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Cover Page Footnote

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Engaging Farmers, Culinary Schools, and Communities in Value-Added Production to Strengthen Local Food Systems

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Abstract. Value-added products can generate farm income and improve community food access, yet lack of available kitchen infrastructure and labor can limit farm production capacity. This project explored how community-based culinary schools might fill the gap. A unique “product share” model was identified and piloted, meeting the collective needs of farmers, a culinary school, and urban consumers. By researching farmer crop availability and business model preferences, and aligning value-added production with community food preferences, we demonstrate a successful pilot indicative that similar initiatives can be replicated in other metropolitan areas, with potential to engage cross-disciplinary extension professionals.

INTRODUCTION

Value-added production (VAP) represents a way for farmers to stabilize seasonal crops and other farm products while adding a new revenue stream to farm operations. VAP may provide important opportunities for farmers, especially in places where direct-to-consumer markets for fresh produce are saturated (Lu & Dudensing, 2015). However, many farmers lack the necessary kitchen infrastructure for VAP (Center for Profitable Agriculture [CPA], 2007). Extension and food systems research have explored the ability of shared-use commercial kitchens, as in “facilities where local entrepreneurs ... can prepare and process their food products for the consumer market,” (Topaloff, 2014, p. 5) to serve as incubators for food businesses (Center for Integrated Agricultural Systems [CIAS], 2001; Colpaart, 2021; Sandkamp, 2014). For farmers, however, personally taking on responsibilities associated with food processing and marketing may involve outlays of resources, time, and labor that are prohibitively high (Alonso, 2011; Born & Bachman, 2006).

Motivated by existing shortages in kitchen infrastructure for farmers, we designed and implemented a project to explore the potential for mutually beneficial partnerships between local farms and community organizations with access to commercial kitchen space. The project team consisted of researchers at Rutgers University and staff at Elijah's Promise (EP), a food aid organization that operates a community soup kitchen and culinary school in New Brunswick, New Jersey. Community organizations such as this can provide the kitchen infrastructure, expertise, and labor that farmers often lack, while creating educational opportunities for community members and economic benefits for the organizations themselves. The goal of this project was to identify and pilot a VAP business model that could meet the needs of farmers, community organizations, and urban consumers in central New Jersey and be replicated in other metropolitan areas.

ENGAGING LOCAL FARMERS

This project included four stages. First, we investigated whether farmers would be willing to collaborate on VAP with a food-oriented community organization. We presented our project at the 2019 New Jersey Agriculture Convention and Trade Show and (1) held a focus group session with farmers in attendance; (2) conducted a survey of farmers in attendance; and (3) conducted in-depth interviews with farmers after the trade show had concluded.

Triangulating these research methods led to integrated conclusions. First, tomatoes, peppers, and tree fruits were among the most readily available produce types. Second, farmers were willing to pilot a four-part “product-share” model in which (1) farms provide surplus produce, which might otherwise be donated or sold at a loss, to EP; (2) EP culinary students process the produce into value-added products (VAPs); (3) a share of the VAPs is returned to the farms to sell through direct-market channels; and (4) EP retains a share of VAPs to sell to urban consumers (Errickson et al., 2020). Importantly, farmers saw the product-share model as reducing financial barriers to VAP by eliminating cash exchanges between farmers and processors. Three farmers agreed to participate in a 2019 production trial based on this model.

GATHERING COMMUNITY INPUT

Second, we conducted research with New Brunswick community members to understand what kinds of VAPs made with local produce would appeal to consumers in the urban marketing area of EP. We invited residents to voice their needs, values, and concerns through participation in community-based focus groups. Four focus groups were held at places of established community contact (Parker & Tritter, 2006), including an annual “food forum” and a soup kitchen. Fruit preserves, tomato sauce, and pickled vegetables were identified as VAPs that would be particularly enticing. Cost and convenience were key factors in food-buying decisions, but participants also attached importance to food quality and health (Quick et al., 2022). These findings suggest that a viable market exists for locally sourced VAPs among New Brunswick residents.

