

Final Report: 2017- 2018 NEED-NERA Planning Grants Program

Project Title: Increasing Local Food Production with Value-Added Processing in the Northeast

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The Problem

Food systems entrepreneurs have an opportunity to meet strong consumer interest for local and regional foods by expanding local food production through value-added processing, however, limited research and extension technical support are currently available for successful implementation. This meeting was organized for in-person meetings of multi-state partners, within and outside of the northeast extension network, to build an integrated research agenda and funding strategy that would mutually benefited relevant food processing supply chain players.

Project Purpose:

The goal of this meeting was to develop an integrated research agenda and funding strategy to address the challenges of developing and disseminating information required to determine the profitability/ viability of a local value-added supply chain for key supply chain actors: farmers, processors, distributors, and retailers. The meeting shared current knowledge, research and outreach capabilities of the Extension network, establishing a broader research agenda and a focused strategy to address this critical need with stakeholders and to promote regional collaboration for future funding. Key parts of the meetings included:

- Identifying a **centralized data management system** among the partners (research, extension and industry) to share research information.
- **Identifying challenges and opportunities** for conducting consumer market research studies and food product development research to promote economic viability for local producers.
- **Developing a working list of funding supports aimed as a technical resources** to further support northeast producers and processors
- **Identifying resources to further enhance regional programming** and training to meet the needs of northeast processors.

Activity – What Was Done

This meeting included network if interdisciplinary partners that all contribute to value-added food production. Partners included: food scientists, producers, processors, operation management, food entrepreneurship coaches, distributors, retailers, and agricultural marketers within the northeast (including MA, VT, NH, and ME). This meeting allowed participants to network with key stakeholders and collaborators involved in the local food movement. The intent was to provide an opportunity to think collectively about all of the facets within the food system to launch local value-added food products within the Northeast that would help to extend season, increase production and increase profitability for northeast producers.

Results and Outcomes

RESULTS

Activity 1: Group meeting held at UMass Amherst.

A meeting was held on May 2, 2018 in Amherst, MA and led by Amanda Kinchla. After brief introductions, the meeting presented several value-added projects that acted as case studies that shared approaches to integrated research projects. Meeting participants were then divided into one of three groups, intentionally diversified to include different food system members to engage in a group discussion aimed at opportunities that connect consumer based research and value-added food production. Specifically groups were tasked to answer several questions:

- What is the full distribution chain for value-added for northeastern processors? E.g. who are the partners needed to enable value-added processing?
- What are the potential market opportunities for local produce that have not been assessed to better understand the true value of local? This can include product attributes such as “local”, “healthy”, “environmentally friendly” or other.
- What is a critical research gap for developing local value-added foods for the northeast?
- What are the technical resources that would help to enable local-added food production?

The output from this discussion identified 3 challenges that are relevant to value-added processing for local food, including:

Choosing a commodity: The method for choosing the commodity for value-added processing is not clear. Each potential commodity poses challenges along the supply chain, from disease and production concerns associated with growing the raw commodity, to technical and labor based processing challenges. Also discussed was whether it would be beneficial to choose a commodity already grown readily in the area, or try to identify a new opportunity for growers. Both processes pose additional challenges that need to be assessed when determining the final commodity chosen.

Economic feasibility: Challenges stem from the difficulty of providing an economically feasible model for producers, processors and consumers. Producers can often sell fresh produce for higher prices than a value-added product, with the price-gap growing when factoring in high processing costs for labor and value-added techniques such as freezing. This posed the question of if the “value-added” processing would actually add value for producers.

Competition and market feasibility: The relatively small scale production of the Northeast coupled with high processing costs would likely lead to a high cost value-added product that may struggle to compete with lower cost alternatives. While there is increasing interest in buying local foods, the price gap may turn consumers away. Consumer attitudes towards local foods, particularly focusing on willingness to spend, need to be determined to assess if a local value-added product can be feasible.

Using the challenges identified from the morning discussion, the team then shared different potential grant funding opportunities that we could further strategize for funding. A working list of project focus, goals and objectives was then built and shared to hold the working ideas using a Box.com as a shared use data management system. Additionally, a variety of resources related to value-added foods was shared using Box that has helped to better illustrate the research support for local value-added food production.

