

Struggle and Adaptation During COVID-19 Food System Disruptions

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This time of collectively enduring and working to contain the coronavirus (COVID-19) presents many challenges to people, communities, states, nations, and the world. Currently, we are urged to stay-at-home if possible, keep social distance and shelter in place to flatten the curve, protect people at high risk and most vulnerable to infection, and curtail the asymptomatic spread of the virus. Economically, people are facing and experiencing the disruption of schedules, careers, livelihoods, and protracted financial losses. Businesses, particularly in the food service and hospitality sectors, are experiencing declining sales, decreased revenue, and tremendous uncertainty. Food economics Professor William Masters of Tufts University's Friedman School of Nutrition Science and Policy states the coronavirus (COVID-19) pandemic is "the largest loss of income and decline in gross domestic product caused by a single identifiable event" (Jiminez, 2020, p. 2).

As a result of this unprecedented disruption, concerns about the food supply chain are making headlines pointing out the many vulnerabilities in the system. Large economies of scale and vertically integrated production systems are too rigid to nimbly pivot, leaving farmers with limited places to sell their food. This has resulted in many hardships and difficult decisions, including farmers faced with the dumping of milk, tilling of crops before harvest, and euthanizing animals that would otherwise be processed for market. At the same time, we see an increase in food pantry participation and food supply shortages where not seen before. Additionally, the concerns for the health and safety of frontline food workers has never been more significant as processing plants are hot spots for COVID-19 outbreaks, which has further resulted in some plants taking workers offline while risking the health of those workers who continue to operate to stay employed. This unfathomable health event has indeed exposed weaknesses, challenges, disparities, and underlying inequities in the U.S. food system. Our food system is largely designed to be geographically dispersed and based on efficiency and economies of scale with little to no accounting for environmental externalities, health outcomes, or systemic inequities. According to Mary Hendrickson, rural sociology professor at University of Missouri, "[n]ow we have an animal welfare catastrophe, an environmental catastrophe, a farmer catastrophe, and a worker catastrophe altogether, and we can trace a lot of this back to the pursuit of efficiency" (Kelloway, 2020).

From the consumer perspective, the outbreak and spread of COVID-19 and the resultant stay-at-home and social distancing measures have caused a major shift in how people in the U.S. eat

and purchase food. Unlike most countries in the world, people in the U.S. eat out at restaurants, cafes, and other food venues such as office cafeterias, university dining halls, food courts, and hotels on a frequent and regular basis. In 2018, according to the U.S. Bureau of Labor Statistics, the average U.S. household spent 43.6 percent of its food budget on food away from home and 56.4 percent on food at home. Annual food purchases in Virginia are estimated at \$20 billion dollars, with a rough split of \$9 billion on food purchased away from home and \$11 billion for food to prepare and eat at home (Meter, 2015). Due to COVID-19, the percentage of food purchased for home preparation and eating is estimated at 85 to 90 percent (Jiminez, 2020).

If we can learn anything, the COVID-19 pandemic has demonstrated that people and policymakers need to reflect on all the essential components of the food system and reconsider our current emphasis on measures of efficiency and policies rooted in neoliberal ideology. To do so allows us to revisit critical questions: What does resilient adaptation look like during food system disruptions? What will emerge as we move forward? How do we build equity in the fabric of our food system today and for future generations?

Virginia is fortunate to have a diverse food and farm economy. However, many sectors, along the food value chain, are in crisis mode and are being buffeted by the health crisis and its economic repercussions. Virginia's local and regional food systems have developed significantly over the past 15 years. At the same time, small and mid-sized farms and food businesses face incredible uncertainty and new demands that require adaptation, agility, and flexibility because many wholesale, institutional, and intermediated markets have closed or drastically reduced their hours of operations and food purchases. Cold storage, value-added products, and frozen meats and produce that allow for some flexibility and year-round production and distribution have helped some farmers in pivoting their businesses and services. Retail and direct to consumer sales of produce have seen increased demand because of the shifts in food purchasing behaviors (Jiminez, 2020). Additionally, people are once again appreciating, and in many cases discovering, the importance of having a strong local and regional food system that complements traditional distribution and market channels.

As sheltering in place and social distancing to contain COVID-19 continues into week six, the local and regional food system has adapted and adjusted to social distancing requirements. Farms and food businesses have learned and developed new technological skills and nimble delivery systems to serve children, families, businesses, and the most vulnerable in our communities. Local and regional schools have organized to serve pack-and-go lunches and meals to schoolchildren across the Commonwealth. Farmers markets, restaurants, food hubs, and farmers have expanded their food handling and packaging safety protocols, set up online markets, offered modified Community-Supported Agriculture (CSA) models, organized drive-through options, and tailored hours for curbside service. Additionally, local and regional businesses and organizations have pivoted from a wholesale focus to increase direct-to-consumer delivery services (Held, 2020). These changes have improved food access to high risk populations and also contribute to meet the growing demand of food insecure households that

has resulted from the COVID-19 crisis and consequent job and revenue losses by individuals and families.

Why emphasize local and regional food systems? Diversity in the design of our food system is needed but especially in times of crisis. Dependence on a sector or one specific mode of processing, procurement, and distribution can lead to vulnerability and gaps in services, particularly in a national and global pandemic when supply is highly concentrated. Many of Virginia's 44,000 farm businesses serve local and regional food systems, which allows the everyday person to know the farmer; strengthens and connects locally owned businesses and farms; provides essential nourishment and resilience; preserves local and regional identity; and can benefit long-term social, economic, and environmental health and viability through genuine community care and timely adaptation (Niewolny et al., 2016).

As the food system has shifted through the years, particularly among retailers and grocery stores, the industry has become accustomed to 'lean' supply chains and has fine-tuned its 'just-in-time' food inventory and delivery systems to accommodate demand (Held, 2020). David W. Orr, professor, author and ecological thinker, stated in a 2010 interview about the fragility of the world's food supply that "civilization is nine meals away from anarchy." His statement is a reminder of the susceptibility of these short-term food supplies. He also helps us see that the food system is actually based on connections, relationships, values, and a whole lot of trust, which requires constant care, coordination, and public accountability.

Warren Buffett, founder of Berkshire-Hathaway, often speaks on investment values and risk exposure. In evaluating risks and weak links in value chains and business relationships, Buffett stated in a December 2001 letter to shareholders: "You only find out who is swimming naked when the tide goes out." It is more and more clear that the tide covering many aspects of a globalized food system has receded and continues to expose the gaps, weaknesses, and inequities. A food system, which is overwhelmingly dependent on long distant supply chains, lowest cost providers, national and international trade agreements with little accountability and oversight, has inherent weaknesses and vulnerabilities.

For many people, the food system is easy to take for granted. A severe storm resulting in a short-term electrical outage may pique some interest in where food comes from and how food is produced but the raised awareness quickly dissipates once electricity and a sense of normalcy are restored. With COVID-19, the impact on the food system has been more protracted. Everyone hopes what we are seeing now are only short-term disruptions that will be easily rectified. However, the time is ripe to have serious conversations and honest assessments of what is and is not working in the food system.

Strong interconnected local and regional food systems and networks based on short, transparent supply chains can reduce risk exposure and rectify swimming naked in low tide. Local and regional food systems entail civic-mindedness and being rooted in trusted relationships to adapt and weather unforeseen disruptions. The time to invest in, and truly

connect with, small and mid-sized farms and food businesses in our communities has never been more urgent or relevant as an act of community appreciation and care.

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