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Food after the COVID-19 Pandemic and the Case for Change Posed by Alternative Food: A Case Study of the American Midwest

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Abstract

Non-Technical Summary. In this paper, we focus on the disruption that the current pandemic has created within the US industrial food system. We suggest that the pandemic has provided an opening for small producers. Attending to small-scale responses to the pandemic can guide policy and public investments towards a more just and sustainable future for food.
Technical Summary. Building on the IPES-Food Communique of April 2020, we examine the many ways in which the US industrial food system faltered during the ongoing COVID-19 pandemic. Using Regime Theory as a guide, we suggest that such a catastrophic crisis may create significant opportunities for an emergent food regime. Drawing from our research and participant observation in the US Midwest, we examine changes in the food system occasioned by the pandemic that foreshadow a new food regime. We suggest several blockages and risks to this new regime and suggest policies that would make transition smoother to a more just and sustainable food system.
Social Media Summary (120 characters). What will food be like after the pandemic? This new study outlines an alternative food system emerging in the American Midwest.

The IPES-Food Communique of April 2020 (IPES, 2020) noted three major impacts of the COVID-19 pandemic on food. First, it outlined the practices of industrial agriculture that contribute to the spread of viruses. Second, it anticipated that the pandemic would test the resilience of the industrial food supply-chain, forecasting logistical bottlenecks, export and sales restrictions, and food- and farmworker vulnerabilities. Third, it highlighted the increased precarity of the quarter of the human population already "living permanently on the cusp of hunger, malnutrition, and extreme poverty." It made four recommendations: "take immediate action to protect the most vulnerable," "build resilient agroecological food systems" that use "natural synergies" to support regenerative systems and local food cultures and communities, "rebalance economic power for the public good," and "reform international food systems governance."

This paper builds on the IPES analysis to focus on problems and recommendations presented by sustainable food systems as they develop during the pandemic and have longer term consequences through subsequent institutionalization. We use the Midwestern US as our case study.

The Pandemic's Effects on the US Industrial Food System

The COVID-19 pandemic is a grim reminder of weaknesses in the US industrial food system (IFS). Without the migrant labor on which industrial fruit and vegetable production relies, producers have had to destroy healthy crops (Cook, 2020). Field and, especially, meat processing workers, already vulnerable to injury on the job and crowded housing, are susceptible to the disease, with the risk of passing it on to others in their communities and even downstream in the supply chain (Klemko & Kindy, 2020; Schlosser, 2020; Reiley and Reinhard, 2020). By one count, as of November 2020, 74,000 meatpacking and food processing workers had contracted the virus, most in the American Midwest, and 366 had died (Douglas, 2020). With the closure of major slaughter and processing facilities during the pandemic, livestock and poultry farmers were forced to euthanize animals (Mak, 2020), and large-scale dairy farmers, already in crisis from chronically low prices, were forced to dump milk (Huffstutter, 2020). Aggregators were not immune. COVID-19 cases closed at least 11 Amazon warehouses in

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March (Selyukh, 2020). At the other end of the food system, those relying on industrial agriculture faced similar pressure. At the pandemic's peak, 1-in-5 Wendy's Restaurants had no hamburger (Lucas, 2020). Major grocery chains had few dairy options and had trouble stocking food basics such as yeast and flour (Guynn & Tyko, 2020; Hobbs 2020). Small grocers and neighborhood food outlets were shuttered and niche products (e.g., gluten free or organic) were shed by producers for broadly acceptable staples made with readily available ingredients (Zwillich, 2020; Walters, Wade, & Suttles, 2020). Small food businesses, restaurants included, were especially hard hit (Anderson, 2020). Although some restaurants thrived by increasing take-away, others less adaptable closed (CBS News, 2020). Longer-term, districts historically identified with local food culture may close or change such that regional distinctiveness and talent are diminished (Anderson, 2020). The collapse of consumer-oriented, face-to-face business led to the unemployment of 16.3 million people in the U.S. (Bureau of Labor Statistics, 2020), as well as growing food insecurity (Feeding America, 2020). While some were able to source food outside the dominant food system, those excluded from alternatives, by social-economics or location, faced precarious circumstances (Wilson 2020), suffering shortages, uncertainty, and quantity/quality trade-offs. Even emergency food pantries, the traditional "dumping grounds" of the IFS (Fisher, 2017), failed those in need during acute periods of shortage and quarantining as they had insufficient labor to hand out food donations (Abou-Sabe et al., 2020; Stanger, 2020).

Unsurprisingly, laborers on farms, in warehouses, and in retail organized in larger numbers to demand workplace protections, and did so in solidarity with one another (Mzali, 2020). Over half of COVID-19 related labor movements between March and May inhabited the food sector, and food workers moved to capitalize on their "essential" status and newly high-risk nature of their jobs to demand workplace protections (Mzali, 2020; Payday Report, 2020).

