

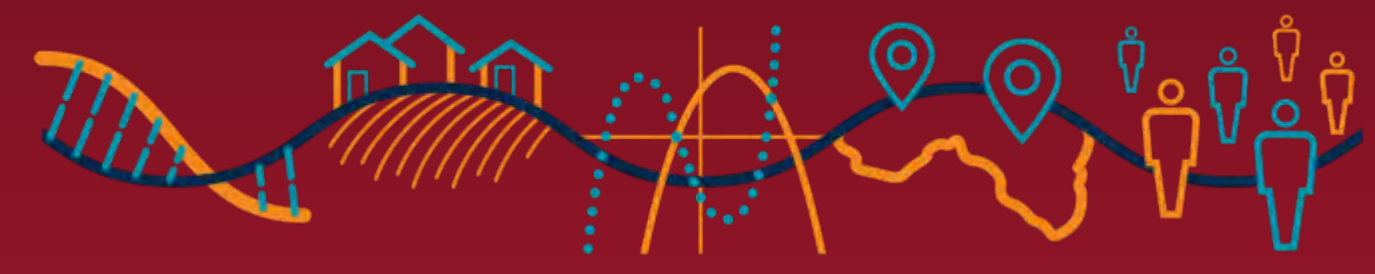
The Role of Distributors in Arkansas Farm to Institution (FTI) Programs: A Comparative Analysis of Barriers and Facilitators to Participation

Emma K. Wallens, BS¹, Kelly Dundon, LMSW², Willa A. Thomason, BS³, Emily S. English, DrPH, MPH, MPS⁴

¹Department of Population and Quantitative Health Sciences, Case Western Reserve University, Cleveland, OH

^{2,3}Office of Community Health and Research, University of Arkansas for Medical Sciences, Fayetteville, AR

⁴Office of Community Health and Research, Department of Internal Medicine, University of Arkansas for Medical Sciences, Fayetteville, AR



BACKGROUND

- Distributors are a vital component of local food systems; they are responsible for bridging food production and retail. This bridge can include food processing, product procurement from farmers and food processors, warehouse storage, and transportation to retailers and wholesale buyers (Johns Hopkins, n.d.).
- The Local Food, Farm, and Jobs Act of 2017 (amended in 2019) serves as an endeavor to “create, strengthen, and expand local farm and food economies throughout the state” (Arkansas Department of Agriculture, 2021). The LFFJA affects distributors through its definition of local food. Food purchased by institutions from distributors can be reported as local if they are labeled “Arkansas Grown” or “Arkansas Made,” (a designation of the Arkansas Department of Agriculture) or are confirmed as local by the distributor or farmer themselves.
- Interviews were previously conducted by the UAMS Office of Community Health and Research in 2020 to discern facilitators, motivators, and barriers to participation in Farm to Institution (FTI) by farmers, institutions, and distributors. A literature review was completed to compare national barriers and facilitators for distributors with those local to Arkansas. A brief report and one-page teaching material was formulated using the combined national and local barriers and facilitators that distributors face when participating in FTI.

LEARNING OBJECTIVES

- Analyze semi-structured interviews about the FTI process in distributors.
- Identify barriers to and opportunities for distributors using the FTI process.
- Develop support materials to improve distributor participation in FTI.

ACTIVITIES

- Conduct a literature review about Distributors’ role, challenges, and facilitators in FTI.
- Participate in weekly meetings with team to discuss and revise the paper and educational material as new information occurred.
- Work with an interdisciplinary team to analyze, revise, and prepare analyses for dissemination.

DELIVERABLES

- Literature Review outlining the current facilitators and barriers that distributors encounter in FTI programming across the country.
- Brief report providing a quantitative and qualitative background on distributors in the United States and their role in FTI as well as a comparative analysis between local Arkansas barriers and facilitators that distributors participating in FTI have experienced with those that are experienced regionally and nationally.
- Create a one-page document for circulation at educational and networking events hosted by the UAMS Office of Community Health and Research that highlights resources for Distributors and the LFFJA.

METHODS

- A literature review was performed to assess barriers and facilitators in distributors’ participation in FTI initiatives across the country. Previous coding themes were reviewed and integrated into a comprehensive report detailing national and local barriers and facilitators to Distributor participation in FTI.
- The UAMS Community Health & Research department completed semi-structured interviews with farms, institutions, and distributors (n = 18) to gauge the overall response in the local supply chain towards the Local Food, Farms, and Jobs Act as well as specific facilitators, barriers, and expansion opportunities for the FTI process throughout the state of Arkansas (IRB approval #260599). Interviews occurred in-person (prior to the COVID-19 pandemic) or through the phone between January 2020 and September 2020. Interviews involving only distributors (n = 5) were reviewed for the purpose of this project.
- A one-page teaching material was formulated for dissemination at educational and networking events hosted by the UAMS Office of Community Health and Research to address some of the needs and wants of distributors from interviews and literature.

RESULTS

- The graph below depicts the interconnectedness of the literature review and interviews with Arkansas distributors in addition to overlap between common themes (bolded) noted throughout the project.
 - Words typed in **Red** signify **barriers**. Words typed in **Green** denote **facilitators**, and words typed in **Blue** indicate an **ambiguous influencing factor** of the two.

