Building Food Systems Resiliency Through Different Business Scales and Forms

AN OPEN MARKETS INSTITUTE REPORT BASED ON A USDA COMMENT



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Executive Summary

The Open Markets Institute originally prepared the following report in response the USDA's request for comments titled: "Supply Chains for the Production of Agricultural Commodities and Food Products" (AMS-TM-21-0034, page 26689). Food & Water Watch and Friends of the Earth cosigned it

In this report, we lay out why the USDA must invest in what we know works: governance and resources that promote the distribution of capacity and risk, a diversity of food businesses of different forms and scales, and greater power and voice for working people.

While a natural disaster or global pandemic is never predictable, the supply chain disruptions wrought by COVID-19 were. For decades, the Open Markets Institute and its founders have documented the inherent risks and fragility in both domestic and international supply chains created by the consolidation of industrial and transportation capacity, combined with Wall Street-driven austerity.ⁱ The food system is no exception.

"While a natural disaster or global pandemic is never predictable, the supply chain disruptions wrought by COVID-19 were."

Rebuilding food system resiliency must also include redistributing wealth and resources to communities that have been historically and systemically denied private-owned services, such as supermarkets, and cut off from federal supports or even directly exploited by past USDA actions.^{II} This includes Indigenous, Black, and immigrant communities and other communities of color, and poorer populations generally.

Going forward, the USDA must do a vastly better job of regulating agriculture markets to ensure fair competition and counterbalance predatory corporate consolidation through statutes such as the Packers and Stockyards Act. The time has also come for the agency to rededicate itself to promoting cooperatives, nonprofits, and public food infrastructures that provide farmers, workers, and consumers with real alternatives to the private, investor-owned firms whose interests have come to dominate the department.

Introduction

Building a resilient food system that can withstand unpredictable shocks is a critical matter of public health and national security, especially as the number of extreme weather events increases due to global climate change.

According to the Federal Emergency Management Agency, "Building resilience within, and providing for the rapid restoration of, supply chain systems is key to responding to any catastrophic incident."ⁱⁱⁱ But decades of lax antitrust and antimonopoly law enforcement by federal agencies, including the USDA, have undermined this critical supply chain resilience.

The continued concentration of food production, processing, distribution, and retailing — paired with business practices that emphasize efficiency over safety nets, diversity, or capacity-building — creates a centralized and brittle food system that is built to break when any one piece of the highly specialized chain falls. The concentration of corporate power also results in a variety of other harms, including diminished worker power and protections. This in turn further undermines resiliency, as it increases the level of risk that essential food systems workers face. Over the past year, Americans witnessed the results of this dangerous food system design in the form of workplace virus outbreaks, empty grocery shelves, and supply chain backlogs that resulted in the deaths of hundreds of food systems workers and the waste of millions of pounds of quality food.^{iv}

A truly resilient food system will promote food sovereignty, allowing all communities to have a say in what they eat and how its produced, including greater opportunities for all communities to directly participate in their own food production and distribution. This is one of the core promises of American democracy. And the USDA can help achieve this promise by regulating unfair corporate advantages and investing in marginalized communities and alternative modes of food production and distribution.

I. How corporate consolidation contributes to supply chain fragility

On February 24, 2021, the Biden administration issued Executive Order 14017 ("America's Supply Chains") to improve supply chain resiliency in the wake of the COVID-19 pandemic.^v The order was inspired by a variety of dramatic disruptions to the U.S. food supply system during the pandemic. Institutional and in-person dining shut down, driving a surge in demand for grocery and food delivery for at-home dining. Dozens of vital food processing and warehousing facilities shuttered as food chain employers failed to protect workers from COVID-19, leading to widespread illness and deaths among food chain workers and plant closures, especially in meatpacking.^{vi} Disruptions in the production and shipment of raw materials, packaging materials, chemicals, and other specialized ingredients also upset food supply chains. At various times these disruptions resulted in shortages of milk, eggs, flour, and meat on shelves across wide swaths of the United States.^{vii}

