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Strengthening Urban Food Systems Through Extension Programming and Community Engagement: A Case Study of New Brunswick, New Jersey

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Cooperative Extension (Extension) can, and in many cases already does, engage in well-rooted partnerships with urban audiences. Yet, it is important to recognize that there are many layers to the diversity that exists within urban audiences—there is no single “urban community.” This article presents a case study of food security programming in New Brunswick, New Jersey, including collaborations between Rutgers Cooperative Extension and multiple community organizations to illustrate important considerations for engaging in urban Extension initiatives. Specifically, challenges exist in identifying urban audiences, including those who are hidden, especially as the demographics of city residents can vary greatly within a single geographic area. Solutions include the development of deep community partnerships and creative engagement of university students, with the latter participating as both an audience to benefit from Extension programming and as partners in program implementation. Evaluating urban Extension programming can provide important information as to whether a particular program is meeting the needs of the target audience, but a challenge exists in distinguishing the impact of a single Extension program operating in what is often an ecosystem of programs addressing food insecurity in an urban area.

Keywords: food insecurity, urban food systems, healthy food

Food insecurity is negatively associated with health outcomes across the lifespan (Gundersen & Ziliak, 2015). Challenges within the urban food system include multiple factors that can dramatically affect food security and the ability to consume a healthy diet, including the issue of the *availability* of healthy and culturally appropriate foods (Jones et al., 2021; Laska et al., 2010; Newman et al., 2017). Even when these foods are available, *accessibility* can be an issue (Baek, 2016). For example, people may lack transportation and/or time to reach the locations where food is available. Further, places where food is sold may not be readily accessible to differently-abled urban residents. For those without a personal vehicle or public transportation options, accessing stores by foot may require frequent trips due to the inability to carry substantial amounts of food home physically. This can pose an additional burden for residents of urban areas with respect to both time and physical limitations.

Despite the availability and accessibility issues, it is the *affordability* of food, whether people can buy healthy, culturally appropriate food given their available financial resources, that is most aligned with how food insecurity is often defined and measured. For example, a commonly used definition of “food insecurity” is the limited access to adequate food due to lack of money or other resources (Coleman-Jensen et al., 2020). In addition, the most commonly used measure of food insecurity in the United States is the USDA Household Food Security Survey Module (Economic Research Service, U.S. Department of Agriculture, 2012). Most questions on the scale ask specifically about being able to afford food. While this is the most common conceptualization, others have expanded beyond affordability, particularly within the realm of community food security (Hamm & Bellows, 2003). For example, the New Brunswick Community Food Alliance has a more expansive definition of food security as “access to adequate amounts of nutritious, safe, affordable, and culturally appropriate food at all times and in socially acceptable ways” (New Brunswick Community Food Alliance, 2012, p. 1).

Availability, accessibility, and affordability are all important to consider because food insecurity is multifaceted. Solving one component of the problem in isolation may not be sufficient (Murrell & Jones, 2020). While Cooperative Extension (Extension) programs focused specifically on food insecurity are essential to consider, urban food system programming more broadly has been shown to provide additive benefits for urban areas. Not only does it affect the production, sale, and consumption of food in urban areas, but it can have economic and environmental impacts on these areas (Diekmann et al., 2017). Extension professionals are increasingly engaged in initiatives to improve localized urban food systems (Clark et al., 2016). These initiatives occur largely through programming related to urban agriculture, including home and community gardening, and creating alternative marketplaces for local foods, such as farmer’s markets and community-supported agriculture programs (Diekmann et al., 2020). Together, these diverse programs can provide a comprehensive, systems-based approach to address food insecurity in urban areas.

Extension professionals may be well-positioned to address food insecurity in urban communities. While urban Extension programming can improve food access, availability, and affordability within cities, there are several important considerations in creating programming to meet these goals. For Extension to have a vibrant future serving traditional and underserved audiences in urban areas, programs and partnerships must develop novel approaches to reach diverse community members.

This article presents an overview of food security and food systems programming that has been designed and developed by Rutgers Cooperative Extension and collaborating partners to bring a diverse community together toward solving the problem of food insecurity in urban New Brunswick, New Jersey. The featured programs highlight important considerations for engaging in food insecurity work in urban areas. Specifically, new and veteran Extension professionals might strengthen the impact of their work in urban areas by identifying urban populations and

their unique needs, engaging community members as more than simply program participants, creating high-level community-Extension partnerships, engaging students in urban Extension work, and evaluating urban programming.

