

BENTON & WASHINGTON COUNTIES, ARKANSAS RESILIENT COMMUNITY FOOD SYSTEM RESEARCH BRIEF

Impacts from COVID and severe climactic events



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INTRODUCTION

This research brief is formatted to give an in-depth analysis of findings related to impacts of the various climactic events over the last decade, as well as COVID-19, on Benton and Washington Counties food system. The study included one focus group (6 participants total); 13 interviews and a survey with 111 responses with IRB¹ approval and informed consent across Benton and Washington Counties. Participants included community advocates, city and county government, farmers and food businesses, non-profits, schools, and state organizations. University of Arkansas Extension supported the project through outreach for participation in surveys, interviews and focus groups.

Overall, community members shared a strong desire for scaling-up agriculture production and options for market development through Farm to School and local food procurement and distribution. This included comments around increased opportunities for local food networks and organizations to work together to better collaborate on efforts.

SUGGESTED PRIORITIES FROM ACTION PLANNING

The priority that will be acted on through funding from the Agricultural Marketing Resource Center will include meetings and investigation into farm to school and local food procurement across the counties. While this was not the top priority from the action planning, the team agreed that this would have the most capacity to move forward at this time. This will include understanding supply and demand aspects related to local food procurement, convening meetings of farmers and food purchasers to identify existing needs and interest for local food purchasing and scaling of agricultural production. The \$10,000 will be allocated to an individual consultant that will work with organizations and farmers throughout Spring 2023.

No. 01 —————
Scale up farms to meet demand for local food procurement.

No. 02 —————
Maintain and re-engage existing regional network for communication, planning, and implementation of food systems projects, including prevention, response, and recovery for climate-based events.

No. 03 —————
Commit to and increase local food purchasing within institutions and businesses.

No. 04 —————
Increase interest and labor support on farms, in schools, and in other food-based businesses.

No. 05 —————
Establish peer-to-peer networks and mentorship with existing and new farmer.

No. 06 —————
Improve land zoning and development considerations.

No. 07 —————
Develop awareness campaign about the impact of climate change on purchasing from local farms and food businesses, as well as the community at large.

No. 08 —————
Create a sustainability "score card" and ways of assessing existing conditions and future needs.

¹ Institutional Review Boards and Protection of Human Subjects - study exempt

COMMUNITY OVERVIEW

Benton and Washington Counties are in the most northwestern corner of Arkansas. Benton County encompasses 884 square miles and Washington County encompasses 952 square miles. Both counties have an estimated growth in their population since 2020 of between 1.7 and 3.3 percent.

- Benton County: estimated population of 293,692 in 2021²
- Washington County: estimated population of 250,057 in 2021²

This section reviews values and ways that community members participate and connect in community. Individuals were asked to share their select top three societal values from a pre-created list. Environment, Education, and Trust rank as the highest values, with 52% agreeing that environment is a top personal value.

The intent of this research is to understand the interest and ability to have a resilient food system. Primarily, the research seeks to understand the community’s interest in local and regional foods, and the community’s willingness to participate and purchase from farm and food businesses that operate within a local or regional geography.

When asked specifically about how important it was to support local farm and food businesses, 91 percent agreed that it was either extremely important or very important.

To further understand purchasing habits, survey participants were asked about the level of importance for attributes for purchasing food. Based on average rankings (with extremely important equaling 5 and not at all important equaling 1), freshness (4.31) and grown locally (3.85) were ranked highest; organic (2.77) and a relationship with the producer, seller, or business owner (2.76) were ranked lowest.