Importantly, the current pandemic has cut unevenly across the US population. First, those who are low income are more likely to be marked as "essential" workers required for in-person work (Jewett, 2020). They are thus more likely to become infected, to die, or to lose their source of income. Second, because of systemic racism in the US, Black, Indigenous, and People of Color (BIPOC) are the most vulnerable to COVID-19 and its long-term implications as they are more likely to be low income and without adequate access to healthy food (Woodward et al., 2020; Neel 2020). COVID-19 also has particularly ravaged those with diabetes, metabolic disorders, and immune deficiencies (Centers for Disease Control, People, 2020), which disproportionally impact BIPOC due to marginalization, food insecurity, environmental racism, and economic inequality. Unsurprisingly, both infection and death rates are higher among BIPOC (Centers for Disease Control, Health Equity Considerations, 2020).

The Pandemic as Crisis and Reformulation

To understand how a pandemic created a crisis in the US IFS, we note that the US IFS is primarily a periodic pull-oriented, just-in-time system (Kim, 1985) characterized by not just large numbers of producers and consumers, but also highly agglomerated intermediaries engaged in the manufacturing, aggregation and distribution of food (Saitone & Sexton, 2017). Capitalist corporations necessarily narrow their responsibilities to maximize profit, with many items involving the public good (employee well-being, community investment, environmental resilience, animal welfare, etc.) treated, in the words of Foster and Clark (2018) as "gifts" to capitalism. The system thus relies on both self-exploitation by small-scale producers seeking competitive advantage and exploitation of nature and laborers. Just-in-time production systems are particularly vulnerable to disruption, more so when they are lengthy and geographically dispersed as in the US IFS (Hobbs, 2020).

The pandemic has exposed the tenuous underpinnings of the US IFS. Two possibilities emerge from the current crisis. First, the pandemic simply created a hiccup in our current IFS that will quickly dissipate. Or second, we are glimpsing first-hand a transition from one food regime to another with potential for a more secure and sustainable food future. While a regime is an integrated economic and socio-cultural system of accumulation (Aglietta, 1979), a food regime, by extension, references such an integrated system for food (Friedmann, 1987; Friedmann & McMichael, 1989). Food regimes, like larger capitalist accumulation regimes, end in the sorts of crises we are experiencing today wherein their logic collapses. The current, or third, food regime, which emerged in the 1980s and continues at least up until the current pandemic, is dominated by the global circulation of food by entrenched multinational corporate actors (McMichael, 2009; Holt-Gimenez & Shattuck, 2011) that often exploit geopolitical tensions with agricultural products in order to accumulate wealth.

Dominant regimes, such as that now in crisis, simultaneously exist with others that lie nascent below the surface. Crisis opens *at least the possibility* that a nascent regime may be catalyzed into the dominant position. Piore and Sabel (1984) argue that such a significant change can result from a combination of experimentation, expediency, and potent historical events such as the Great Depression, World War II, or global pandemic (Davidson, 2020). Their theory helps to account for the prospect that smaller-scale agriculture and alternative food production practices, previously relegated to the margins, may at this time present a challenge to industrial production. The pandemic may well set the stage for new urgency in food experimentation and expediency that expands crafting and sourcing into the future, as preliminary research by Burris (2020) suggests. Developments in this emergent food regime are likely to build on early signs of concern for provenance and social and environmental justice (Weston, 2020).

We do not, however, expect the current, industrial food regime to quietly succumb. Indeed, President Donald Trump's invocation of the Defense Production Act to protect the country's meat supply mandates that facilities stay open despite risks to the health of employees and their communities. Additionally, his administration sought to support American agriculture by reducing wages for foreign workers (Ordoñez, 2020). These examples demonstrate how the ideological state apparatus continues to scaffold things as they are, even in a crisis (Althusser, 2008). The resulting culture war (Mitchell, 2000) has seen both protesters armed with automatic-weapons defending their right to work during the pandemic (Bogel-Burroughs & Peters, 2020) and labor strikes for higher wages and better working conditions (Mzali, 2020). Large corporations such as Amazon, Dial soap, and United Airlines have also gone to lengths to convince the public that they have both the safety of their workers and consumers foremost in mind (Day One Staff, 2020; Henkel, 2020; United Airlines, 2020).

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Evidence for a New Food System: The Case of the U.S. Midwest

Known for its industrial agricultural production of maize and soybeans that are shipped to other parts of the country and the world, the Midwestern US features a mixture of sparsely settled rural areas, small towns, regional hubs, and major urban areas along with the attendant disparities of infrastructure and income. Less encumbered by rigid or lengthy supply protocols the Sustainable Food System (SFS) in the Midwest largely adapted to the new reality quickly and creatively, using technological innovations and community alliances to rapidly shift to online ordering, reduced-contact delivery (Cagle, 2020), new venues, and new supply systems.

