The farmer-owned Western Montana Growers Cooperative supplies buyers such as grocery stores, restaurants and institutions. It serves institutions such as schools, summer camps, hospitals and senior living communities. Members — the co-op's website lists nearly 40 farms — produce fruit, vegetables, milk, cheese, lentils, eggs, honey, meat and value-added goods. They benefit from the co-op's wholesale marketing and delivery services. Using refrigerated trucks, the co-op picks up produce from members' farms and transports the food to its warehouse for packing and storage. It ships food to buyers on the following day. The co-op also has a sales team that works on its members' behalf (Western Montana Growers Cooperative).

One of the co-op's institutional buyers — the University of Montana — has explored how it might collaborate with the co-op and a food processing facility on equipment investments that would lead to incorporating more local food into its menus. New equipment would add capacity for the co-op to offer different further processed foods, and ultimately, it would allow the university to save on prep time and labor. The university would receive a reduced rate when purchasing the value-added goods processed with the co-owned equipment, but the co-op could sell full-price goods to other customers (Moran 2016).

For institutions, this model enables them to access local foods that have undergone processing, so they can use locally grown products for an extended period during the year. They can also save on labor costs because they can access local food that already has been processed. Additionally, this model makes local food costs more competitive, so buyers can better fit local food purchases into their budgets (Mission West Community Development Partners 2021).

References

Henn, Maura, Anne Harney, Kaylee Thornley and Elayna Shapiro. 2020. "Local Food for Local Kids: Reducing Barriers to Local Food Procurement in Montana Schools." *Mission West Community Development Partners* and *National Center for Appropriate Technology*. Accessed June 2021 at https://missionwestcdp.org/wp-content/uploads/2021/01/Local-Food-for-Local-Kids-Final.pdf.

Mission West Community Development Partners. 2020. Accessed June 2021 at http://missionwestcdp.org/mission-mountain-food-enterprise-center/food-agriculture-development-center.

Mission West Community Development Partners. 2021. "Farm to School Product Guide." *Mission West Community Development Partners*. Accessed June 2021 at missionwestcdp.org/wp-content/uploads/2021/01/Final-Farm-to-School-Product-Guide-2021.pdf.

Montana Department of Agriculture. "Montana Food & Agriculture Development Network." *Montana Department of Agriculture*. Accessed June 2021 at https://lccdc.ecenterdirect.com/.

Moran, Dana. 2016. "The keys to a successful purchasing collective." *Food Service Director*. Accessed June 2021 at https://www.foodservicedirector.com/operations/keys-successful-purchasing-collective.

The Wallace Center at Winrock International, The Common Market, Changing Tastes and the W.K. Kellogg Foundation. 2015. "From the Ground Up: Inspiring Community-based Food System Innovations." *The Wallace Center at Winrock International, The Common Market, Changing Tastes and the W.K. Kellogg Foundation*. Accessed June 2021 at http://communityfood.wkkf.org/wp-content/uploads/2017/07/WKKF_food-scan_wallace_r401_all_pages.pdf.

Western Montana Growers Cooperative. Accessed June 2021 at https://www.wmgcoop.com/.

4.7 TRAINING INSTITUTES

To support institutions through planning and implementing farm-to-institution programming, several states have introduced training institutes. Typically formatted as yearlong programs, these institutes combine education with one-on-one assistance available to teams formed by the institutions selected to participate — typically, schools. Nebraska has an institute designed for school teams. Available in the Northeast and New York, Vermont FEED hosts an institute open to schools and early childhood centers. Additionally, the organization offers training to other states interested in using its institute as a model for training in their own states.

Training Blueprint for States

Vermont FEED welcomes other states to create similar institutes, and it offers a ***Farm to School Institute Adaptation Program*** to help other states apply the institute's model in their own areas (Vermont FEED a). The program's purpose is to provide states with tools they can use to implement their own institutes and customize the experience to work for their stakeholders (National Farm to School Network 2021).