The breakdown of these systems also affected farmers. The dual shocks caused by the closure of foodservice channels and the sudden diminished processing capacity prevented many raw foods from getting to market. Milk, vegetables, potatoes, eggs, and more destined for restaurants, schools, universities, and work cafeterias could not be readily processed or packaged for retail and went to waste. At the peak of the disruption, a single farmer buried 1 million pounds of onions, a chicken processor smashed 750,000 eggs each week, and the largest U.S. dairy cooperative dumped 3.7 million gallons of milk a day.^{viii} At the same time, 25% of pork processing capacity went offline due to plant closures driving a backlog of slaughter-ready animals and forcing farmers to euthanize around 300,000 to 800,000 hogs.^{ix} Just as unfathomable amounts of animal lives and food went to waste, Americans experienced record levels of food insecurity in addition to the temporary grocery store shortages.^x

Many of these disruptions can be traced to a failure to protect workers paired with overly consolidated and rigid supply chains. On one hand, major processing plants did not act quickly in providing protective equipment or reconfiguring plants for proper social distancing contributing to massive outbreaks of COVID-19 among workers and subsequent plant shutdowns. On the other, highly concentrated and specialized distribution systems could not readily adapt to repackage and redistribute products destined for foodservice, such as restaurants and schools, to retail grocery channels. Decades of corporate consolidation created many of the conditions for these failures and then exacerbated their harmful outcomes. Radical relaxation of anti-monopoly laws permitted a few corporations to roll up control over nearly every step along the food chain — from seeds, agrichemicals, and animal genetics to grocery distribution and retailing. The top four firms sell 76% of all U.S. soybean seed when in 1988 they only sold 42%.^{xi} As recently as 1997, the four largest grocers sold 21% of all groceries; today that figure has doubled to 43%.^{xii} Consolidation can be more striking at the local level, as farmers often find only one or two potential buyers for their products and as consumers find cities controlled by a handful of dominant grocery retailers.^{xiii}

"Decades of corporate consolidation created many of the conditions for these failures and then exacerbated their harmful outcomes."

On a local level, the top four grocery chains control 72% of sales in metropolitan areas, on average.^{xiv} Walmart alone sells 50% or more of all groceries in one in every ten metropolitan areas and nearly one in three "micropolitan" areas across the country.^{xv} Food systems consolidation is not a thing of the past: The U.S. food supply chain saw nearly 1,300 mergers involving food processing, manufacturing, and distribution between 2008 and 2018.^{xvi} In addition to buying up their direct competitors, large corporations also vertically integrate to take over related businesses, such as Walmart investing in beef and milk processing or Tyson Foods expanding into chicken breeding.

Where corporations do not directly own key parts of their supply chain, they increasingly dictate their terms of business through restrictive contracts, including exploitative livestock growing contracts between farmers and meat processors. These trends give a handful of private business owners and corporate shareholders inordinate decision-making power over how food is produced, priced, and distributed.

"At the same time, 25% of pork processing capacity went offline due to plant closures, driving a backlog of slaughter-ready animals and forcing farmers to euthanize anywhere from 300,000 to 800,000 hogs." The blunt fact is that our current economy and policies are structured to reward the most powerful firms for predatory pricing, exclusive dealing, price-fixing, wage suppression, union-busting, and general exploitation of farmers, workers, and the environment. Indeed, even after the harsh lessons of the last year, food corporations continue to pursue these same policies.

The consequence for food system resilience cannot be understated. Consolidated and vertically integrated food producers favor lean, standardized, highly specialized food supply chains in the name of efficiency and short-term profit maximization for owners and investors. But as rural sociologist Dr. Mary Hendrickson points out, "a focus on efficiency, standardization, and specialization has decreased the diversity of scale, form, and organization across the food system" at the expense of redundancy, ecological sustainability, social and economic equity, and democracy.^{xvii}

Such consolidation and standardization are inherently risky and fragile in the face of any disruption: Consolidating production into fewer entities exacerbates the harm caused by the disruption of any one facility and reduces or even destroys vital fail-safes and flexibility. The food supply chain's ability to adapt to sudden changes or shocks is greatly inhibited. There are numerous examples of food supply chain fragility created by consolidation, capacity-cutting, and specialization. This comment will focus on two case studies: meatpacking and food distribution.