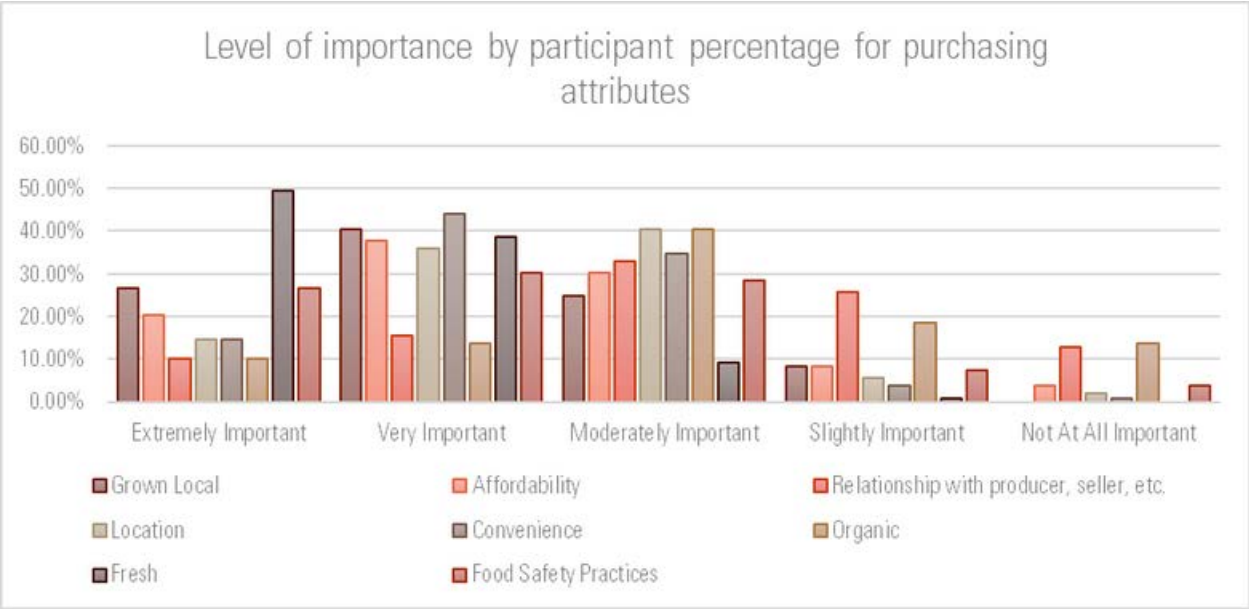


Figure 1: Importance of food attributes by percentage (N=107, except N=109 for grown local and affordability; N=106 for relationships with producer; and N=105 for organic and food safety); see Snapshot Appendix D for full data spreadsheet.

² United States Census Bureau. (2021). U.S. Census Bureau. Retrieved from Quick Facts: Benton and Washington County Arkansas: <https://www.census.gov/quickfacts/fact/table/washingtoncountyyarkansas,bentoncountyyarkansas/PST04522>

NATURAL DISASTERS IMPACT

Natural disasters impact all of community life, ranging from mild challenges for transportation and ease of access to devastating loss of infrastructure and life. Benton and Washington Counties have been involved in six designated disaster areas since 2011.³ Interview, focus group, and survey participants were asked to reflect on their experiences of natural disasters. Of the 109 survey participants, 79 (72%), shared that they experienced a climactic event or disaster, which included hail, drought, flood, wind, tornado, ice, and fire. Of those participants, 64% experienced more than one climactic event.

Damage to home and property and loss of communications were the most common impacts across all disasters, with tornadoes causing the most frequent loss of communications and hail causing the most frequent damage to property.

While tornadoes only impacted 15 people, they had the most dramatic impact on individuals, with someone reporting an impact in every category. Ice (60 individuals) and Flood (15 individuals) had the next highest impact by percentage, followed by wind.

Usefulness of organizations when responding to a Natural Disaster

Individuals were asked about usefulness of organizations in Benton and Washington Counties, based on a pre-made list from interviews. There were no organizations that received over a “4” or “somewhat useful ranking.” The highest ranked organizations for usefulness were County Government (3.80), Arkansas Extension (3.58), and City Government (3.53). Fayetteville Farmers Market (2.94) and University of Arkansas Medical School (2.87) were seen to be the least useful.