States must apply to participate in the adaptation program by first submitting a written application. Vermont FEED then asks top candidates to participate in a virtual interview. Ultimately, the selected states begin their participation by attending a five-day training held

during the Northeast Farm to School Institute. The training teaches participants strategies for recruiting farm-to-school institute participants and coaches, managing logistics and budgets, evaluating the institute and offering a professional learning experience. Plus, given that their training is co-scheduled with the Northeast Farm to School Institute, participants may observe how to execute an institute. States participating in the adaptation program also have an opportunity to invite a school team from their state to attend the Northeast Farm to School Institute (Vermont FEED a).

The learning continues after the five-day training concludes. For a year, Vermont FEED facilitates additional training for the state teams. To participate in the adaptation program, states incur no fees. A $7,500 stipend helps them to pay for travel and other costs related to their participation (Vermont FEED a).

Nebraska modeled its farm-to-institute institute after the Northeast program. Other states, such as Massachusetts and Mississippi, have also developed institutes based on the Northeast model. Seven states had adaptation efforts underway in 2021. Further, another two or three efforts may begin in 2022 (National Farm to School Network 2021). To participate in 2022, states had a Dec. 18, 2021, deadline to submit applications. Selected states would receive a selection decision notification in January 2022 (Vermont FEED a). In August 2021, Sen. Patrick Leahy announced that he had recommended the U.S. allocate $5 million to support a National Farm-to-School Institute that would build on the Northeast Farm to School Institute's work (Pasanen 2021).

Northeast

Designed as a yearlong professional development program, the ***Northeast Farm to School Institute*** allows participants to network and create a plan they can implement to use more local foods and conduct farm-to-school programming. The Northeast Farm to School Institute began in 2010. It's available to school or early childhood centers from New England and New York. Vermont FEED, the institute's host, ties to two nonprofit parent organizations: Northeast Organic Farming Association of Vermont and Shelburne Farms. Plus, it partners with the National Farm to School Network in Vermont (Vermont FEED b).

5 Tenants of the Northeast Farm to School Institute

The yearlong training program incorporates these five principles into the experience (National Farm to School Network 2021).

Selected schools and child care centers begin their participation in the spring. They each form a team composed of representatives who will complete the institute's activities. When forming institute teams, a single school or early childhood center would recruit four to six members who have a combination of administrative, teaching and school food service responsibilities. To round out the team, schools or early childhood centers may select students, farmers, school nurses, school board members or other interested individuals to participate in their teams. If participating as a school district, then a district should identify a five- to seven-member team and plan to start farm-to-school programming on a small scale — one or two schools (Vermont FEED b).

At a summer retreat, all of the selected teams meet and experience a "deep dive" into their farm-to-school planning (Vermont FEED b). Using the action plan created at the retreat, teams implement their own farm-to-school efforts during the school year (National Farm to School Network 2021). Each team has an assigned coach who's part of the Farm to School or Early Childhood Network. During the school year, teams meet with their coaches. These coaches support teams as they implement their action plans, and they help participants realign their plans as needed. Learning also continues during the school year as teams participate in monthly "community of practice" education tailored to their specific roles. For example, school food service representatives engage with school food service representatives, and educators engage with their respective peers. The teams assemble again in the spring with other teams within their regions (Vermont FEED b).

Nebraska

In Nebraska, eight schools will participate in the ***Nebraska Farm to School Institute*** during the 2021-22 school year. Financial support for the institute originated from a USDA Farm to School grant (Nebraska Department of Education). Participating schools receive assistance to create and execute farm-to-school initiatives. In June 2021, the selected schools participated in a virtual one-week event designed to help them plan their 2021-22 farm-to-school programming. Plans may include efforts such as organizing farm visits, including students in gardening or cooking activities and featuring seasonal ingredients in school meals. To give schools support they need to implement their plans, each will have a coach with which to collaborate (Star-Herald).

