



The COVID-19 pandemic and food assistance organizations' responses in New York's Capital District

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Accepted: 7 November 2022 / Published online: 3 December 2022
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Abstract

This research examines the impact of COVID-19 on food security in New York state and the innovative approaches employed by food assistance organizations to help address the changing and increasing demand for their services from March 2020 to May 2021. We examine the case study of New York's Capital District region through a qualitative approach. We find that there was a sharp increase in utilization of emergency services during spring of 2020, which tapered off in the summer and fall of 2020 but remained above the levels of need seen the previous year. Food assistance organizations quickly adapted to the increased demand for their services and changing conditions to reduce gaps in local food distribution chains: They reorganized and tapped into new sources for volunteers, networked with public and private organizations, and coordinated work with other regional food pantries for maximum impact. The flexibility of food assistance organizations to address the disruptions brought about by the COVID-19 pandemic highlights their critical roles in the U.S. food security environment. While organizations are aware of their shortcomings, constraints, and overall role in the American food system, the majority also expressed that the pandemic presented an opportunity to treat a complex problem together and to enact change. Several stakeholders also shared their hope that strengthening their networks and innovations may facilitate post-pandemic recovery, bring about systemic changes to address root causes of food insecurity, and better serve the communities most vulnerable to hunger and service disruptions.

Keywords Food Security · Innovation · Food Pantries · COVID-19 · New York Capital District

Abbreviations

ALICE	Asset Limited, Income Constrained, Employed	FFCRA	Federal Families First Coronavirus Response Act
CARES Act	Coronavirus Aid, Relief, and Economic Security Act	SNAP	Supplemental Nutrition Assistance Program
EA	Emergency Allotment	WIC	Women, Infants, and Children

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Introduction

The COVID-19 pandemic, declared as such in March 2020, exposed “deep inequities and dysfunction” in the American food system (Anderson 2020). Measures taken to contain the virus, including social distancing, lockdowns, and the closure of facilities, businesses and offices, paired with the threat of COVID-19 outbreaks in food harvesting or processing facilities negatively affected food security¹ and the food environment,² particularly for the poorest and most vulnerable families (Bené et al. 2021; Laborde et al. 2020).

¹ We use food security to refer to food availability, access, utilization, and stability (Committee on World Food Security 2012).

² Following Bené et al. (2021), we use food environment to refer to proximity, convenience, availability, and quality of food items.

The United States already had a food insecurity problem before COVID-19: in 2019, about 10.5% of the population faced food insecurity (Coleman-Jensen et al. 2021). In the United States, food insecurity is not a result of food shortage, but presents itself as “income-related lack of access to nutritionally adequate and safe food or the inability to obtain such foods in socially acceptable ways” (McIntyre et al. 2016, p. 845). Moreover, “it is a result of persistent structural and racial inequalities that continue to limit communities of color to access better socio-economic opportunities” (Elsheikh and Barhoum 2013, p. 3).³ Even before the onset of COVID-19, food insecurity and food deserts⁴ have been “prevalent in areas where other racialized policy outcomes are visible, such as areas impacted by home foreclosures, lack of funding for public schools, lack of adequate public transportation, and high levels of health disparities” (Elsheikh and Barhoum 2013, p. 2). The social and financial inequalities in the United States have been deepened by COVID-19 and exposed the fragility of the food system (King et al. 2022; Oncini 2021; Temitope and Wolfskill 2021): Food insecurity increased among low-income U.S. households by 26% in the months immediately following the onset of the COVID-19 in the U.S. (Ohri-Vachaspati et al. 2021).

The public health crisis accompanied by an economic crisis due to COVID-19 created additional challenges for communities already facing food security. Long lines of people waiting to receive food from food banks made headlines in the early months of the pandemic (Zack et al. 2021). Feeding America (2020) estimates that 45 million Americans (one in seven), including 15 million children (one in five), likely experienced food insecurity in 2020. Around 40% of recipients visited a food bank for the first time in their lives (Morello 2021). Reduction or elimination in income removed or reduced the ability to purchase food: a record level of 3.8 million Americans filed for unemployment benefits for the first-time in April 2020 alone bringing total number of first-time unemployment claims to over 30

million in the first 6 weeks of COVID-19.⁵ State-specific studies suggest that an increase in unemployment during the COVID-19 pandemic particularly impacted lower-middle income groups, causing higher rates of job loss and lower opportunities for remote employment, affecting mostly Hispanic, non-Hispanic Black, and minority populations (Feingold et al. 2021). Moreover, low-income people who are also racial and ethnic minorities were disproportionately impacted by COVID-19, facing a higher burden of disease and death (Lopez et al. 2021). Thus, COVID-19 created additional trauma along race, class, and health status lines.

With the onset of COVID-19, food assistance organizations⁶ served a record number of meals in 2020: according to Feeding America (2020), at least 60 million people in America sought food assistance at some point in 2020, a 50% increase than 2019. The number of meals served in food pantries decreased since March 2021 with the rollout of COVID-19 vaccines, and decreasing concerns about the health risks (Khalil 2021). The rapid coordination and response of these organizations to address systemic and government failures regarding food security during the early months of the COVID-19 pandemic demonstrated that they serve critical roles in the U.S. food system. An exogenous shock, such as an economic or public health crisis, can trigger an innovation response to mobilize resources and capabilities to maintain the level and coverage of services (Rey-Garcia et al. 2018).