Logistics	Supply and Demand	Relationships
<p><u>Food Safety</u></p> <ul style="list-style-type: none"> Distributors often left with the burden of Good Agricultural Practices (GAP) and Good Handling Practices (GHP) certifications when partnering with smaller farms (Bobronikov, 2011). GroupGAP certifications can reduce cost for distributors. (Brobronikov, 2011). 	<p><u>Seasonality</u></p> <ul style="list-style-type: none"> Distributors and producers find it difficult meeting retailer and customer demands for specific products throughout the year (Feenstra et al., 2011). Customers in different climates may have opposing farming seasons and business seasons (Adams, 2015). 	<p><u>Community Investment</u></p> <ul style="list-style-type: none"> Distributors interviewed felt that local food procurement enhances economic growth and development in their communities (UAMS Interviews). Farm to School (F2S) an excellent opportunity for students to learn about local food systems (Izumi et al., 2010, Baustin 2017). Distributor and farmer relationships bolstered community investment and education as well as economic development (Conner et al., 2014).
<p><u>Built Infrastructure</u></p> <ul style="list-style-type: none"> Food transportation requires specific storage and cooling, depending on the product (Winnesota, 2018). Size and specialization (or lack thereof) of distributors affects logistics, efficiency, and food safety and storage units for the products (Winnesota, 2018). 	<p><u>Distributor Capacity</u></p> <ul style="list-style-type: none"> Barrier to broadline distributors in Farm to School initiatives, as they have less of a personal relationship with farmers than regional distributors (Izumi et al., 2010, Baustin 2017). Broadline distributors and other large distributors typically have the edge because of increased finances and resources (Winnesota, 2018). 	<p><u>Marketability</u></p> <ul style="list-style-type: none"> Local food is attractive to consumers and buyers. Partnerships between farmers and distributors created the opportunity for informational materials, farm tours, in school farmer visits, and local product availability lists/calendars (Brobronnikov, 2011). Distributors identified personal relationships as conducive to marketing and innovation (Conner et al., 2014).
<p><u>Environmental Sustainability</u></p> <ul style="list-style-type: none"> Consumers and distributors were concerned with environmental sustainability (Krejci & Bannon, 2014). The type of products consumed (plant-based versus meat) has more of an effect on reducing greenhouse gas emissions (GHGs) than food mile reduction (Weber & Matthews, 2008). 	<p><u>Farm Capacity</u></p> <ul style="list-style-type: none"> Major barriers for distributors’ participation in farm to institution are low supply and volume (Krejci & Beamon, 2014). Crop volume, farm size, and the supply-demand ratio of the food system affected market entry and pricing (Krejci & Beamon, 2014). 	<p><u>Communication</u></p> <ul style="list-style-type: none"> While some distributors felt that local farmers were “not as reliable” in terms of communication, others mentioned that communication with local farms prevents them from having to “go out and hunt for the local food and stuff” (UAMS interviews) Distributors interviewed also held negative perceptions of local farmers’ business acumen; most believed that they did not have the business insight to be competitive in the marketplace (UAMS Interviews).

FINDINGS

- Barriers and facilitators for Arkansas distributors are similar to those reported in other states.
- Environmental sustainability was a consistent concern in the literature review but did not come up in Arkansas distributors’ interviews.
- Communication is both a facilitator and barrier for key stakeholders in the FTI community. Information concerning the LFFJA of 2017, food safety practices, seasonality, pricing, and marketing need to be discussed between farmers, distributors, and institutions to form a cohesive partnership.

LESSONS LEARNED

- Distributors are key participants in FTI. There are many different types of distributors, and each can be involved in FTI.
- Communication and relationships within the local food supply chain are vital to strengthening community investment and have the potential to facilitate goals and reduce barriers to key participants in FTI.
- Thorough, qualitative coding from previous projects is important for those who are researching a similar topic in the future. A codebook compiled by the UAMS Community Health and Research team and a CWRU MPH candidate in 2020 provided an excellent resource for a literature review and comparison within the FTI space.

PUBLIC HEALTH IMPLICATIONS

- Institutions such as hospitals, schools, correctional facilities can be provided with local, healthy foods to enrich the health and economy of their communities through FTI. Policies such as the LFFJA are important public health measures; equally important are means of information sharing, collaboration, and resource access for all stakeholders in FTI.
- Farmers, distributors, and community members value the importance of local foods and educational opportunities. Public health professionals can use the productive dynamics of shared value systems to advocate for policy to support local food systems using community-based participatory research.
- Building a knowledge base of the needs and wants of local and national stakeholders streamlines the processes of creating future legislature, initiatives, and advocacy.

FUTURE DIRECTIONS

- Dissemination of educational materials during local FTI educational events involving distributors.
- Conduct follow-up interviews with Arkansas distributors and farmers to better understand potential concerns regarding the areas of food safety measures. Have Arkansas distributors, farmers, or both encountered issues in obtaining food safety certifications? What kind of technical assistance do distributors or farmers need to label and track local food?
- Presentation of literature review and analysis to Arkansas Agricultural Department for examination.

ACKNOWLEDGEMENTS

Special thanks to Emily English, Kelly Dundon, Willa Thomason, Mary Bailey, and the rest of the UAMS team for their invaluable contributions to my practicum experience.