Teams intended to meet regularly through May 2022 to advance their plans. Mini grants — valued at $2,000 to $3,500, depending on the project — may help schools implement their plans. Recipients could allocate mini grant funding to uses such as cafeteria equipment, supplies or staff training; garden materials, equipment and supplies; and experiential education activities (NDE Nutrition Services 2021). Two organizations coordinate the institute: the Nebraska Department of Education and Nebraska Extension (Star-Herald).

Any school — district or building — participating in the National School Lunch Program could apply. In the application, the school must identify at least a three-person team to lead the farm-to-school plan and implementation. Teams must include a school administrator and school food service manager. Ideally, a third member would be a teacher or extension contact. Teams could include as many as seven individuals. Other potential team members may include students, community members, farmers, school nurses and parents (NDE Nutrition Services 2021).

References

National Farm to School Network. 2021. "Driving Sustainable Farm to School Through the Farm to School Institute Model." *National Farm to School Network*. Accessed Nov. 30, 2021, at https://www.farmtoschool.org/news-and-articles/driving-sustainable-farm-to-school-through-the-farm-to-school-institute-model.

NDE Nutrition Services. 2021. "Nebraska Farm to School Institute Application Q&A." *NDE Nutrition Services*. Accessed at https://www.youtube.com/watch?v=mpfQm2zB1A0.

Nebraska Department of Education. "Nebraska Farm To School." *Nebraska Department of Education*. Accessed at https://www.education.ne.gov/ns/farm-to-school/.

Pasanen, Melissa. 2021. "Vermont Leads National Farm-to-School Movement, and Harwood Union High School Demonstrates How." *Seven Days*. Accessed Nov. 30, 2021, at https://www.sevendaysvt.com/vermont/vermont-leads-national-farm-to-school-movement-and-harwood-union-high-school-demonstrates-how/Content?oid=33772868.

Star-Herald. 2021. "Gering High School selected to participate in 2021 Nebraska Farm to School Institute." *Star-Herald*. Accessed at https://starherald.com/news/local/education/gering-high-school-selected-to-participate-in-2021-nebraska-farm-to-school-institute/article_aef2ad25-ec3c-5525-97fc-ad8ed21dddb1.html.

Vermont FEED. a. "Farm to School Institute Adaptation Program." *Vermont FEED*. Accessed Nov. 30, 2021, at https://vtfeed.org/2022-23-farm-school-institute-adaptation-program.

Vermont FEED. b. "Northeast Farm to School Institute." *Vermont FEED*. Accessed Nov. 30, 2021, at https://vtfeed.org/northeast-farm-school-institute.

Chapter 5

Farm-to-Food Bank Pathways

Missouri Farm-to-Food Bank Activities and Opportunities

Author:

Bill McKelvey, Senior Project Coordinator, MU Division of Applied Social Sciences

Table of Contents:

5.1 INTRODUCTION

Farm to Food Bank describes activities that move food from farms in a given area to hunger relief efforts in the same given area. These activities include selling or donating whole or value-added farm products. They may involve intermediaries such as food processors, distributors, or manufacturers. The food may also move directly from a farm to a regional food bank or food pantry. Partners including nonprofit gleaning organizations, private businesses, industry groups, or federal and state agencies may fund or facilitate these activities.

This paper explores farm-to-food bank activities in Missouri using information collected through key informant interviews with supply chain stakeholders. It examines farm-to-food bank activities in other states, and it notes federal programs that support farm-to-food bank activities. Ultimately, the paper makes research-based recommendations to better facilitate farm-to-food bank activities in Missouri.

5.2 BACKGROUND

Food insecurity and hunger impact 11.5% of Missouri households[i] — approximately 277,670 households or 683,068 people. Many people benefit from federal nutrition assistance programs such as the Supplemental Nutrition Assistance Program (SNAP or food stamps); free and reduced-price meals via the National School Lunch Program; and the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC). However, national estimates show that as many as 45% of food-insecure households do not participate in an assistance program[ii]. Lack of participation may be due to ineligibility, such as when a family's income exceeds a program's eligibility threshold. In other cases, people may not know about programs, have difficulty navigating the required paperwork, or avoid applying for help because of stigma. For thousands of families not reached by federal programs, food banks and food pantries may serve as the only source of supplemental food.