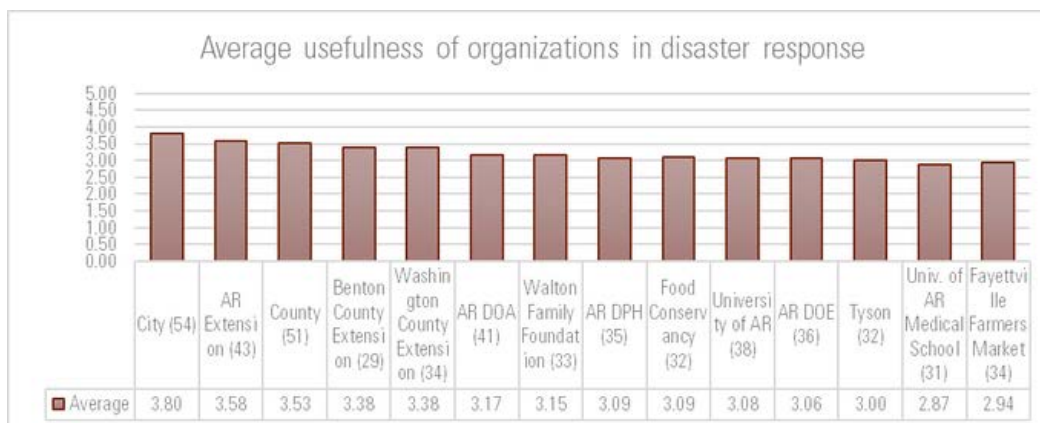


Figure 2: Average usefulness of organizations for responding to Natural Disasters; see Snapshot, Figure 10 for total participant numbers.

Many of these events happened consecutively or during COVID leading to longer time periods of recovery. However, individuals were still asked to share their perspectives on recovery on a scale of zero to ten (with 0 being no recovery, and 10 being full recovery). On average, participants have mostly recovered from each event, ranging from 8.85 -10. Drought had the lowest average, with 8.85 recovery and two participants who had only moderately recovered. Flooding was the only category that a participant shared they have had no recovery. Hail, wind, and ice also have participants sharing little recovery since the event.

³ FEMA. (2022). FEMA. Retrieved from Declared Disasters: https://www.fema.gov/disaster/declarations?field_dv2_state_territory_tribal_value=AR&field_year_value%5B%5D=2011&field_dv2_declaration_type_value=All&field_dv2_incident_type_target_id_selective=All

COVID-19 IMPACT

Interview, focus group, and survey participants were asked to reflect on their experiences of natural disasters. Of the 109 survey participants, 101 (93%) shared that they experienced COVID-19. Of those who experienced COVID-19, 73 (72%), also experienced at least one natural disaster that happened within the same time frame. COVID-19 had a broad impact on communities. Community members identified experiencing multiple influences on mental and physical health, general fatigue from exposure and worry, and stress related to financial and employment constraints that have occurred due to supply-chain and corporate closures.

The most significant impact for individuals was being unable to see others and the mental stress that COVID-19 caused.

The question of “what will the future hold” regarding food systems continued to come up in conversation. While many hope that the new interest in locally-sourcing food and consumer demand for local will continue, concerns that individuals will forget about the supply chain shortfalls and go back to the “old way of doing” were prevalent. Across the board, food access changed, from purchasing to donations. Amidst all of it, one thing has been constant: a hope for change.

Usefulness of organizations when responding to COVID-19

Individuals were asked about usefulness for organizations in Benton and Washington Counties, based on a pre-made list. Similar to natural disasters, no organization received a “4 - somewhat useful” ranking or higher. Arkansas Department of Public Health (3.94), Washington County Extension (3.57) were seen to be the most useful organizations for response to COVID-19. County Government (2.85) and Tyson (2.96) were seen as the least useful organizations in response to COVID-19.