Context: Food Security Programming in New Brunswick

New Brunswick is a vibrant city of approximately 55,000 people located in central New Jersey. It is home to Rutgers-New Brunswick, the largest public university in the state, as well as the global headquarters of Johnson & Johnson. These anchor institutions make New Brunswick well situated for public and private partnerships to improve health and food security within the city.

The demographics of the city have changed significantly over the past few decades. New Brunswick is diverse with many immigrants, most recently from Central and South America. More than half the population of New Brunswick is under 35 years of age, and in some neighborhoods in the city, the prevalence of child poverty is approaching 50% (Newman et al., 2017).

New Brunswick Food Security Programming in Brief

As New Jersey's Land-Grant University, Rutgers has been an active participant in New Brunswick's evolving food security landscape. Rutgers Cooperative Extension has led initiatives such as the New Brunswick Community Farmers Market (NBCFM), which was established in 2009 as a partnership between Rutgers Cooperative Extension, Johnson & Johnson, and the City of New Brunswick to address food availability and affordability. Rutgers Cooperative Extension has also collaborated on many city-wide, community-led food initiatives. For instance, Rutgers Cooperative Extension professionals have held leadership roles within the New Brunswick Community Food Alliance and Meals on Wheels in Greater New Brunswick and have served as members of the Feeding New Brunswick Network. Due to the breadth of community food initiatives in New Brunswick, a full review is beyond the scope of this article. Select examples are presented in Table 1 to demonstrate the approaches employed by Rutgers Cooperative Extension professionals in collaboration with the New Brunswick community to improve food access and engagement.

Table 1. Select Examples of Extension-Partnered Food Security Programming in New Brunswick, New Jersey

Program	Description	Objectives	Extension Involvement
Feeding New Brunswick Network	Affiliation of New Brunswick emergency food providers connects via monthly meetings and events.	Collectively promote food security by increasing access to healthy, culturally appropriate food in New Brunswick.	Extension partners with this collective network of pantries to maximize emergency food system outcomes.
Meals on Wheels in Greater New Brunswick	Volunteers deliver pre-made meals and fresh produce (in partnership with NBCFM) to elderly and homebound residents in New Brunswick and surrounding areas.	Enrich the lives of seniors and assist them in maintaining independence by providing nutritious food, human connections, and social services support.	Community initiative has expanded to include an Extension-partnered fresh produce delivery program.
New Brunswick Community Farmers Market	Three weekly farmer's markets dedicated to fruit and vegetable sales are held in two New Brunswick locations.	Increase fresh food access and intake, community engagement with urban green spaces for improved health and well-being.	Program led by Extension professionals in partnership with Johnson & Johnson and the City of New Brunswick.
New Brunswick Community Farmers Market (NBCFM) Market Ambassadors	A three-year project that assessed community food preferences, made desirable foods available via collaboration with local farmers, and promoted available healthy foods to New Brunswick communities.	Increase availability of and access to fresh, culturally relevant foods; improve community engagement with NBCFM; increase sales for local farmers.	Project led by Extension professionals in partnership with bilingual community members with support from the USDA.
New Brunswick Community Food Alliance	Alliance of community members and leaders working together to strengthen the local food system.	Ensure neighbors, children, and the community have easy access to nutritious and affordable food choices.	Extension professionals serving as active members of NBCFA working groups strengthened connections between community leaders, residents, and Extension.
New Brunswick Community Food Assessment	New Brunswick food systems stakeholders completed a multi-year, three-phase food assessment and planning process.	Support efforts to improve community food security in New Brunswick.	Co-led by Extension professional, with other Rutgers researchers and a bilingual team of community members and student researchers.

Program	Description	Objectives	Extension Involvement
Veggie Rx	Prescription produce program for patients of HIPHOP Promise Clinic, a student-run free health clinic for low-income individuals. Clinicians provide “prescriptions” for free produce that can be redeemed at the NBCFM.	Increase fresh fruit and vegetable access for limited resource patients at risk for chronic disease.	Co-led by Extension professionals in collaboration with medical school faculty and a team of medical students.