Social innovation refers to new solutions that meet a social need and lead to new or improved capabilities and a better use of assets and resources (Krlev et al. 2018a). While problem-solving under crisis conditions can differ from designing a long-term approach to solve the problem of food security, we argue that crisis conditions can force a radical rethinking of approaches that can potentially open new innovative trajectories. Similarly, a combination of urgency of need and configuration of appropriate solutions by engaged users can lead to diffusion and potential learning across different actors (Bessant et al. 2015). Because of the variety of approaches, and shared lessons, food assistance organizations had an opportunity to rethink some of the structural issues they faced, structural issues that lead to food insecurity (e.g., lack of adequate income, access to healthy food) and reevaluate their role in the post-recovery efforts.

In this paper, we examine a case study of the Capital District region of New York and the intersection of federal,

³ Rates of food insecurity were significantly higher for those households below the poverty line, households with children headed by a single parent, and Black and Hispanic households (Coleman-Jensen et al. 2021).

⁴ Food deserts are areas in the United States where people have limited access to a variety of healthy and affordable food. These regions “often feature large proportions of households with low incomes, inadequate access to transportation, and a limited number of food retailers providing fresh produce and healthy groceries for affordable prices” (Dutko et al. 2012).

⁵ Indeed, unemployment rates have reached record high levels early in the pandemic, increasing from 3.5% in February 2020 to 14.8% in April 2020. While it reduced in the following months, in April 2021, unemployment rates were about 6.1%, higher compared to the previous year (Bureau of Labor Statistics 2021).

⁶ We use food assistance organization to refer to food banks, food pantries, food charity organizations, food rescue programs, anti-hunger organizations, as well as other organizations who were involved with food security questions before the pandemic but expanded their service to provide new and additional food security assistance during the pandemic.

state, and local level responses to food security during the COVID-19 pandemic and document the role of innovation in the responses of food assistance organizations. While we primarily focus on food pantries, we also highlight the work of other organizations, such as Radix Ecological Sustainability Center, Capital Roots, and Pitney Meadows Community Farm that started or expanded food security initiatives during this period (see Appendix for a full list of community organizations interviewed). We examined the response of food assistance organizations through three research questions: How has the need for food assistance organizations changed in the initial months of COVID-19? How have food assistance organizations reached people at a time of crisis? What type of adjustments have they engaged in to address a shock likely to have long lasting impacts? The findings contribute to the literature on COVID-19 impacts on food insecurity in the United States and provide an extended analysis of the responses of food assistance organizations. After a brief review of food assistance systems in the United States and COVID-19 impacts, we discuss our methods and case study context. We then present our findings, from the perspective of individuals facing food insecurity and food assistance organizations and discuss the changes food assistance organizations implemented in response to the crisis.

Federal programs and food assistance in the United States and COVID-19

Federal programs

The U.S. has attempted to mitigate some of the impacts of systemic inequity and food insecurity by funding federal programs since the 1960s (Martin 2021). The U.S. Department of Agriculture's Food and Nutrition Service typically administers 15 domestic food and nutrition assistance programs (Coleman-Jensen et al. 2021). Before the onset of COVID-19, 58% of households facing food insecurity participated in at least one of the three largest federal food and nutrition assistance programs: Supplemental Nutrition Assistance Program (SNAP, formerly food stamps); Special Supplemental Nutrition Program for Women, Infants, and Children (WIC); and the National School Lunch Program. Participation rates in SNAP, the most widely used federal program, traditionally responded proportionately to economic downturns (Ohri-Vachaspati et al. 2021). While Women, Infants, and Children (WIC), provides food and education to low-income women and infants, the National School Lunch Program operates in more than 100,000 public and nonprofit private schools and residential childcare institutions and serves free or reduced-price lunches to low-income students (Coleman-Jensen et al. 2021).

Despite the large number of households reached by these programs, many households experiencing food insecurity, particularly households that are "asset limited, income constrained, employed" (ALICE), are unable to fulfill their needs via federal nutrition programs. ALICE households span all demographics and include individuals who are living paycheck to paycheck, may be working multiple jobs, but still struggle to afford the basics of housing, childcare, food, transportation, health care and have limited technology access. Because they are above the Federal Poverty Level, they do not qualify for federal assistance (United for ALICE 2022). SNAP applications are completed at the state level, and eligibility in terms of resource and income limits thus vary. These programs require enrollment, which is done either online or at a government office. Not all households qualify for these federal programs; households that live just above the poverty line or do not meet the number of program specific qualification criteria, must rely on food pantries and local hunger relief organizations to meet their nutritional needs, while others may be intimidated by the bureaucracy or due to their immigration status (Feeding America 2020). Moreover, there is stigma associated with using SNAP and school lunch programs (Gaines-Turner et al. 2019).

The amount provided by SNAP is not adequate to cover the cost of food. In 2019, before the onset of COVID-19 and the following spike in food prices, an average individual in the U.S. spent about \$680 a month on food, about 10% of their income (Bureau of Labor Statistics 2020). The same year, SNAP benefits per month was \$136 for an individual and \$377 for households with children. The federal government raised benefits for SNAP households permanently beginning October 2021. The goal of this raise was to more accurately "reflect the cost of a healthy diet" (Center on Budget and Policy Priorities 2021). This increased the maximum SNAP allotment for a one-person household to \$250 per month, \$459 for two people, and \$658 for three (New York State 2022a).⁷ Yet, as the income related lack of access to healthy food continues, food pantries serve to address gaps in food access and stability in the U.S.