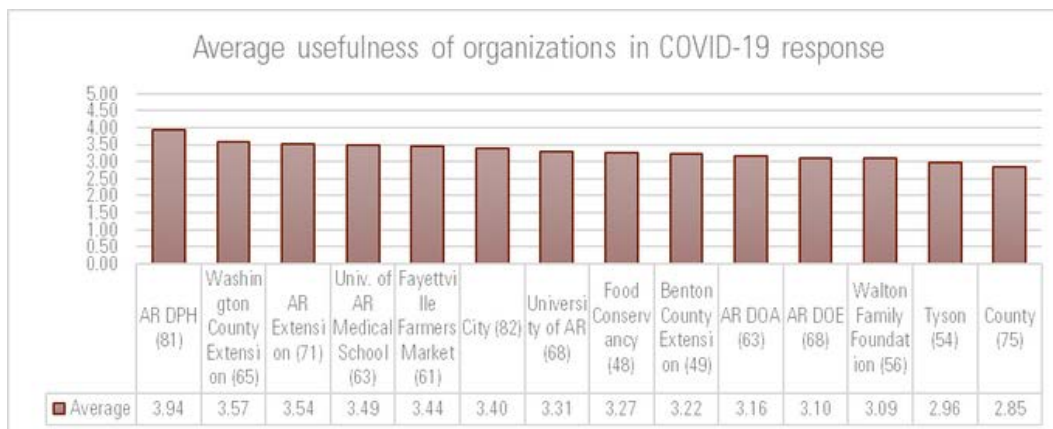


Figure 3: Average usefulness of organizations for responding to COVID; see Snapshot, Figure 14 for total participant numbers.

While it is difficult to know the extent of recovery that has been able to occur from COVID-19 since it is an ongoing pandemic, individuals were still asked to share their perceived level of recovery from COVID-19 based on the moment in time that they were participating in the research study. On average, people thought they were moderately recovered (7.5 on a scale of 10).

"[We are seeing people excited about] local food systems . . . excited about the rapid adaptation for technology, and the fact that there was a high concern for food given the supply chain logistics and there are new players -- that will lead to more sustainable solutions and quicker reaction [in the future]."

PRIORITY AREAS

01. Scale up farms to meet demand for local food procurement.

- 1.1. Educate on agriculture and food businesses.
 - 1.1.1. Understand aspects of agricultural business, including taxes, profitability, liability, etc.
 - 1.1.2. Compare business models and distinction between direct to consumer and wholesale
 - 1.1.3. Increase farmer knowledge and confidence on production capacity/ meeting demand and sale quantities/ quality
 - 1.1.4. Understand insurance needs and distribution practices
- 1.2. Assess products that can be grown locally, and easily scaled, to source local wholesalers and buyers rather than being exported
 - 1.2.1. Improve existing local food aggregation and distribution for wholesale buyers
 - 1.2.2. Conduct a feasibility study on mobile and permanent structures for fruit and vegetable processing
- 1.3. Establish new, or identify existing, insurance programs for small to mid-size farmers that will aid in extreme weather conditions
- 1.4. Create a plan for when markets fail or have barriers with disaster or general business models
- 1.5. Enhance outreach to underserved, marginalized individuals and organizations, including developing materials in multiple languages
- 1.6. Increase gardening and subsistence farming
 - 1.6.1. Create a network of gardeners, producers, etc. and understand the desired communication platform for getting in touch
 - 1.6.2. Develop, or partner with existing gardening networks (like Master Gardeners) for seed sharing and gardening techniques

02. Maintain and re-engage existing regional network for communication, planning and implementation of food systems projects, including prevention, response, and recovery for climate-based events.

- 2.1. Develop roles and clear responsibilities for a network
 - 2.1.1. Create a common space for individuals, farms, and food businesses to turn to for questions around local and regional foods
 - 2.1.2. Identify support organizations, producers, food businesses etc. for comprehensive understanding of existing conditions
 - 2.1.3. Focus on marginalized individuals in the area—with understanding that numerous groups are doing this, so connect across organizations
 - 2.1.4. Understand who is currently doing work, what roles need to be filled, and redundancies in place for supporting the local food system
- 2.2. Hold regular network meetings, with a focus on trust and reciprocity to share updates, problems, resource needs, etc.
 - 2.2.1. Identify administrative entity and point of contact for the network
 - 2.2.2. Create a cohesive communication strategy for sharing insights – both internal and to public
 - 2.2.3. Create space for deep dives in specific areas of focus
 - 2.2.4. Accountability for partners and showing up – could show up in roles and responsibilities
 - 2.2.5. Understand network's policies, structure, and purpose