In response to gaps in the IFS during the pandemic, we have seen the rearrangement and expansion of SFS actors (those involved in the alternatively organized, biodiverse, smaller scale agro-food system) of the region, as evidence below indicates. Consumers that were financially, geographically and technically able turned to alternative suppliers specializing in pastured meat and regionally available fruits and vegetables (Proeber, 2020; WRTV, 2020). As restaurants closed across the Midwest, the balance of prepared versus home-made shifted dramatically. Shortages in the IFS meant that staples (breads, milk, meats, etc.) were sourced online, outside the usual channels (Bowman, 2020; McCrimmon, 2020). Interest in food crafts such as backyard chickens, sourdough baking, and home gardening revived (Burris, 2020). Despite issues in the IFS, locally and regionally raised and slaughtered grass-fed meats remained readily accessible (Linnekin, 2020). Artisanal milk, cheeses, yogurt, and eggs of different varieties remained available. Locally grown mushrooms, greens, and vegetables continued making their way to farmers' market pick up sites and local food delivery services (Ballard, 2020). Indeed, some direct-to-consumer operators saw sales grow during the pandemic (Bowman, 2020; McCrimmon, 2020).

To connect producers and consumers, new channels of aggregation and distribution emerged, and existing alternative channels rapidly enlarged (Grace, 2020; McAfee, 2020). For example, many small-scale, locally-distributing farmers and artisanal food producers established an online presence, gaining new information about customers' preferences along with possibilities for cooperation with other producers (for example, see Sill, 2020; Elejalde-Ruiz, 2020; Coulter, 2020; Waxman, 2020; Peyton, 2020, Splitter, 2020; Severson, 2020; Thilmany, et al., 2020). The pandemic saw small producers gathering in new, sometimes marginally legal, configurations to circumvent the closure of farmers' markets, restaurants, and CSA drop points (Sill, 2020; Coulter, 2020; Robinson, 2020). In addition, providers who aggregatedand distributed food in new ways and places—including cooperative farm stops, neighborhood drop points and walk up sales at production points, such as bakeries and creameries—expanded their customer base to new alternative food customers (Elms, 2020; Held, 2020; Forum News Service, 2020; Muddy Fork Bakery, 2020; Robinson & Farmer, 2017). Additionally, emergency food services expanded their reach through increased food donations from campus gardens, gleaning, and "sponsor a neighbor" programs as well as through coordation with underutilized food production facilities and distribution programs (University of Wisconsin-Milwaukee, 2020; WIBW, 2020; Feeding America, Summer Food Service, 2020; Johannesen, 2020; Slootmaker, 2020; Babb & Betz, 2020; Neighborhood Planting Project, 2020).

A New Food Regime: Problems and Recommendations

While the cracks in the IFS have positioned small-scale alternatives to innovate and expand, significant challenges, both legacy and new, remain. These include limits to scale, tension between farm and food justice, and the uneven reach and undesirable effects of technology based on socio-economic disparities.

Problem: Limits to scale and the need for new producers

As the SFS grows, producers may struggle to scale operations while retaining agro-ecological principles. Indeed, evidence indicates tension between agro-ecological practices and farm size (Torres & Marshall, 2018) in part because small-scale, organic, biodiverse farm operations require particular knowledge and labor. Thus, the new food regime requires many new (and knowledgeable) farmers. The influx of new farmers will, in turn, challenge traditional land regimes, educational systems, and financial instruments. The National Reckoning on Race may also play an important role in the future of farming as new producers are increasingly drawn from groups heretofore underrepresented in farmland ownership.

Recommendation: Diversify the food system by supporting entry level, small scale, and scalable enterprises

Producers, especially new producers, need greater access to land and capital funding, especially in ways that protect against state and national budget cuts in the wake of the pandemic (Valliant & Freedgood, 2020). Also implicated is the need to incentivize and increase the number of farms run by BIPOC, immigrant, and women producers. Numbers, diversity, and nimbleness of small and midsize food providers will respond to increased grants and incentives for land and facilities, generational transfer, and technologies that help expand the growing season. National support for networking among beginning and career farmers will buttress career education and knowledge sharing. Related, quality of life investments, such as healthcare, arts, public transportation, and public education, will make farming more viable long term (Robinson, 2016). A living wage, medical insurance, medical leave with pay, and other benefits accorded traditional "white-collar" workers as well as boosting safety features will make food professions more desirable.