Considerations for Addressing Community Food Insecurity

Identifying Urban Populations and Their Unique Needs

Identifying the audience and their unique needs is a critical step in developing Extension programming (Garst & McCawley, 2015) and may be especially challenging for Extension professionals working in urban areas (Ruemennapp, 2018). It is imperative to recognize that “urban” communities are not all the same, even within a single geographic area. Urban residents are themselves diverse, and thus no two urban areas are identical. Even within one geographical urban area, there are often multiple communities that experience different challenges, utilize different support systems, and may respond differently to Extension programming and interventions. Many communities within an urban area might come together based on ethnicity, race, culture, language, income, age, ability, and other factors, including geographic location within the same city. For example, in New Brunswick, several waves of immigration have resulted in a shifting demographic makeup of the city. Through the middle of the last century, multiple waves of Hungarian immigrants moved to New Brunswick (Weiss, 2006). Later there were influxes of immigrants from the Caribbean, and over the past (approximately) 30 years, many immigrants from Central and South America have moved to the city, with a notably large population from Oaxaca, Mexico. At the same time, there are several historically black neighborhoods in New Brunswick (Newman et al., 2017). Simply using the term “urban” to refer to the residents of New Brunswick does not capture even this level of diversity, and immigration demographics represent only one component of urban residents’ characteristics.

Extension professionals must also consider that some urban populations can be at first hidden from view; however, this does not mean these community members would not like or benefit from Extension programming, simply that it can be more challenging to identify and engage them. For example, homebound seniors may have challenges accessing a program if only traditional Extension outreach efforts are employed. In-person program recruitment will miss many of these homebound individuals as may online or email-based recruitment since this group tends to have lower technological literacy than other populations (Anderson & Perrin, 2017).

Though important, identifying these “hidden” populations can be challenging. Connecting with cultural, religious, or social service agency leaders can provide an opportunity for Extension professionals to reach audiences in a more meaningful way than Extension professionals could manage on their own. In New Brunswick, a collaboration with the advocacy group Lazos America Unida has increased Extension’s engagement with undocumented populations (Newman et al., 2017). Of course, there is always the chance that hidden populations are among the community but not yet served by any community organizations. Whether because they are too few or simply choose to remain hidden, Extension professionals may opt to employ gentle but ongoing efforts to reach these groups.

Additionally, a specific concern is that the number of languages spoken amongst members of an urban audience may pose a barrier to comprehensive engagement with Extension. Unfortunately, a lack of translation resources among Extension professionals is a real concern in many areas (Angima et al., 2016; Wyman et al., 2011). Steps to increase the language skills among Extension professionals might include additional hires of bilingual staff and faculty as well as professional development opportunities for those already serving in Extension. Universities are increasingly expanding diversity, equity, and inclusion initiatives (Iverson, 2008), and community partners may prove to be a key resource in this area. In particular, community leaders and residents have the potential to serve as cultural ambassadors to aid Extension professionals not only in language skills but in developing a deeper connection and cultural understanding among residents whose heritage differs from their own.

Once the populations of interest are identified, the community’s needs should be identified in partnership with the community (Ruemenapp, 2018). Needs assessments can be conducted with a variety of tools and approaches, which are often used together to capture broad community perspectives more fully (Garst & McCawley, 2015). Many collaborative research- and community-building approaches can help co-create the understanding of community needs (Lynch et al., 2021) The New Brunswick Community Food Assessment and Action Plan used many of these methods (Newman et al., 2017). In this example, the research team conducted almost 150 interviews during a three-year period, half with staff from community-based organizations and half with food pantry clients and other low-income residents. A hallmark of community-partnered research (Hardy et al., 2016), engaging Spanish-speaking community members who designed and conducted interviews with residents was a critical component to both overcoming language and cultural barriers and fully including residents and their insights in the research process. After the food assessment was completed, findings were shared widely within the community. Engaged community members worked closely with the research team to create the New Brunswick Food System Action Plan, which outlined proposed work for the New Brunswick Community Food Alliance over the following three-year period. To do this, the team held more than 30 small-group planning meetings and one large, full-day community food planning conference, which was attended by more than 60 residents and stakeholders. Though the amount of time and work involved for community-engaged research can be significantly

greater than more traditional approaches (Terosky, 2018), the short- and long-term rewards such collaborations yield, such as deeper and lasting connections between Extension professionals and community members, are well worth the effort.