VALUE-ADDED PRODUCTION AND MARKETING

Third, we worked with Rutgers University dietitians to develop recipes for, and ultimately produce, healthy, locally sourced VAPs that would appeal to New Brunswick consumers. The project team piloted value-added tomato sauce (104 pints), apple sauce (32 pints), and pickled vegetables (50 pints) made with produce from three partner farms. Branding and marketing were integral considerations for this part of the project. To create custom labels for each product (Figure 1), EP worked with graphic design students to incorporate community feedback on the importance of freshness and quality by emphasizing the single origin of many ingredients. Labels also reflected farmer interest in having a self-labeled product by including a description of the farm and the social service mission of EP.



Figure 1. Sample value-added product label.

EVALUATING THE PROGRAM: LESSONS FOR STAKEHOLDERS

Finally, we evaluated the project based on feedback from community members, EP staff, and farm partners. Several lessons emerged as useful for organizations and farmers interested in a similar VAP collaboration model. Furthermore, these lessons are relevant for Cooperative Extension professionals looking to facilitate such partnerships.

Sensory analyses (taste tests) of finished VAPs were conducted at local farmers markets. Overall consumer feedback was favorable (Quick et al., 2022). Detailed results comparing the local VAPs with store-brand alternatives were used to further refine the recipes. The positive real-world reception to EP-branded products showed that our strategy of using community focus groups to develop new VAPs could be a useful component of future iterations of this project.

Staff and chefs at EP, as well as farm partners, were interviewed following completion of the pilot project; four main areas for improvement emerged from these discussions. First, food-oriented community organizations should identify VAPs that fit well within their existing kitchen infrastructure and staffing abilities prior to engaging farm partners. For instance, EP concluded that dried herb and spice mixes and herbal teas would impose fewer demands on kitchen staff and equipment than labor-intensive jarred tomato sauce, while still generating significant new revenue for farm partners. Second, advance training on food safety is key to avoiding delays in production. Canning and jarring require specialized skills that are best taught and practiced prior to embarking on production for external consumers. Third, a more conventional fee-for-service model in which farm partners pay community organizations to process their crops and receive all the finished VAPs to sell on their own may in some cases be preferable to the product-share model piloted with this project. A fee-for-service model would place less onus on organizations like EP to devote resources toward marketing and sales of VAPs, while still incentivizing farmers to take full advantage of VAP opportunities. Fourth, while farm partners evinced high overall satisfaction with the program, they also reported that transporting produce to EP constituted a significant logistical challenge. The feasibility of future VAP collaborations may hinge on whether affordable, efficient transportation can be arranged to take raw ingredients from farms to community kitchens, and VAPs from kitchens back to farms.

IMPLICATIONS FOR EXTENSION

This project demonstrates how farmers and community organizations with underutilized kitchen facilities can collectively strengthen local food systems. Food-oriented community organizations may be an overlooked resource for bridging critical VAP infrastructure gaps for farmers. Successful VAP partnerships hold the potential to create revenue for both farmers and community organizations while benefiting food insecure consumers, reducing waste in the food system, and creating educational and training opportunities for community members. On multiple dimensions, VAP partnerships could therefore make local food economies stronger and more vibrant.

At the same time, our pilot project shows that VAP collaborations between farmers and community organizations face many challenges. These challenges include: (1) identifying VAPs that meet the needs of farmers and match the production capacities of community organizations; (2) ensuring high standards for food safety; (3) finding a business model that yields economic benefit for all parties; and (4) overcoming transportation challenges. Extension professionals, who already employ many of the skills necessary to surmounting these challenges, can play an essential role in helping VAP partnerships to thrive by connecting diverse stakeholders and facilitating crucial discussions about product fit, food safety, economic viability, and logistics. This project shows the relevance of Extension in a changing foodscape, particularly as we emerge from the COVID-19 pandemic. With Extension as a catalyst, university departments, farmers, and food-oriented community organizations can work together to develop and strengthen partnerships for locally sourced VAPs.

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