In Missouri, these families are supported by six Feeding America-affiliated food banks that are part of Feeding Missouri, one independent food bank named Operation Food Search, and other independent hunger relief organizations. The food banks serve as regional food distribution hubs that receive and then redistribute food purchases and donations from local, state, and national sources. Food banks cooperate with hundreds of local food pantries, meal sites, and other agencies that make food available at no cost to people in their communities.

Most food that flows through this food bank network is sourced from national producers, processors, manufacturers, and distributors. However, an opportunity exists to cooperate with more Missouri-based producers and entities, especially those producing or adding value to edible specialty crops, dairy products, eggs, and livestock. Food production and farming are important parts of Missouri life, livelihoods, and the economy. Missouri agriculture contributes an estimated $88 billion to the economy annually, and it has 95,000 farms covering two-thirds of the land area of the state[iii].

5.3 METHODS

This paper summarizes farm-to-food bank findings sourced from key informant interviews and internet research. The semi-structured interviews with key informants collected input from stakeholders along the farm-to-food bank supply chain. During 2021, eight interviews were conducted in the late summer and early fall. They focused on gathering information concerning opportunities and roadblocks for farm-to-food bank activities in Missouri. Informants were professional contacts of the researcher. To explore farm-to-food bank activities in other states, the researcher conducted internet research, which studied activities in bordering states and states farther from Missouri. This summary provides a snapshot of farm-to-food bank activities in Missouri and other states and highlights areas where efforts might grow.

5.4 THE FARM-TO-FOOD BANK SETTING IN MISSOURI

Farm-to-food bank activities happen across Missouri. They take many shapes; operate on different scales; and use various arrangements to make products such as fruits, vegetables, meat, and eggs available to residents. Many are likely undocumented and happen out of the public eye. The farm-to-food bank activities documented below represent three major models:

1. **Farmer Direct to Food Bank or Food Pantry**
2. **Farmer via an Intermediary to Food Bank or Food Pantry**
3. **Noncommercial Partner to Food Bank or Food Pantry**

In addition, this section discusses how **Tax Incentives** play a role in farm-to-food bank activities.

Farmer Direct to Food Bank

This model involves direct engagement between a commercial producer and a food bank or food pantry. To work effectively, agencies must maintain connections and communication with producers or at least develop a working relationship with producers. One food pantry director noted that this model works well for their pantry — with very little time investment — because of the pantry's awareness in the community. The director noted that once a relationship is made with a producer and the producer understands where and when to donate, the arrangement is relatively hassle-free. The pantry's director has invested time in letting the community know about the food pantry in general and that it accepts donations from local producers. The pantry is open multiple days per week and has a large-capacity cooler and freezer. Both aid its Farm to Food Pantry efforts. Pantries open less often with less cold storage area may have more challenges working directly with producers.

Scale is an important consideration with this model. The size of farmers' donations should generally match the food storage and distribution capacity of the food pantry or food bank. Bins or small truckloads of product are likely better suited for a food pantry. Semi-truckloads of product, especially in regions where the product itself is more like a commodity such as watermelons and potatoes in southeast Missouri, are better suited for a food bank.

Farmer via an Intermediary to Food Bank
In this model, an intermediary coordinates donations or sales between producer or producer group and a hunger relief agency. Key informant interviews uncovered both nonprofit and for-profit partners working as intermediaries.

Nonprofit partners
Nonprofit partners in Missouri include industry-focused groups and a gleaning organization.

Industry-focused groups
An industry-focused group coordinates a program involving livestock producers, processing plants, regional food banks, and the state association of food banks. This effort utilizes product donated by producers or purchased from producers. Animals are sent to processors and ultimately picked up by a regional food bank. For the food banks and state association, this program requires very little effort apart from product handling and covering product and processing costs when applicable. When there is a product cost, it is generally below market rates. Participating producers and the industry group benefit from goodwill and positive public relations generated on their behalf.