Another formal approach to better understanding the community and food insecurity issues within New Brunswick is demonstrated by the NBCFM's Market Ambassador initiative, launched in 2019 with the goal of strengthening and expanding community engagement. The program included a comprehensive survey of community residents to identify preferences for locally grown and ethnic crops along with barriers to food access. The survey was administered by three trained Market Ambassadors, community members who were hired as Extension staff for the project. Detailed interviews with farmer's market customers expanded on survey findings by collecting additional in-depth information regarding community food preferences. The data were analyzed by Rutgers Cooperative Extension professionals and used in close collaboration with New Jersey farmers to make desirable foods available at the NBCFM during the 2019-2021 seasons. The synergistic collaboration of urban residents working as Ambassadors, Rutgers Cooperative Extension professionals, and local farmers demonstrates how data collection and analysis by trained researchers done in partnership with community members can smoothly- and quickly- translate into practical, meaningful outcomes in a community-based program.

Another community-engaged research project within urban New Brunswick involved interviews designed to understand how residents apply their own food values to evaluate locally produced value-added products at the NBCFM. Using the Food Choice Process Model (Furst et al., 1996) as a guide, interviews with New Brunswick residents revealed that seasonality, familiarity, and social value are all important factors in how New Brunswick residents evaluate their food choices (Quick et al., 2022). The theme of social value reflects community valuation of food equity and opportunity for local food entrepreneurs, qualities that may not be at first considered when thinking about food products themselves but that are important pieces of a sustainable and equitable food system and an important component of how residents think about the food they purchase.

Informal community assessment methods can also generate important information when consciously implemented, thus should not be overlooked. For example, attending and participating (when appropriate) in community meetings can improve understanding of community needs, generate ideas for new programming, and provide community feedback on developing proposals and program ideas. Whereas meetings organized by Extension professionals for the purpose of collecting data may require a higher level of effort yet yield limited results (e.g., if attendance is low), Extension professional attendance at meetings organized by community groups can allow for the observation of genuine community interactions and uninhibited comments that may inform program development.

Engaging Community Members Beyond Program Participation

One way to foster genuine connections between community members and Extension professionals is to involve community members at meaningful levels in the design, implementation, and evaluation of programs instead of offering programs strictly *by* Extension *for* the community. As Ruenenapp (2018) points out, “Extension cannot approach these audiences or urban communities with a ‘Savior’ or ‘Lone Ranger’ attitude” (p. 171).

In the example of the NBCFM Market Ambassadors program, community partnerships were key to collecting data and maximizing the effectiveness of implementation strategies based on the results of the data collection phase. The Market Ambassadors were New Brunswick-area residents recruited in collaboration with local organizations and hired into the program as Rutgers Cooperative Extension staff. This strengthened community connections with Rutgers Cooperative Extension and created local employment opportunities for residents.

In the early stages of the program, the Market Ambassadors engaged in data collection by helping to design and administer a comprehensive community survey. Thus, the Market Ambassadors were listed on the Institutional Review Board (IRB) protocol after completing the existing ethics training required at the university (i.e., CITI human subjects training). Though required of all individuals directly engaged in the research effort, these trainings may not be well suited to the needs of community researchers (Anderson et al., 2012), especially if technological or language barriers exist. Further, while training is crucial from the protection of human subjects’ perspective, as currently configured in many universities, the required trainings may be a barrier to including community members in the research components of programming.

To promote the availability and affordability of preferred food choices and help audiences overcome barriers to utilizing the NBCFM as a resource during the later phases, the Market Ambassadors participated in community events as program representatives. Maintaining a presence with collaborating organizations to reach diverse local community members reinforced the connectivity between the NBCFM and local residents over time, particularly as the local Market Ambassadors became familiar points of contact.

Hiring New Brunswick-area residents as Market Ambassadors resulted in successful program outcomes and demonstrates the importance of considering community members’ diverse workplace skills. Expanding beyond traditional program development and delivery skill sets (Fox et al., 2017), acknowledge that approaches to staffing may have to be more flexible for successful urban Extension programming. Since much Extension program work relies on effective relationship building, community members bring valuable interpersonal connections when hired as program staff, contributing to success.

Creating Organizational-Level Community Partnerships for Increased Relevance and Sustainability of Programming

Extension professionals joining and actively participating in community groups can increase collaboration and encourage new partnerships between Extension and communities (National Urban Extension Leaders [NUEL], 2015). In New Brunswick, Extension professionals serve as active members of the two largest anti-hunger coalitions in the city, the Feeding New Brunswick Network (FNBN) and the New Brunswick Community Food Alliance, and as members of other smaller organizations.