Local food assistance

A nationwide network of 200 regional food banks, 60,000 food pantries, and meal programs provides food assistance to people in the U.S. each year (Feeding America 2022). Food assistance has been criticized for being Band-Aid solutions to the complex problem of food insecurity. Poppendieck (1998) criticizes the emergency food system and

⁷ The SNAP benefits were raised again in 2022 adjusting for inflation: In October 2022, SNAP benefits are \$281 for one individual a month, \$516 for two people, and \$740 for three people (OTDA 2022).

food charities, which emerged as replacements for scaled-back anti-poverty entitlement programs. She argues that broad participation in the charitable food system acts as a “moral safety valve.” While it relieves guilt, participating in food charity does not present any solutions to alleviate long-term poverty and the root causes of food insecurity. Lohnes (2021) furthers this critique by discussing how the food charity system does not address inherent paradoxes in our capitalist food system, specifically high volumes of food waste coupled with immense food poverty. Since their creation, food pantry programs have also been criticized for prioritizing quantity (i.e., pounds or bags of food) over nutritional quality, offering some choice for clients but not fully catering to clients’ dietary and health needs (Wetherill et al. 2018). Other concerns about food assistance programs regard limited operational hours of food pantries, limited access to food (e.g., availability of fresh produce), concerns about expired food, and the challenge of running out of food entirely (Ginsburg et al. 2019).

In recent years, efforts have been made by food assistance organizations to prioritize client choice, healthy food alternatives, culturally appropriate meals, and increasing overall access (Martin 2021). Pantries and other organizations in the food charity system have also become aware of their shortfalls and are now transitioning to a comprehensive approach to better address the root causes of food insecurity and focus on client empowerment (Powers 2016). Before the pandemic, some pantries were operating as community centers and “spaces of care” that are “characterized by acceptance, moral support, generosity, hospitality, and advice” (Oncini 2021: p. 03). Pantries also provide additional services, such as assistance with rent, job training, and skills development (Taylor et al. 2022). They may also hire their members as paid volunteers, provide legal advocacy and training, and offer assistance with SNAP and WIC applications, thereby offering long-term solutions with self-dignity (Martin 2021). However, COVID-19 halted the use of these spaces as community centers, and in-person access often has been curtailed even in 2022.

COVID-19

In the early months after the declaration of COVID-19 as a pandemic, the federal government passed the Federal Families First Coronavirus Response Act (FFCRA) and authorized the issuance of emergency allotment (EA) supplemental benefits to households receiving SNAP. States were given permission to issue the supplements if the federal public health emergency caused by the pandemic remained in effect. To address some of the concerns related to income

loss, the government also offered relief through The Coronavirus Aid, Relief, and Economic Security Act (The CARES Act).⁸ to individuals and families in several forms: unemployment insurance, loans to small businesses, funding for housing assistance and aid for the homeless, and assistance to states. Anyone who had filed tax returns for 2018, 2019, and 2020 and had a Social Security number was eligible to receive an economic impact payment. Three rounds of stimulus checks were circulated to individuals and families who qualified. However, about 14.4 million people who were income eligible were disqualified from receiving the much-needed aid due to the Social Security Number requirement (Gelatt et al. 2021). Overall, the CARES Act provided an additional \$25 billion for domestic food assistance programs, including the school breakfast and lunch programs and SNAP (Moss et al. 2020). These payments worked to stimulate the economy (Zack et al. 2021) and kept the overall food insecurity rates from falling further- 2021 food insecurity rates in the U.S. stayed similar to that of 2020 (USDA 2022). However, the payments did not engage with structural racialization that causes widespread food insecurity in the United States or approach access to adequate and nutritious food as a human rights issue.

Social innovation and food assistance programs

Social innovations can include ideas, objects, services, processes, structures, behaviors, and practices with an open and collaborative character (Krlev et al. 2018). The ability to contribute or create solutions to previously inadequately addressed or new social needs depends on the capacities of actors, their relationships among each other and with affected communities, and contextual factors, which provide a laboratory for exploring alternative approaches (Bessant et al. 2015). Studies examining the impact of disease outbreaks (particularly HIV and Ebola) on global health governance suggest that these functions can be served through the creation of new institutions and coordination mechanisms, intra-institutional innovation within existing and new institutions, ideational innovation, and public sector

⁸ To complement the existing programs, the federal government also created two new, temporary programs: the Pandemic Electronic Benefit Transfer (P-EBT) and the Farmers to Families Food Box Program. These two programs accounted for 11% of the total spending in the 2020 financial year. Yet, overall, WIC and the Commodity Supplemental Food Program (CSFP), which works to improve the health of seniors, decreased by 6%, and combined spending on child nutrition programs decreased by 9% in 2020 (Food and Nutrition Service 2021). This shift suggests that the creation of new programs took resources from necessary pre-existing programs, rather than from another sector of the national economy.

innovation for capacity building (Held et al. 2019). Examining social innovation among organizations addressing the humanitarian crisis, Bessant and colleagues (2015) argue that some of these innovations, such as process innovation that is focused on improving warehousing and consolidation, on transport and logistics, and on distribution management, became mainstream over time. However, what is critical is how these changes adapted in the short term can be codified and replicated, which can lead to further innovation and transformation of the system.

Case study context and methods

Case study context: New York State

New York is a relatively wealthy state; in 2020, “on a per capita basis, New York State’s GDP was 29.3% higher than the national average” (DiNapoli 2020). However, the loss of manufacturing jobs in 1980s and 2000s negatively affected New York’s economy and the well-being of households. By 2000, there was over a 60% decrease of manufacturing jobs in New York, compared to its peak in the mid-1940s (DiNapoli 2010). While there was some negative impact of the Great Recession of 2008, between 2007 and 2018, New York still experienced steady economic improvements—unemployment fell to historic lows and GDP grew. Yet, in 2018, 45% of the households in New York were struggling to make ends meet, and 31% of these struggling households were ALICE as they did not earn enough to provide the household necessities. Even before 2020, the cost of living was increasing for ALICE populations, and the number of ALICE households was on the rise in New York (United for Alice 2022).