Gleaning organization
Missouri is also home to a gleaning organization that facilitates produce donations to hunger relief agencies. The organization works independently with regional producers and via a national program that facilitates subsidized produce sales from large producers selling to national and international markets.

Regionally, the organization works with more than 100 growers under three main arrangements. First, the largest share of regional produce comes from growers who pick and pack their own produce. Growers receive a "nonprofit" price negotiated by the organization. A regional food bank handles the transportation. This arrangement benefits greatly from groups of coordinated Amish and Mennonite growers whose farms concentrate in a few regions.

Second, the gleaning organization collaborates with farm stands and farmers markets. It picks up leftover produce at the end of the market day and takes it to a central cold storage facility or a partnering hunger relief agency.

A third arrangement involves coordinating volunteers to pick and pack produce at farms. Although this arrangement yields the smallest share of produce, it involves the most people and provides ancillary benefits to the organization. For example, it enhances public relations and develops donors.

Farmer cooperative/food hub
A for-profit farmer-owned cooperative operating as a food hub has been involved in farm-to-food bank activities. It contracts with human service agencies to create weekly boxes stocked with locally sourced vegetables and meat. The agencies cover the product and handling costs — generally through grant or stimulus funding — and make the food available to their clientele at food pantries, housing developments, and early childhood centers. The food hub's logistical infrastructure makes these transactions relatively routine. The food hub representative noted

clientele's overwhelmingly positive response. However, funding and agency priorities tend to affect program longevity.

Noncommercial Partner to Food Bank
Notably, several noncommercial growing efforts lead to donations of local and regional food to food banks and food pantries. Many Missouri prisons contribute food from their gardens to hunger relief agencies through their restorative justice programs. One key informant noted that their hunger relief agency provides seeds to a regional prison. Nonprofit and noncommercial community and urban gardening organizations in Missouri grow food for hunger relief. Likewise, numerous home gardeners contribute food to their local food pantries, shelters, and feeding sites.

Tax Incentives
State and federal tax incentives can facilitate farm-to-food bank activities in Missouri. Annually, Missouri offers a Food Pantry Tax Credit[iv] through the department of revenue. The tax credit benefits "taxpayers who make donations of cash or food supplies to a qualified local food pantry, homeless shelter, or soup kitchen." A taxpayer may claim a credit of up to $2,500 per year for donations. Claims must be filed by April 15 of each year, and the amount of tax credits available in each fiscal year totals $1,750,000.

Likewise, at the federal level, businesses that donate product may be eligible for general or enhanced tax deductions[v]. For general tax deductions, businesses may claim a deduction equal to the product's basis value or "cost to the business." The enhanced tax deduction provides an extra incentive in addition to the product's basis value. Find more information online, or contact a tax professional.

5.5 FARM-TO-FOOD BANK EFFORTS IN OTHER STATES

To better understand what might be possible in Missouri, a variety of other states' farm-to-food bank activities are summarized below.

Examples from States Bordering Missouri
States neighboring Missouri can serve as examples. The programs summarized below were found through internet searches or professional contacts.

- ***Oklahoma*:** A partnership between Oklahoma Food Banks and the Conservation Partnership — an effort of the Oklahoma Association of Conservation Districts, Natural Resources Conservation Service, and Oklahoma Conservation Commission — encourages farmers to plant multispecies, edible cover crops including beans, squash, and turnips on 1 acre to 4 acres. In addition, volunteers can register to work as gleaners to harvest crops and deliver them to hunger relief agencies. Find more information at okconservation.org/farmtofoodbank.

- ***Kansas*:** The Kansas Farm Bureau sponsors an End Hunger campaign that encourages members to make monetary donations toward hunger relief efforts. In addition to the

financial contributions that go directly to agencies, Kansas Farm Bureau also makes grant funds available to county bureaus and agents for projects. Find more information at bit.ly/3bjoy2a.