Activity 2: Engagement with new partners within the food system.

Jill Fitzsimmons traveled to Philadelphia, PA to attend the Northeast Agriculture and Resource Economics Association (NAREA) Annual Meeting, including the *Advances in the Economic Analysis of Food System Drivers and Effects Workshop*. At this event, Fitzsimmons networked and met with a number of key potential collaborators for local food systems food safety and mid-scale regional processing research projects, including two collaborators who became key collaborators on the SAS pre-proposal submission (detailed below). Fitzsimmons discussed the innovative use of behavioral economics in the proposed research design with one of the top behavioral researchers in the field, and whose work focuses on agricultural producer behaviors, receiving valuable feedback and a possibility to serve on an Advisory Board in the future.

In addition, Amanda Kinchla traveled to Salt Lake City, UT to attend the International Association of Food Protection Annual meeting. During the meeting she built a stronger network of partners to help further expand the collaborations related to the research themes identified from the NEED/NERA grant. In particular, she had one-on-one meetings with Rohan Tikekar from the University of Maryland and Erin Leigh DiCaprio from the University of California Davis. Both of which were contributors to the grant submission submitted below.

KEY OUTPUTS:

- Developed a plan for sharing information and informational resources using Box.com as the shared use data management system, Filed as: “2017_2018 NEED NERA Value Added Planning Grant”, <https://umass.app.box.com/folder/47086559257#>. Example include Market Research Trend reports, the USDA’s Value-Added Producer Grant Program and Its Effect on Business Survival and Growth report, Value Added & Specialty Food Trend Reports.
- Identified a series of research themes based on the NEED/NERA Meeting:
 1. **Food Safety:** The new FMSA regulations have introduced new challenges to producers and processors required to comply with new regulations. To effectively contribute to reducing the incidence of food borne illness in local food supply chains, there is a research opportunity to investigate the application of FSMA (produce safety rule and preventive controls) in the fresh and processed (value-added supply chain) for local foods and to provide technical support for stakeholders that will help reduce risk and ensure compliance.
 2. **Marketing Research:** Currently there is limited marketing research data to support producers in effectively marketing (post-farm gate activities) locally-branded products, in particular for marketing value-added local products through intermediated supply chains. One important opportunity is to leverage the practical expertise of producers and value-added production as case studies to inform larger-scale research projects. We have begun to do this, but could really benefit from having more opportunities (money) to bring the people who were at the table together more frequently. Another opportunity is supply chain research, including research on what producers actually do when they are faced with an opportunity (behavioral models).
 3. **Agricultural commodity research:** New England as a whole has a significant land cost that makes it challenging for agriculture, however, researching commodity production vs. value may help to evaluate the direction in which value-added production may be competitive.
 4. **Food processing equipment inventory within the northeast** – The infrastructural investment for processing value-added foods is a significant financial investment and risk. While there is value in the existing shared-use kitchens these facilities currently have limited infrastructural availability. While there is an economical opportunity to invest in processing equipment that can further support value-added food production there is a research need that will initially conduct an inventory of existing infrastructure, system linkages, capacity, efficiencies and bottleneck to help assess the current and projected needs for food aggregation storage, processing and distribution strategies for the northeast region.

OUTCOMES

- Development of regional network contact list, including project team members and other regional partners.
- Submitted applications to the following funding sources based on the Food Safety research themes identified in NEED/NERA discussions:

- USDA Sustainable Agricultural Systems Program Area Code – A9201. The LOI submission title was, *Addressing Food Safety Challenges to improve Agricultural Sustainability, Producer and Processor Profitability and Consumer Well-Being*. Program funding = up to \$10 Million.
- USDA AFRI Foundational, Small and Medium Farm – A1061, full proposal was submitted titled as, “*Developing and implementing mixed media training tools to assist farm-based processors comply with new FSMA regulations*” Program funding = up to \$500,000.

NEXT STEPS

- Continue to seek funding:
 - 2019 USDA Local Food Promotion Program Grant. The total budget for this award is ~\$500,000. Proposal due date is anticipated for 5/2019.
 - 2019 USDA NIFA Food Safety Outreach Program. The budget for this award is up to \$400,000. Proposal due date is TBD (early June 2019)