New York ranks high in terms of inequality (Swords 2019); while the Capital District region of New York is not above the national average in terms of food insecurity, there are pockets of food insecurity throughout the region. We focus on two counties within New York’s greater Capital District: Albany and Saratoga. In Albany County, approximately 13% of residents live in poverty (based on 2009–2013 period). Within the city of Albany itself, that percentage rises to 25%, making it one of the most impoverished cities in the region. By contrast, Saratoga county is the best off in the region with only 6.5% of its residents living in poverty (Capital District Regional Planning Committee 2015). However, Saratoga County has high income inequality and high housing prices, which exacerbate food insecurity. Initial findings from the first year of COVID-19 demonstrate that overall food security in the region decreased from 71.9% to 59.9%, but the portion of people facing very low food security more than doubled (Feingold et al. 2021). As previously mentioned, the closure of businesses, loss of jobs, increase

in food prices, and lack of items at grocery stores particularly affected those with lower-middle income and households with children in New York (Feingold et al. 2021).

During the initial year of COVID-19 in New York State, households that were already receiving SNAP received supplemental emergency allotment benefits in addition to their original SNAP benefits. Individuals received either an additional \$95 per month or were able to increase the maximum allotment per household if they had not received the maximum amount previously (New York State 2022a). Nearly 1.6 million households in New York State were on trajectory to receive these supplemental benefits by September 2021 (Colello 2021). The emergency allotment program came into effect in March 2020 and was revised in April 2021. While the program was set to expire beginning October 2021, it continued until the end of 2021.

Methods

We conducted a phenomenological study to examine how the experiences of food insecure populations and food service organizations were altered in the face of the COVID-19 pandemic. To better understand the lived experiences of individuals, we collected online and paper surveys from 40 individuals who faced food insecurity. To do so, an online survey instrument was created using Qualtrics, with 28 questions focusing on various factors relating to respondents’ food security, including questions on food access both prior to and during the COVID-19 pandemic. Questions specifically regarded changes in income, specific challenges (i.e., finding nutritionally adequate foods), and government and food assistance program resource utilization. We distributed printed copies of surveys to be filled out in person at Lifeworks Soup Kitchen in Saratoga County, Franklin Community Center in Saratoga County, and the Salvation Army in Albany, as well as cards with a QR code and link to an online version of our survey. Although there is an element of convenience sampling with the distribution of surveys at these locations, we used purposive sampling to identify and select cases (from regional food assistance organizations) to use our limited resources effectively and to select respondents that are most likely to yield appropriate responses and useful information (Campbell et al. 2020).

We also conducted 18 semi-structured interviews with local food assistance organizations and government organizations. In interviews, we asked about resources that stakeholder organizations provided, how the pandemic affected their ability to provide those resources, how they adapted to specific challenges arising from the COVID-19 pandemic, and how participation in services changed during the course of the pandemic. Moreover, Wilton Food Pantry, St. Vincent Food Pantry, and Salvation Army Saratoga Springs (food pantry) shared specific service data from 2019 to 2020.

Bracketing and content analysis of survey and interview responses was conducted to reveal prevailing themes and quantify redundancy in responses. Although analysis was objective and unbiased, data may be skewed as the survey was only administered in English and sampling was limited to clients already utilizing select food assistance organizations. Because of this, survey respondents included limited geographic, ethnic and socio-economic diversity. Additionally, information collected via stakeholder interviews may be skewed by the interviewee's inherent bias towards their own organization and any tendencies to overstate the services they provide. All stakeholders we spoke welcomed our questions, but it is possible that stakeholders may have withheld details knowing that their response would be publicly reported. Percentages of interview responses were calculated out of the total 18 stakeholders interviewed. The tables isolate food pantries, as categorized in Appendix Table 3, Table 2. Food assistance organizations categorized as food pantries include: LifeWorks, Salvation Army Albany, Salvation Army Saratoga Springs, St. Vincent's, Trinity Alliance, Wilton Food Pantry, and Franklin Community Center.

We also engaged in participant observation; all authors attended an online regional conference for food assistance organizations and policymakers on June 2, 2021 (referred to as "Food Summit" from now on) and had an opportunity to learn about the synergies and collaborations among the food assistance organizations, government agencies and local stakeholders. One of the authors, who used to work with the Regional Food Bank as a volunteer before COVID-19, has served as a volunteer driver for one of the local food pantries since January 2021.

Findings

Households facing food insecurity

In the Capital District Region, multiple demographics can be defined as under-resourced when it comes to food security, including individuals under quarantine, people with disabilities, immigrants, people of color, infants, and families. Our research respondents, whose ages ranged from 34 to 80, were mainly families, with nearly three quarters (74.36%) belonging to a household with two or more persons. This corresponds to data collected from food assistance organizations that reported serving a high percentage of families during the pandemic. More than half of household food insecurity survey respondents (61.54%) identified as female. This is similar to data reported by the Salvation Army of Saratoga County, which served more women than men in the same period of time. Before the start of the COVID-19 pandemic, our survey respondents already faced many barriers to access adequate food. One third of respondents (36.84%)

reported income as a limiting factor in sufficient food access while 18.42% reported transportation. Additional challenges reported by survey respondents included insufficient SNAP benefits (10.5%) and lack of grocery stores nearby (5%).