CASE STUDY 1: MEATPACKING AND COVID-19

The bottleneck of livestock processing has been singled out as the weakest link in the domestic protein supply chain.^{xviii} Concentration in processing across livestock sectors has increased at a staggering rate.

In 1980, the four-firm concentration ratio (CR4) of steer and heifer slaughter was 36%.^{xix} A mere 17 years later, the CR4 in 1997 was 80%.^{xx} Poultry processing and pork processing are also more concentrated: the CR4 for pork slaughter doubled from 33% to 66% between 1976 and 2015, while the CR4 for poultry processing increased from 35% in 1986 to 51% in 2015.^{xxi}

These figures also underestimate the degree of regional consolidation, which is critical given that farmers can ship their animals only a limited distance. For example, industry consolidation leaves half of contract poultry growers with just one or two processors to work with.^{xxii} The consolidation of ownership has been accompanied by the consolidation of plants, leading to fewer and larger plants.^{xxiii}

The pork industry exemplifies the problem. Historically, hog processing plants existed at a diversity of scales. In 1977, 38% of hogs were slaughtered in plants that could process more than one million animals per year.^{xxiv} Throughout the 1980s, consolidation led to fewer, larger hog processing plants. By 1997, 88% of hogs were processed in plants with an annual processing capacity of one million animals.^{xxv}

Today, most hog farmers send their pigs to large plants that are few and far between. South Dakota, for instance, contains only five federally inspected processors, with some 400 miles between them.^{xxvi} The Smithfield plant in Sioux Falls, South Dakota, accounts for a staggering 4%-5% of national pork processing annually.^{xxvii} This concentrated structure is inherently fragile if any one plant goes offline.

In the early days of the pandemic, the Smithfield plant became the nation's single largest hot spot of coronavirus cases.^{xxviii} South Dakota Gov. Kristi Noem formally requested the plant's closure, and in April 2020, the Smithfield plant temporarily closed.^{xxix} Hog farmers in the state were all but unable to find alternative processors. Shane Odegaard, who sends about 15,000 hogs to the Smithfield plant annually, instead held his breath for the plant's reopening. In the meantime, he put his hogs on reduced diets to slow their development and crammed more animals into limited barn space.^{xxx} Odegaard was among the lucky, as farmers across the country were forced to shoot, suffocate, and gas thousands of pigs and piglets. One farmer reported euthanizing up to 3,000 pigs in a single day.^{xxxi}

"According to a 2019 Federal Emergency Management Agency report, 'it is common for 80 percent of key goods and services serving a densely populated area to depend on seven or fewer distribution centers.""

While the call to deconcentrate meat processing is growing, some skeptics remain. A recent simulation of the beef-packing sector's reaction to closure risk at different levels of consolidation argued, "There are no easy solutions to improve resiliency by changing market structure."^{xxxii} Meilin Ma and Jayson L. Lusk evaluated the impact of closure scenarios on industry output, consumer welfare, and producer welfare for three different market structures: a market with only small-sized plants, the actual market structure of the beef-packing sector, and a more concentrated structure of only large-sized plants.^{xxxiii}

The authors did not, however, analyze a less consolidated structure with an assortment of plant sizes, including midsize plants. The study found that when the risk of closure was low, the "all small" market structure consistently outperformed both the actual structure and a more concentrated structure.^{xxxiv} When the risk of closure increased to 50%, the concentrated structure was more likely to maintain a higher level of production, but the "all small" structure was still best in avoiding the worst-case scenarios.^{xxxv} The results of the study reflect the complexity of the beef-packing sector and further support the need for a network of small, midsize, and large facilities to build resilience, maintain consistency, and avoid the worst-case scenarios. Additionally, concentrated ownership, regardless of plant size, further concentrates other forms of risk. Just this month, a cyberattack on the world's largest meatpacker, JBS, temporarily shuttered some 20% of U.S. beef and pork processing, slowed poultry processing, and even stalled slaughter plants in Canada and Australia.^{xxxvi}

"Greater vertical integration and specialization also make the business of meatpacking more susceptible to shock."