- ***Iowa*:** Activities featured on the Food Bank of Iowa website (bit.ly/3mpJyue) encourage corporations to host *giving gardens* at their offices. Those gardens would grow fruits and vegetables for donation. The food bank also partners with Iowa prisons that grow produce for donation. In addition, several short-term pandemic-related activities were initiated by the Iowa Department of Agriculture and Land Stewardship through the Governor's Feeding Iowa Taskforce. They include Pack the Pantry (cold storage grants for food pantries), Pass the Pork (pork donations with funding for processing), Beef Up Iowa (beef donations from 4-H and FFA with funding for processing), Turkey to Table (turkey bologna purchases), and egg donations. These activities all included agriculture industry groups as partners. Read more at bit.ly/3iUi0ez.

- ***Illinois*:** The Illinois Sustainable Technology Center, Feeding Illinois, and other organizations have partnered to launch a farm-to-food bank feasibility project. The goal is to connect food banks with farms to purchase fruit, vegetables, dairy products, and meat directly from farmers. The project includes a farmer survey, farmer focus groups, and pilot project. Find more information at feedingillinois.org/farmers and bit.ly/3bCA6Oh.

- ***Kentucky*:** Feeding Kentucky's Farm to Food Banks program uses funds to cover farmers' costs related to harvesting, packing, and transporting food to food banks and food pantries. The program started in 2011 and has worked with more than 1,000 farmers across Kentucky. Find more information at feedingky.org/farms-to-food-banks. The program has been supported by state funds in the past; it received $600,000 in 2016-17: bit.ly/3nJ0OtW.

- ***Tennessee*:** Second Harvest Food Bank of Middle Tennessee Farm to Families sources local food directly from farmers and via volunteer gleaning. The program also encourages gardeners to donate produce to the food bank and hosts a tool share service. Find more information at secondharvestmidtn.org/farm.

- ***Arkansas*:** Like the Tennessee program, The Food Bank of Northeast Arkansas Fresh Produce Program accepts donations of produce that is surplus or irregular from local growers. It also can help set up volunteer gleaning opportunities through the Arkansas Hunger Relief Alliance. Home and community gardeners are encouraged to donate as well. Find more information at foodbankofnea.org/fresh-produce-program.

Examples from Other States

- ***Indiana*:** Supported by a state budget allocation of $300,000 per year, Feeding Indiana's Hungry pays below market rates for surplus or No. 2 produce. Find more information at bit.ly/318jls1. Additionally, the Farm to Family Fund in Bloomington purchases produce, dairy, and eggs year-round at half the market value when the Bloomington Farmers

Market closes for the day. Items are then donated to area hunger relief organizations. Read more at farm2familyfund.org.

- ***Washington*:** The Washington Department of Agriculture (WDA) and nonprofit Harvest Against Hunger (HAH) partner to implement the Farm to Food Pantry initiative. Between $3,500 and $30,000 in funding is available per hunger relief agency to set up wholesale contracts with local, small-scale growers to provide food to local hunger relief agencies. WDA and HAH provide technical support. In addition to enhancing the viability and success of small farmers and hunger relief organizations, the program seeks to create lasting relationships between growers and agencies. Find additional information at bit.ly/31gd4dZ. Read more about the work of HAH, a well-established gleaning organization, at harvestagainsthunger.org.

- ***Ohio*:** The Ohio Association of Food Banks operates the Ohio Agricultural Clearance Program. The program acquires and redirects unmarketable fresh fruits, vegetables, and dairy items to the state's 12 Feeding America food banks and partnering agencies. Nearly 100 producers are involved. The program receives funding from the state of Ohio and Ohio Department of Job and Family Services. In FY 2020, the program distributed more than 32 million pounds of food and paid $0.2230 per pound on average for food products. Find more information at ohiofoodbanks.org/what-we-do/food-programs.