By the end of the first year of COVID-19, there was an increase in limiting factors to sufficient food access in addition to limited income and lack of transportation, which included social isolation amid lockdown measures and empty shelves at local grocery stores. The respondents shared the increased challenges of COVID-19, and how mental health impacts of COVID-19 closures, physical health impacts (and fears of it), and lack of fresh produce in grocery store limited their access to food. Three (7.5%) of our survey respondents also reported feeling lost and without help after COVID-19 as regular food assistance organizations closed temporarily or shifted their work patterns and that they had no knowledge of who else to turn to during a food emergency. While nearly 20% of respondents acknowledged that they benefited from the resources of food pantries in their community, three (7.5%) of respondents also expressed concerns about being food insecure as food pantries and other local food assistance organizations alone were often not enough and they wished for more resources to be made available.

Impact of COVID-19 on food assistance organizations

There was a sharp increase in reliance on the services of food assistance organizations in Spring of 2020, followed by a tapering off, yet organizations still reported increased demands in Summer and Fall of 2020 compared to 2019 (Fig. 1). Four (21%) stakeholders specifically reported that they saw an increase in first time users. Franklin Community Center in Saratoga County reported a rise in new middle-income people at the pantry. It is important to note that while the overall need for food assistance rose, demand fluctuated throughout the pandemic: Nine (47%) stakeholders reported that their largest assistance for 2020 was at the onset of the pandemic and during initial stages of lockdown, due to loss of income and food insufficiency at the grocery stores (due to both price and availability). Four (21%) stakeholders reported dips in demand directly after stimulus check distribution or during the summer of 2020.

The pandemic associated public health safety guidelines and restrictions imposed a variety of challenges on food assistance organizations throughout the Capital District region.

Food pantries who once served the community face-to-face, in often crowded quarters, had to resort to different methods of distribution. Before the pandemic, food pantries utilized a form of client-choice where community members were able to shop similarly to a grocery setting and choose

Fig. 1 Meals served at the Saratoga Springs Salvation Army food pantry

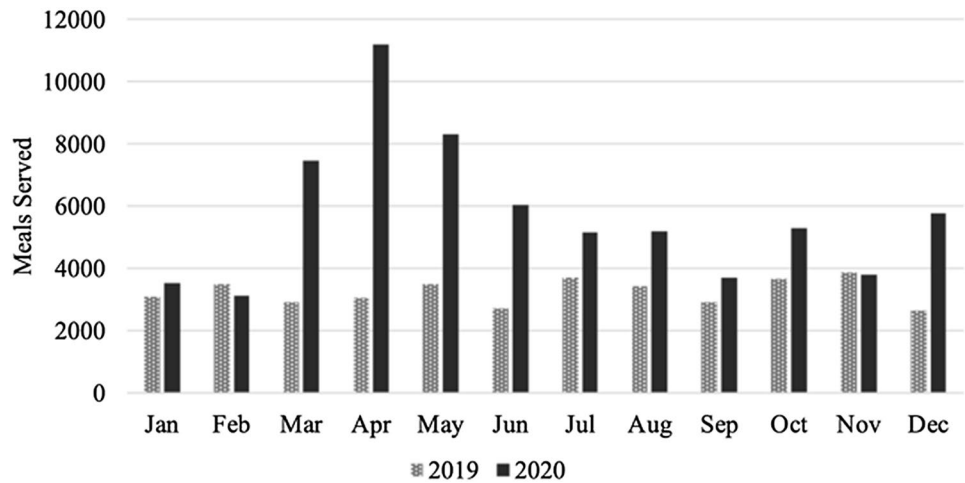


Table 1 Challenges specific to food pantries due to COVID-19

Challenges due to COVID-19	Salvation army	Franklin community center	Life works	Trinity alliance	Wilton food pantry	St. Vincents
Increased Demand	X		X	X	X	
Loss of Client-Choice	X	X		X*	X	X
Loss of Volunteers	X*	X	X*	X		X
Delivery Transition & Expansion	X		X	X		X
Online & Phone SNAP Assistance			X	X		

*Regained during pandemic

the exact items, they needed or desired. Due to the pandemic, food pantries either had to alter or eliminate client-choice (Table 1), forcing many pantries to resort to a model where pantry staff pre-packaged items in grocery bags for clients. There were several issues with the pre-packaged form of distribution that stakeholders expressed: clients were unable to choose the exact items they desired, leaving people with items they might not necessarily prefer, utilize or find culturally inappropriate items. A representative from the Salvation Army in Saratoga County stated that with the changes people were more likely to receive “less desired items” due to the inability of food pantries “being able to speak to and really get to know these people’s needs.” Representatives from five food pantries expressed a loss of personal connection and communal feel without full client-service. Before the pandemic, it was a common practice for clients to walk through and retrieve their items with a volunteer and interact directly with pantry staff. Now due to contact-less models, a representative from Salvation Army Albany reported a “transactional” feeling and less relationship building with clients.

An organization’s capacity to deal with high demand is often dependent on their volunteer base. At the onset of the pandemic, pantries had to either limit or eliminate their volunteer base, including the Salvation Army in Saratoga,

Franklin Community Center and St. Vincent’s food pantry. One stakeholder reported that majority of their volunteers were seniors, a group that faced extreme vulnerabilities to COVID-19 and were given directions by health officials to isolate themselves. Another food pantry representative reported that they lost elderly and veteran volunteers but were able to mitigate this loss by having fewer volunteers stand scattered throughout the pantry instead of walking directly with each client. The same food pantry representative also emphasized the importance of “listening to the volunteers and their input” to make changes in the food delivery and service options (e.g., decisions to resume in-person operations). During the online regional food conference, some food pantries acknowledged employing their own staff, other organizations’ employees as volunteers for packing and serving meals in the first months of the pandemic, while one food pantry representative suggested “how volunteers and managers can come together to create a safe space during a time of stress to serve people with dignity.” The shift from volunteers meant “increasing professionalism in the food pantry,” as expressed by a second food pantry representative, who added “how bringing in and working with trained professionals can help to provide the best service to clients.”