Because urban areas may be complex in terms of the number of organizations operating with the space (Fox et al., 2017), developing collaborative networks and alliances can increase the likelihood of successfully meeting objectives. For example, there are many individually operated food pantries in New Brunswick. However, they have achieved collective success by developing the Feeding New Brunswick Network, an organization of affiliated pantries that meet monthly to address shared concerns and needs. Rather than developing many individual relationships with pantries, Extension professionals in New Brunswick have found success by collaborating with the coalition of pantries for research and programming initiatives. Additionally, Extension professionals have worked with the coalition to replicate the model in other nearby locations, with one Extension professional serving as a founding member of the Metuchen Edison Assistance League, a coalition of food pantries located nearby and based on the FNBN model.

In a similar “network” model, residents, organizational leaders, and Extension professionals worked closely together with support from USDA and Johnson & Johnson to develop the New Brunswick Community Food Alliance. Topic-focused working groups that span the mission of the Alliance are led by a diverse collaborative group of community and Extension leaders focused on healthy food access, urban agriculture, food and economic development, food advocacy and policy, and community engagement. Collectively, working group members engaging around initiatives relevant to local residents, such as the healthfulness of school meals, can yield exponentially higher results than individual efforts.

Successful food security programming in New Brunswick has long relied upon strong connections between Extension professionals and community leaders. In the Market Ambassadors program example, engaging residents through connections with church leaders, cultural program coordinators, and others who directly serve as trusted community contacts allowed for the dissemination of information. Also important, it fostered the creation of an open communication channel through which community voices can continue to be heard by Extension professionals as programming evolves.

Along with community groups, developing close collaborations with the government is also important (Diekmann et al., 2017). The City of New Brunswick has been a willing partner on multiple initiatives of the New Brunswick Community Food Alliance, Feeding New Brunswick

Network, and New Brunswick Community Farmers Market. Collaboratively developing programs and events with the city as an official partner ensures an efficient yet comprehensive process to address logistics such as permitting, parking, space usage, and public safety while also providing opportunities to increase engagement of local residents through city media and promotion channels. In a prime example, the City of New Brunswick partners with Rutgers Cooperative Extension and Johnson & Johnson to sponsor the New Brunswick Community Farmers Markets, which receive additional community support and promotion through New Brunswick City Center, a 501(c)3 organization dedicated to promoting the central business district of New Brunswick. The city also works closely with farmer's market leadership to ensure a fair and effective process for obtaining vendor permits and parking in the market's urban locations.

Engaging community partners from the beginning is key to developing programs with the community rather than for the community. Engaging city government is essential to reduce the likelihood that unexpected logistical concerns will arise in the process. Programs with a single champion could be more vulnerable to deterioration with time or changes in resources, whereas programs supported by deep community partnerships and secure institutional backing may be more likely to achieve both short- and long-term success and to remain resilient as communities and their needs evolve.

Engaging University Students in Extension Programming

Community-engaged research, scholarship, and service, long the domain of Extension (Franz, 2014), are increasingly recognized as important in universities writ large (Eatman et al., 2018; Stanton, 2007). Therefore, as universities train students in the traditional approaches of research, scholarship, and service, training them in publicly-engaged scholarship and service is also essential. One way to accomplish this is through academic coursework. For example, one of the authors teaches a first-year seminar called "Food Insecurity in New Brunswick: A Service-Learning Approach," where students volunteer in food pantries in the community for course credit. Another example is in a course called "Women, Food, and Health," where the other author led students' assessment of a personal dietary intake and food budget along with the determination of New Brunswick living expenses to place their own food costs in the context of an urban community environment. Even if Extension professionals cannot create their own classes, guest lecturing in others' classes is a meaningful way to involve undergraduate students in Extension work on food insecurity. These guest lectureships may take place in a broad range of curricula but are often especially welcome in departments of nutrition, agriculture, and economics.

Additionally, many opportunities to engage students in food security work via internships and experiential or service-learning credits, even within a singular program. As an example, interns with the New Brunswick Community Farmers Market have assisted with projects related to

community food preferences for value-added products, business development and agricultural economics, communications and marketing, winter crop production in an urban setting, and nutrition education for adults and youth.