Problem: Tension between farm- and food-justice

Current agro-ecological producers often struggle without sufficient profit, relying on self-exploitation, long hours and low-paid or volunteer labor (typically justified by personal passions and ethical commitments). These trade-offs compromise beginning farmers and fail to sustain career farmers. Still, foods circulating within the SFS command prices corresponding to parity, a usual marker of farm-just prices (Tolley, 1943). However, positioning the price of SFS foods well above their IFS counterparts cynically pits farm justice against food justice, placing alternative food beyond the financial reach of many. Furthermore, online food shopping and delivery presents particular challenges for many in terms of technological knowhow and access, limited pick-up times, ordering and/or delivery surcharges, upfront payment, and access to adequate transportation. Moreover, customers using government food benefits, such as SNAP and TANF, generally cannot use or have extremely limited delivery options. In the absence of substantial increases in wages and government food benefits (e.g. SNAP, WIC, School Lunch, etc.) for people underemployed, unemployed, or disabled, Americans will have to

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choose between economically viable farms and feeding low-income citizens.

Recommendation: Underwrite economic risks of beginning and SFS-transitioning farmers by increasing access to government benefits

Producers make far-reaching decisions during crucial points in their career trajectory—including at entry, adoption of production methods, and generational change. With buffering at key points, public policy can support increases in the number of farmers, diversification of producers' interests and talents, reduced business precarity, and latitude for sustainable decision making that will benefit the larger society. On the consumer side, government food vouchers must be sufficient and flexible enough to sustain those in need, and minimum wages should be sufficient to broaden financial access to parity-priced food in the SFS.

Problem: Uneven access to resources based on social-economic disparity

Even with greater emphasis on technological interfaces, computer skills and broadband access, alternative food may continue to be confined to particular socio-economic circles. Technological access is neither universally available nor evenly distributed. Further, Amish communities, whose faith limits technology use and who are predominantly located in the states of Indiana, Ohio, Michigan, Wisconsin (in the Midwest) and Pennsylvania and New York (in the East), are vital medium-scale producers of local and regional specialty crops and dairy products. They, along with older or poorer producers, are limited by the costs and skills of building and maintaining a website and utilizing purchasing software. Additionally, online marketplaces that remove participants from a larger, diverse public may impede the social exchange, community building, and business accountability valued in direct marketing while also raising new obstacles that disproportionately affect consumers already hindered by other financial, social, and institutional barriers.

Recommendation: Build regional agro-food systems infrastructure

Access to food hubs, internet, computer and other education, processing facilities, networking opportunities, and the like will support the establishment, viability and scalability of small food businesses and level the playing field. As new modes of aggregation and distribution, including pick-up and home delivery, expand food labor even while traditional grocery jobs contract, policies must guard against inequalities endemic to the "gig economy" (Smith, Chen, & Fuentes, 2020). Cooperative food hubs, underrepresented in American business yet with a strong history in agriculture, can efficiently structure new local-oriented aggregators and distributors for the emerging SFS (Knutson, 1966) and warrant greater support from producers, consumers, and policymakers. In addition, private aggregators like Market Wagon (WRTV, 2020) may complete food system coverage. Finally, small but crucial food venues need attention: farmers' markets, community supported agriculture, farm stands, and food sharing sites, along with front-porch businesses and rural crossroad pop-ups. When invited, government entities can provide crucial underwriting for resources like management, training, communication, location, grant writing, and insurance.

Conclusion

The pitfalls and environmental degradation inherent to the IFS are well documented (IPES, 2020). The pandemic highlights institutionalized inequities that dis/advantage people systematically and multiply oppression by the intersectional effects of race, class, gender, and geography and that have consequences for global sustainability (Carley & Konisky, 2020). Thus, the same people who suffer from food inaccessibility are those who suffer most from inadequate health, labor, education, political, and environmental conditions. Business as usual will not correct the underlying systemic flaws in the IFS.

In the wake of the pandemic, sustainability as a goal makes new sense. Alternatives to the IFS re-energized during the pandemic provide useful leads and prototypes that can guide policy, investments, planning, and ethical decision making, not only in the US but in other informal food networks around the world (Zimmerer & de Haan, 2020). Their value comes from their embeddedness within the complex dynamics of functioning food systems: inhabited by real participants; informed by genuine goals, values, identities, and economies; and responsive to changes in the social, economic, and ecological environment. A just, sustainable food system will support equitable human thriving across diverse social, ecosystem, and economic circumstances, but it will necessitate, in the words of Chan et al. (2020), "change [in] the fabric of legal, political, economic and other social systems," the sort of transition envisioned by Aglietta (1979) and Friedman and McMichael (1989).

The opportunities available in small-scale solutions provide resources for change. Small-scale systems have built-in multiplicity that make them resilient to crisis. Policies to support newfound momentum in sustainable food systems include fostering (1) the next generations of small and mid-sized food producers, (2) co-operative aggregation and communications infrastructure, (3) just labor terms, (4) regional food planning, and (5) transparent sharing of successful models and lessons learned. The question that remains is the political will to support policy change. The pandemic has created an opportunity, we need but seize it.

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