Pantries who offered home deliveries or SNAP and WIC assistance also saw an additional challenge of now having to

Table 2 Services provided by food assistance organizations in Capital District region

Services provided	ALICE	Capital roots	HPNAP	Hunger solutions New York	Life works	Pitney meadows	Radix	Regional food bank of New York	Salvation army	St. Vincents	Food pantries for the Capital District	Trinity Alliance	United Way	Wilton Food Pantry	Franklin Community Center	Food As Medicine
Home delivery		X			X				X	X						
Food pantry				X	X				X	X		X	X		X	
Emergency food								X	X							
Soup kitchen					X											
Household items									X			X		X		
Education						X	X									
Food growing materials		X					X									
SNAP/WIC support					X							X				
Other	X		X			X		X			X		X			X

give that same assistance via phone or online.⁹ Five (26%) stakeholders interviewed now have their clients submit food orders via phone or online and volunteers package the grocery bags. A representative from Hunger Solutions New York explained how pantries had to “rebuild their outreach program[s] to be virtual.” However, a representative from Trinity Alliance explained that Zoom or internet is not a service that many clients can access since many lack access to a computer or may have challenges reading and utilizing online resources, especially if English is their second language. Some of the pantries in the Capital District region, such as Capital Roots already had delivery services before COVID-19. However, now almost all pantries have incorporated home deliveries, as the pandemic increased the overall need and demand for contact-less models (Table 1). Four (25%) stakeholders also started a mobile food system (e.g., Pantry on Wheels), delivering food at specific locations and times and coordinating these outreach efforts to “allocate resources where there is the greatest need” to minimize barriers to food access. One food pantry also started to work with volunteer drivers, who drive their own cars, pick up items from the food pantries and deliver items to the clients. One food pantry started giving bus passes to clients, another started drive-through pick up. Depending on the organization's capacity to deal with this high demand, delivery systems vary from pantry to pantry with some placing more restrictions on who can receive deliveries (e.g., some prioritize clients experiencing lower mobility and higher risk to COVID-19 infection).

Mobile food deliveries were already used effectively to address the fresh produce needs of remote communities by Capital Roots via their “Veggie Mobile” before COVID-19 in addition to food distributions in its retail shop. “Veggie Mobile” deliveries were set up at certain locations throughout the week, but Capital Roots closed its food retail shop to clients temporarily. The “Veggie Mobile” operates year-round, five-days a week, and provides clients with safe, healthy, and affordable retail access to food; clients can use their SNAP, EBT and other coupons at the same time (Capital Roots 2022). The representative from Capital Roots mentioned the importance of “affordable food” for the communities they work with, and how the donations and their partnerships in the initial months of the pandemic has helped them “move more food” through their organization more effectively, providing increased access to fresh produce as well.

Pitney Meadows Community Farm, which did not previously work on food security issues directly, set up a Food Security Working Group and, after conversations with

several other stakeholders, decided to direct its produce to food banks and local households who were facing food insecurity.¹⁰ The representative mentioned that they used delivery trucks, worked with the food banks, and expanded their partnerships “to reach a diversity of people in need,” particularly in rural areas to provide access to fresh, local and seasonal produce. The organization also expanded the use of its community gardens and used the outdoor space to continue to teach about growing food, building a community, and collecting and redirecting food donations from the community. (see Table 2).

Food Assistance Organizations and federal programs.

Federal government assistance programs such as SNAP and WIC were positively viewed by community stakeholders as 13 of 18 stakeholders (72%) specifically described these benefit programs as essential. Without SNAP and other governmental supplements, the emergency food system would not be able to meet food needs: Five stakeholders (27%) reported a decrease in community reliance on their services following an increase in SNAP and unemployment benefits in Spring of 2020. One food pantry representative mentioned that WIC “provides key nutritional education for both parents and soon-to-be parents.” Four respondents (22%) agreed that SNAP and WIC facilitate local economic stimulus. However, eight respondents (44%) also suggested that although SNAP is extremely beneficial, there are several problems. They mentioned problems such as people waiting to be approved, running out of benefits, technical issues with reapplication, being disqualified due to income levels being just above the qualification threshold, and limitations on what clients can purchase. Two organizations (11%) acknowledged their role as supplemental to SNAP and WIC. A representative from the Regional Food Bank of Northeastern New York explained that without SNAP, the emergency food system would be strained to a point that the regional food bank would not have the capacity to mitigate.

In terms of thinking about the structural issues and systemic solutions, the food assistance organization representatives had concrete suggestions. Six of the respondents (33%) recommended an increased accountability of the federal government, through continuing SNAP benefits at higher levels even after the pandemic ends. One food pantry representative suggested increased collaboration with food assistance organizations and listening to their suggestions in terms of

⁹ The online application form is often both in Spanish and English and accessed through a shopper ID and Pin code.