- ***Arizona*:** Phoenix directed part of its federal CARES Act funding to Feed Phoenix, a collaborative effort of the city and Local First Arizona. Funds provided a lifeline to restaurants, caterers, and farmers whose businesses were negatively impacted by COVID-19. The support enabled them to work together to prepare meals with locally sourced food for those adversely affected by the pandemic. The goals included sustaining jobs and supply chains, strengthening the local food economy, and keeping Phoenix residents healthy during the pandemic. Most of the meals were distributed to food banks and those living in refugee housing. Typical meals included sandwiches, wraps, and salads — cold, ready-to-eat items. The project started in July 2020 and will continue through July 2022. Find more information at https://www.goodfoodfinderaz.com/feed-phoenix and https://bloom.bg/3cZ9V4H.

5.6 Support for Farm-to-Food Bank Activities at the Federal Level

The Agricultural Improvement Act of 2018 provided grant funding to state agencies that administer The Emergency Food Assistance Program. Funding would pay for "projects to harvest, process, package, or transport commodities donated by agricultural producers, processors, or distributors for use by emergency feeding organizations (EFOs)." The program intended to reduce food waste, provide food to individuals who need it, and build relationships between the agricultural sector and EFOs. For FY 2019 to FY 2023, $20 million was made available. States must contribute matching funds; the federal share of any given project is not to exceed 50% of the total project cost. In FY 2020 and FY 2021, $217,542 was granted to the Missouri Division of Social Services and partnering food banks.[vi]

5.7 RECOMMENDATIONS FOR GROWING FARM-TO-FOOD BANK ACTIVITIES

Missouri could take a number of directions to facilitate more farm-to-food bank activities. The following recommendations build on this researcher's findings:

- **Create and fund ongoing programs.** COVID-19 spurred farm-to-food bank programs in Missouri and across the country. Lessons learned from these programs, along with dedicated funding, can be used to build and sustain ongoing farm-to-food bank programs.

- **Pay producers for product.** Even if paid less than market prices, producers can use the revenue they do receive to offset costs. Payment also incentivizes producer engagement. Most key informants agree that producers should be compensated at some level.

- **Designate a coordinator**. Hunger relief agencies can designate staff to engage producers and coordinate donations and purchases. Clear communication about product delivery, pickup arrangements, and storage capacity is key!

- **Raise awareness among producers.** More producers are likely to donate or sell to agencies if they know these opportunities are options.

- **Pick up product from farms.** With busy schedules, especially during the growing season, producers have difficulty prioritizing donations, sales, and deliveries. By arranging transportation, producers have one fewer task to coordinate themselves.

- **Grow Missouri's fruit and vegetable industry, including food hubs and repacking facilities.** A larger industry would create more opportunity for donations and sales of firsts and seconds. More production would require more infrastructure to handle product.

- **When appropriate, partner with intermediaries to utilize existing infrastructure.** Good partners include food hubs and mainline distributors with the infrastructure to sort, store, and ship donations and purchases.

- **Focus on building relationships.** Combined with logistics, relationships are a key ingredient for making farm-to-food bank work for all involved.

- **Explore Missouri's strategic advantages.** Consider what Missouri does well and where Missouri has advantages in terms of production, processing, and distribution. Opportunities exist with Missouri livestock producers and regions of the state where vegetable production occurs.

---

[i] Household Food Security in the U.S. in 2020, USDA Economic Research Service, September 2021, ers.usda.gov/publications/pub-details/?pubid=102075

[ii] Household Food Security in the U.S. in 2020, USDA Economic Research Service Insights Webinar, September 8, 2021, ers.usda.gov/multimedia

[iii] Missouri Agriculture at a Glance, Missouri Department of Agriculture, accessed October 2021, agriculture.mo.gov/topcommodities.php

[iv] Food Pantry Tax Credit (FPT), Missouri Department of Revenue, dor.mo.gov/tax-credits/fpt.html
[v] Federal Tax Incentives, U.S. Food Waste Policy Finder, policyfinder.refed.org/federal-policy/federal-tax-incentives
[vi] The Emergency Food Assistance Program Farm to Food Bank Project Grants, USDA Food and Nutrition Service, fns.usda.gov/tefap/farm-to-food-bank-project-grants