Volunteering is an important way for students to get involved and a critical element of the success of urban Extension (NUEL, 2015). The Rutgers-New Brunswick Student Food Pantry recruits students to be “Social Media Ambassadors” in the hope they can raise awareness of the pantry and concurrently reduce social stigma around pantry use since stigma can have a negative impact on seeking the needed food assistance (Delos Reyes et al., 2021). Students regularly volunteer at other pantries throughout the city and assist the Feeding New Brunswick Network. Medical student volunteers have collaborated closely with Extension personnel to implement Veggie Rx. This fruit and vegetable prescription program increases fresh food access for low-income urban residents at risk for chronic disease. Via Veggie Rx, medical students see patients at a no-cost clinic and offer health screenings at a mobile community soup kitchen. These student volunteers explain the importance of fruit and vegetables to their patient’s overall health and then distribute and track data on the “prescriptions” that are “filled” for fruits and vegetables at local farmer’s markets. Also, having volunteered to analyze data and present findings at conferences, these students have successfully engaged in program design, delivery, and evaluation, benefitting their own learning and the well-being of community members.

Partnering with centers of community-engaged service learning, such as the Rutgers Collaborative Center for Service Learning and Community Engagement, is an opportunity to work with students on food insecurity solutions, as well as to make new connections between Extension and the community. Both authors have partnered with the Collaborative Center and its students to host topical webinars and meetings that fostered solutions-based discussions relative to food insecurity. Additionally, both have done guest lectures in the Advancing Community Development undergraduate class and hosted Collaborative Center students for experienced-based community internships. This Center consistently seeks ways to engage its students directly with community initiatives and organizations in the city. Supporting this process by expanding Extension partnerships benefits Extension personnel, university students, and perhaps most importantly, community residents.

One of the most important considerations when involving students in any food insecurity research or programming is that they often bring firsthand food insecurity experiences to their work. For example, approximately one-in-three Rutgers-New Brunswick students are food insecure (Cuite et al., 2020), and many likely had experiences with food insecurity as children (Coleman-Jensen et al., 2018). Sensitivity to the possibility that students have or have had lived experiences of food insecurity, rather than the assumption that students are food secure, should be the norm when bringing students into this area of Extension work, whether it’s through classes, internships, or volunteer opportunities. Along with community audiences, Extension professionals may also consider university students as a non-traditional target audience. While

university departments and programs such as Student Affairs, Residential Life, etc., may provide direct support to students, Extension professionals who are increasingly well-versed and familiar with the issues connected to food insecurity can also serve as a support network for university students.

Evaluating Community-Based Extension Programs

Both formal and informal evaluation tactics can be useful toward determining whether Extension programs are succeeding in meeting their objectives and serving community needs. Collective impact assessment is one important approach that Extension professionals use to ensure that communities are engaged at every phase of program development and evaluation and that Extension professionals are working toward goals shared by the community (Franz, 2014; Hanleybrown et al., 2012).

One of the first questions program evaluation can help answer is whether the program serves the intended audience. Repeated evaluations over time may be needed to identify which audiences are participating in programs, how this is changing, and who might be missing.

At the NBCFM, extensive sales and customer data tracking sheets, along with on-site and online surveys, are used to collect feedback and outcome measures from diverse audiences. In the Veggie Rx program, pre-and post-intervention surveys are employed with the goal of understanding who the program serves and to recognize audiences who may be missing. To that end, clinic patients enrolled in Veggie Rx but who did not use their fresh produce prescriptions are surveyed to assess program barriers and determine ways to make the program more accessible. This important information guides program changes each year, allowing Extension personnel to reevaluate how well they continually meet community needs.

Many Extension professionals may already be familiar with the traditional approach to program evaluation—examining the impact of a program on the pre-determined outcomes of interest (Duttweiler, 2008). When operating in an urban area, often with multiple co-occurring programs, the overlapping efforts can make it difficult to distinguish individual impacts of any one specific program. It is important to note that when trying to understand the effects of programming on food insecurity, systematic changes in poverty levels and other policy changes may also have a significantly larger impact than any one program in isolation. For example, the NBCFM experienced a decrease in sales during 2015-2016, but it was unclear if the market program was not reaching the intended audience or whether there was an increase in other opportunities to procure fresh produce throughout the city. Sales and attendance have since increased with more targeted outreach efforts conducted in collaboration with community partners and Extension professionals.