¹⁰ Pitney Meadows Community Farm donated 22,350 pounds of fresh produce in 2020, and continued these donations well into 2021. In 2021 production season, the farm set up Pop-Up-Produce markets to bring vegetables directly to individuals and families experiencing food insecurity.

developing long term policies for food security. Another representative emphasized the need to think “outside the box,” “listen to the community,” and “support training of board and staff of the organization” for systemic change. Twelve of the food assistance organizations (66%) acknowledged that SNAP and WIC must expand funding to maximize benefits. A representative from Hunger Solutions New York even suggested a 20–30% increase in SNAP benefits. However, two stakeholders (11%) also noted that expanding SNAP and WIC do not offer a “one size fits all solution” to food insecurity, adding that issues of food deserts and grocery store access should also be addressed. Furthermore, a representative from Hunger Prevention and Nutrition Assistance Program explained that with the current structure in many low-income neighborhoods, SNAP benefits support small bodegas and stores that would otherwise be boarded up and closed. While this could be beneficial for small store owners, it also perpetuated a cycle “where many food options technically exist but there is lack of access to sufficient nutrition.” Nine representatives (50%) also expressed willingness to continue some of these programs to address their long-lasting challenges. Three stakeholders (16%) expressed interest in extending partnerships and moving beyond emergency relief to create systemic changes for long-term community recovery.

During the Food Summit, different representatives from the food assistance organizations, government and the business acknowledged the need to rethink about the food security issues, and to engage with structural issues: A food system coalition and outreach representative mentioned the need to “address the root causes of the problem” and larger scale issues in their community. She added “we need well-paying jobs, livable wages, [and] health insurance,” and suggested that food assistance organizations and government should work together to think about solutions that will “benefit farmers and the community mutually.” This stakeholder continued “We grow good food [in New York]. We need public funds to distribute good food. We need to stimulate community gardens and urban food to meaningfully share food with the community.” A government representative suggested that “We cannot go back. We have to build better” systems to address community and farmer needs. A bank representative providing funding for food banks also acknowledged the need to “address the root problem instead of band-aid solutions.” He added that “the donors need to continue to work together” as they did due to COVID-19 and “provide free training and direct employment” to clients using food assistance organizations to address food security. One food pantry representative also shared that they expanded mental health and trauma training for their staff so that they could address those needs in their communities.

The passionate and powerful messages of food assistance organizations, along with the changes they integrated

to reduce bureaucracies in access to their services and to increase fresh food distribution suggest that food assistance organizations in the Capital District of New York would like to take steps for building a resilient food system and address the root causes of food security more holistically. The messages during the Food Summit also reflect similar tones in terms of finding long-term solutions to the structural issues causing food insecurity in the U.S.

Statewide impacts and responses

New York State is a leading agricultural state, with agricultural farms employing over 55,000 people and its production of milk products (e.g., yogurt) among the top three states in the nation (New York Farm Bureau 2022). The closure of restaurants and disruptions in food retail created problems for produce and dairy farms. New York State intervened by implementing Nourish New York to help farmers who lost important buyers and to help the food assistance industry to address the large number of food insecure people (New York State 2022b). This state-wide initiative rerouted surplus agricultural products, particularly dairy, eggs, and fresh vegetables, to populations in need through New York’s network of food pantries. The state government dedicated \$85 million to this program and now made the program permanent. The online system also provides an inventory of agricultural products, where farmers and regional food pantries can submit and view available products (New York State 2022b). While some of the farms that work with the Nourish NY program donated food to food banks previously, this new outlet gave them the option to share their best produce with the food banks, providing fresh and nutritious food to food-insecure populations in the Capital District region (New York State 2022b).

During the first months of COVID-19, Capital District Physicians’ Health Plan (CDPHP) expanded partnerships with health care providers to supply nutritionally adequate and tailored meals through food pantries. In Spring 2020, CDPHP also expanded its partnerships with food organizations, which had been ongoing since 2018. CDPHP is a physician founded, community-based not-for-profit health plan and provides a spectrum of services and health interventions that recognize and respond to the link between nutrition and chronic illness. CDPHP also started working closely with Medicaid members who are at-risk for food insecurity to provide them with nutritionally tailored meals through grocery stores, Albany County Sheriff’s Office, and Capital Roots. The program aimed to address the social determinants of health, through food security as a first step.¹¹ In

¹¹ CDPHP programs offer one of the following four paths: food pantry plus -food pantry package including fresh produce, lean meats, and whole grain items; medically tailored food packages (e.g., diabetes, hypertension, low salt items + nutritional education) and healthy

extending the partnership, both CDPHP and food pantries staff acknowledged the racial inequalities exacerbating both food insecurity and COVID-19, and how the program could benefit vulnerable individuals as a preventive approach. They also emphasized the role of their program to build trust with the community (CDPHP 2020).

Discussion

Our findings suggest that there was a drastic increase in reliance on community organizations during the initial months of the pandemic in the Capital Region. This supports the findings of Feingold and colleagues (2021), which found an increase in pantry use from 17.2% to 22.31% in the Capital Region and Feeding America (2020) data on the overall use of food pantries in the United States. Examining the impact of COVID-19 on food systems, Parekh and colleagues (2021) found a shortage of certain food items and affordable food; our findings suggest similar challenges in the case study area.

Food pantries not only saw an increased demand for their resources, but also had to drastically alter the ways in which they distributed the resources most in demand by community members. Many food assistance organizations switched to the delivery model after the pandemic which presented new questions about food choice and food access. Restrictions from the COVID-19 pandemic meant organizations were unable to host volunteers, making it extremely difficult to meet increased demand. Food assistance organizations adapted to low staff and high demand by switching to online or phone orders with full time staff working longer hours.