PRIORITY AREAS

Priority 2 continued

- 2.3. Create blueprints for case studies on prevention, response, and recovery, expanding across and within all cities in the County, including multilingual communication materials, and text and phone platforms
 - 2.3.1. Showcase what others have done and pre-package the information
- 2.4. Include food policy components and funding recommendations to support purchasing of local foods within schools and larger institutions
 - 2.4.1. In addition to the 20% local procurement—incorporate additional suggestions on practices
 - 2.4.2. Offer grants program specific to capital and infrastructure improvement for farming, processing, and distribution
- 2.5. Enhance outreach to underserved, marginalized individuals and organizations, including developing materials in multiple languages

03. Commit to an increase local food purchasing within institutions and businesses.

- 3.1. Identify champion and documenting process for local food procurement
 - 3.1.1. Create case study and identify mentors to model behavior through other institutions
- 3.2. Develop matching program for growers and institutions (farmer-buyer events)
- 3.3. Create contract language for buyers and institutions with preference for local food purchases and supporting of local food act reporting
 - 3.3.1. Improved labeling and understanding of local food
- 3.4. Improve awareness of Arkansas Grown database

04. Increase interest and labor support on farms, in schools, and other food-based businesses.

- 4.1. Plan for H2A workers and support
- 4.2. Educational courses and incentives for dining and procurement professionals in early care, schools, and other institutions

05. Establish peer-to-peer networks and mentorship with existing and new farmers.

- 5.1. Research and decide types of peer-to-peer farmer networks that are successful and would work in NW Arkansas
- 5.2. Identify existing resources
 - 5.2.1. Identify producers that are within existing networks and groups that could be mentors
- 5.3. Identify specific needs for producers
 - 5.3.1. Develop relationships, communication and outreach plan for all producers, markets, and food businesses

06. Improve land zoning and development considerations.

- 6.1. Improve land access and understand gaps and challenges related to land tenure
- 6.2. Provide best practices on urban and rural zoning, comprehensive plans, and ordinances
- 6.3. Improve water drainage systems for both hardscapes and natural swales through bio-retention options and rainwater catchment

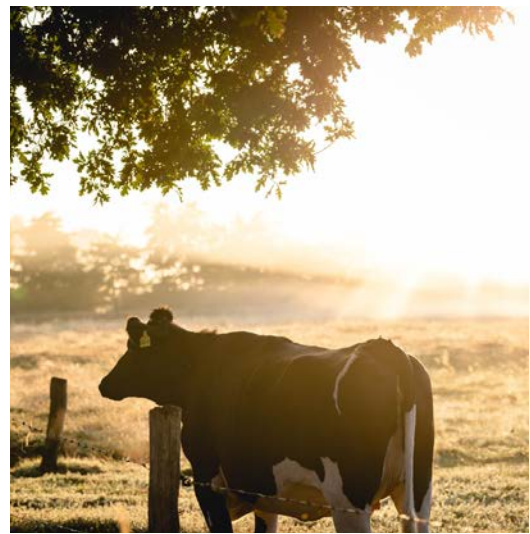
PRIORITY AREAS

07. Develop awareness campaign about the impact of climate change on purchasing from local farms and food businesses as well as the community at large, including:

- 7.1. Showcase the fragility of the food system through narratives
- 7.2. Highlight how local farms, food businesses, organizations and networks were able to respond to COVID-19 and the need for continued support as we get back to “normal”
- 7.3. Discuss how this support can provide financial sustainability for the local economy and community at large

08. Create a sustainability "score card" and ways of assessing existing conditions and future needs.

- 8.1. Connect to current work going on with Dr. Patussi and case study on what is the most resilient growing medium
- 8.2. Develop plan for protecting natural spaces and agricultural land around the counties
- 8.3. Identify pollution streams and prevention strategies
- 8.4. Understand hazard mitigation and response best practices; put in place a checklist for farms and food businesses
- 8.5. Educate on regionally adapted production practices



ACKNOWLEDGEMENTS

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To read the full Benton & Washington Counties, Arkansas Food System Resilience Snapshot, visit



bit.ly/agmrc_ResilientFoodSystems

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