It is also important to recognize that in some cases, a successful program outcome can put other programs or even that same program in jeopardy. In 2012, after advocacy on behalf of the New Brunswick Community Food Alliance and many Extension professionals, a full-service grocery store opened in New Brunswick (NJBiz, 2012). After 20 years without a full-service grocery store to provide regular access to fresh fruits and vegetables, increasing healthy food access through this store benefited the community at large, even if it meant increased competition and the potential for decreased sales for the NBCFM. Because improved healthy food access across the community is a goal of Extension, the new grocery store met the larger objectives of Extension and the city. Luckily, NBCFM's sales of fruits and vegetables also held steady during the store's opening years, indicating both were meeting consumer needs.

As the goal of much urban Extension programming is serving a community in need, sometimes the research and evaluation pieces cannot be the primary focus of the program. Despite their usefulness to Extension practice and scholarship, there are some instances in which evaluation components must be a very minimal piece of a project. One example is demonstrated by an expansion of the New Brunswick-based Veggie Rx program. The initial program format consisted of Extension professionals working with medical students at their student-run free clinic, which serves approximately 40 patients per year. In this setting, a combination of survey research and interviews was effective to gauge preferences, intended and actual program participation, and dietary intake. Further, it was feasible to collect related health outcomes from electronic medical records. At present, an expansion of the program into a much larger community-based health center is in progress. Though the health center is a willing partner, it is not feasible to incorporate an evaluation component into their aspects of the Veggie Rx program implementation. Therefore, the primary program focus will be on providing fresh produce access and measuring what behaviors can be assessed at the NBCFM when patients fill their prescriptions and redeem their produce vouchers. Considering the program's primary goal is to improve food access for increased health benefits, this is an acceptable trade-off because the increased program reach into a low-income and at-risk population will likely increase impact. However, a challenge exists in that the expectation for Extension professionals to demonstrate program outcomes, including obtaining (and in some cases retaining) program funding, remains.

A final challenge for conducting urban programs in close partnership with communities is that, even if programs are evaluated successfully and seen as efficacious, they are not necessarily recognized as part of Extension (Fitzgerald et al., 2018; Fox et al., 2017). Specifically, community partners may be recognized as the lead or sponsor of programs, maintaining a disconnect between community perception and the role of Extension. In this regard, including measurement of how well any given program does in spreading awareness and appreciation of Extension itself in urban areas may be worth considering, as this may contribute to the continued viability of Extension in evolving urban landscapes.

Conclusion

Extension can, and in many cases already does, engage in well-rooted partnerships with urban audiences. Yet, it is important to recognize there are many layers to the diversity that exists within urban audiences. There is no single “urban community,” but rather, each one has distinct needs.

The examples presented within the context of New Brunswick, New Jersey, including collaborations between Rutgers Cooperative Extension and the New Brunswick Community Food Assessment, the NBCFM, Meals on Wheels in Greater New Brunswick, and others, illustrate important considerations for engaging in urban Extension initiatives. This case study leads to the following key recommendations for Extension professionals to meaningfully engage the community in urban food systems programming:

- Identify the urban audience(s) to be engaged, including groups who may be traditionally underserved or hard-to-reach.
- Invite community members to actively participate in program design, implementation, and evaluation to ensure the programming is relevant and wanted.
- Conduct a comprehensive, customized needs assessment to understand the unique community you aim to serve.
- Collaborate with existing (or consider creating new) organizational networks, groups of organizations that work together to address common goals.
- Before launching the program, assess the implications of planned programming to other organizations working in the food systems space.
- Contact local government and other active community organizations and invite them to participate as collaborative partners.
- When possible, hire community residents as Extension team members to solidify their involvement in the programming while strengthening local connections.
- Consider involving university students who can provide program support while learning valuable community engagement skills.
- Evaluate community-based programs to collect information valuable to Extension professionals and the community itself, making sure your outcome metrics can further serve community members.

This is an exciting time for Extension professionals to be working as partners with urban communities. There are challenges, as in all areas of Extension, but the range of successful projects and partnerships in New Brunswick demonstrate opportunities for similar work to be conducted in other urban communities. The presentation of specific considerations in the context of successful urban program implementation examples contributes to the expanding understanding of how Extension professionals situate themselves and their work in partnership with urban communities.

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