As restrictions began to lift, a few pantries were able to rehire volunteers, but not back to the numbers prior to COVID-19. The restrictions put in place by the pandemic also meant that clients lost the ability to shop in person and to individually select food options, putting food choice at the mercy of food assistance organizations. The implementation of deliveries also decreased the relational experiences that both food insecure individuals and food assistance organizations previously felt. Although new delivery models may provide convenience for those who lack transportation, the lack of choice significantly limits food sovereignty of community members experiencing food insecurity. As discussed by Wetherill and colleagues (2018), client choice was already a concern at food assistance organizations

even before the pandemic. That being said, food assistance organizations were able to increase access and transition through new models of service by focusing on coordination of limited resources more effectively, involving more communication and transparency about resources and needs, and rethinking about structural causes more holistically and reflecting on the steps that need to be taken. These measures taken by these organizations exemplify how they respond to the broader lack of functionality in our food system and the need to increase overall availability, access, utilization, and stability of food.

The public health crisis paired with an economic crisis has created additional challenges for food assistance organizations, and conditions for social innovation. Because the food assistance organizations we examined are organized at the local level, they were able to assess the shifting conditions, respond to the increasing demand and adapt their services. Solutions such as delivery methods and pre-ordering cut down some of the bureaucracy of access, and are considered innovative as they provided access at a time when needed most. They increased communication and coordination for increased efficiency of service, which continued their operations while maintaining autonomy for their respective clients. These innovative solutions serve as operational building blocks that the emergency food system will continue to utilize, even as COVID-19 restrictions are lifted. Because of the variety of adopted approaches and lessons shared, food assistance organizations had an opportunity to rethink some of the structural issues they faced and reevaluated their role in the post-pandemic recovery efforts. While Bessant and colleagues (2015) suggest that problem-solving innovations in response to a crisis can differ from long-term solutions, we suggest that the quick adaptations of food assistance organizations, particularly in building and extending partnerships can be important for integrating more innovations, making them mainstream, and transforming the system.

The findings of this research are critical because the social and financial inequalities in wealthier nations and particularly the U.S. have been deepened by the COVID-19 pandemic, demonstrating that the food system is vulnerable. The coupling of the public health and economic crisis have exposed the fragility of the food system in the U.S. (King et al. 2022; Temitope and Wolfskill 2021), making programs like SNAP, and food pantry assistance ever more important. Yet, it also created new challenges as food pantries had to address growing food needs while protecting staff, volunteers, and clients' health. Historically, food assistance programs have been criticized as they address only the symptoms of poverty, and in doing so, they prevent

Footnote 11 (continued)

prepared meals (hot and cold options; and food pantry on the go (CDPHP 2020).

long-term solutions to short-term needs (Lohnes 2021; Poppendieck 1998). However, the findings of this research suggest that food pantries and food assistance organizations have been long aware of these criticisms as well as the urgency to address critical issues and are willing to change their approaches and engage in a broader systemic change. The flexibility on eligibility to receive service from food assistance organizations during the pandemic and rethinking ways about expanding access and availability allowed more people to receive support at a time of crisis.

Although government programs helped mitigate disparities in poverty exacerbated by the pandemic, federal aid during the pandemic did not actually help to reduce poverty but rather address some of the income related changes due to initial impact of the pandemic and income loss that particularly affected low-income households. As expressed by our respondents, one of the most important factors limiting access to food is income. At a time when food spending and food prices increased, limited income continues to be a particular problem, for both continuing users and first-time users of food pantries. Government involvement and support in multiple sectors is necessary to address issues of food insecurity more effectively. Factors that will generate more political commitment include better networks of nutrition-related organizations, strong leadership, supportive political administrations, efficient and accurate data systems, and focusing events. This may begin with further funding of state and federal innovations such as Nourish New York and CDPHP's Food as Medicine which aim to address nutritionally inadequate diets due to food insecurity that results from broader systemic gaps in the food system as forementioned. As we are adjusting to the new reality of COVID-19 and its impacts, as one stakeholder mentioned, it is important to reconsider the role of food assistance organizations and pursue innovations that can help us better rebuild.

Appendix

Table 3.

Table 3 List of all organizations interviewed and the dates of interviews

Food Assistance Organizations	Category	Date of interview
Asset Limited Income Constrained Employed (ALICE)	NGO	March 31, 2021
Capital roots	Education center, NGO, and community garden	March 5, 2021
Hunger Prevention and Nutrition Assistance Program (HPNAP)	Government assistance	April 15, 2021
Hunger solutions New York	Government assistance	March 19, 2021
Lifeworks	Food pantry	March 12, 2021
Lifeworks kitchen saratoga springs	Soup kitchen	March 13, 2021
Pitney meadows community farm	Education center, and community farm	March 31, 2021
Radix ecological sustainability center	Education center, and community farm	March 15, 2021
Regional food bank of northeastern New York	Food bank	March 29, 2021
Salvation army: Albany	Food pantry	March 8, 2021
Salvation army: Saratoga Springs	Food pantry	March 11, 2021
St. Vincent's	Food pantry	March 30, 2021
The food pantries for the Capital District	Coalition of 40+ food pantries	March 1, 2021
Trinity alliance	Food pantry	March 16, 2021
United way of the greater capital region	NGO	March 22, 2021
Wilton food pantry	Food pantry	March 17, 2021
Franklin community center	Food pantry	March 9, 2021
Food as medicine	NGO	April 2, 2021

Acknowledgements We would like to thank all of our research subjects, particularly the representatives of food assistance organizations in the Capital District region of New York, for sharing their insights and time during a time of public health and economic crisis. We are also grateful to Andrew Schneller, Lowery Parker, Matthew Sanderson, and anonymous reviewers for their helpful comments on earlier versions of this paper. We also thank Skidmore College Student Opportunity Fund that supported data collection.

Declarations

Ethical approval All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. (The project has been cleared by Skidmore College IRB 2011-932).

Informed consent Informed consent was obtained from all individual participants included in the study.

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