Greater vertical integration and specialization also make the business of meatpacking more susceptible to shock. In the 1960s, many slaughterhouses processed multiple species.^{xxxvii} Today, most major processing facilities are specialized to a single species.^{xxxviii} Consolidation has also led to intensified geographic concentration in some protein sectors.^{xxxix} A landscape of specialized, geographically distant plants makes pivoting to alternative processors difficult. During the pandemic, such forms of vertical integration and specialization in meatpacking and egg processing did in fact exacerbate supply chain fragilities and economic hardship for farmers.

Most poultry and hog producers today sell their animals on contract with a processing company, rather than in open markets.^{xl} Not only are these farmers tied to one buyer, but in the case of egg production, the product is often directed for a specific type of plant serving a specific sales channel.^{xli} When COVID-19 shut down one of these channels, foodservice egg contractors decided to euthanize entire egg-laying flocks that supplied foodservice egg processing facilities, sometimes without input from farmers.^{xlii} This not only devastated some unlucky farmers but diminished egg-producing capacity just as grocery stores faced egg shortages.

The effects of highly consolidated markets harm the farmer, worker, consumer, and the stability and resiliency of the system as a whole. Contracting and vertical integration in meat production restricts farmers' control over their operations, as integrators dictate critical decisions about farming inputs and methods.

Processing consolidation in the hog industry, for instance, precipitated a shift to confined indoor hog operations, which in turn wiped out more than 70% of hog farms and polluted the air and water of surrounding communities.^{xliii} In the cattle market, consolidation boosts the ability of packers to hike prices to consumers while driving down prices paid to farmers and ranchers: The gap between producer and packer prices reached 1,500% during the pandemic.^{xliv}

The USDA can help build a resilient domestic protein supply chain. A more competitive system would allow for a diversity of operations at a diversity of scales: allowing farmers to pivot in the event of a catastrophe and creating shorter and more flexible supply chains.

CASE STUDY 2: GROCERY AND WHOLESALING CONSOLIDATION

The coronavirus pandemic put a massive strain on wholesale distributors, who at times struggled to deliver foods to retailers.^{xlv} Recent trends of consolidation in wholesaling and food distribution contributed to this supply chain fragility.^{xlvi} Through the 1970s, there were about 20 grocery wholesaler mergers per year; that rate nearly doubled through the 1980s and early 1990s.^{xlvii} Today, the largest wholesale companies are C&S Wholesale Grocers, Wakefern Food Corporation, Supervalu, and UNFI, and they continue to buy up competitors. C&S purchased Associated Wholesalers Inc, the ninth-largest wholesaler, in 2014. In 2014, C&S also purchased The Grocers Supply Company, the leading provider of groceries to Hispanic supermarkets in Texas.

"Through the 1970s, there were about 20 grocery wholesaler mergers per year; that rate nearly doubled through the 1980s and early 1990s.^{xlviii}" C&S in 2018 also acquired Olean Wholesale Grocery Cooperative, a major supplier to independent food retail and convenience stores throughout the mid-Atlantic region. In 2018, United Natural Foods acquired Supervalu, combining a major supplier to Whole Foods Market with a more traditional grocery wholesaler.^{xlix} In 2013, Spartan Stores, the ninth-largest wholesaler at the time, merged with Nash Finch, the largest wholesaler to military commissaries and exchanges in the U.S.

Consolidation among foodservice wholesalers is also a cause for food security concerns in supply chains. The two largest foodservice distributors, Sysco and US Foods, have together acquired 23 companies in the past five years.¹ In 2015, the Federal Trade Commission (FTC) filed a lawsuit challenging Sysco and US Foods' proposed \$3.5 billion merger announced in 2013.¹¹ In its lawsuit the FTC argued that the merger would result in one company controlled 75% of the market for foodservice wholesaling, leading to higher prices for customers. The merger was abandoned by the companies after a federal judge ruled in favor of the FTC's request for a further review.¹¹¹ Between 2009 and 2013, 86 independent foodservice distributors were acquired by the five largest distributors in the industry.¹¹¹

There are numerous examples of how these acquisitions often result in the shutdown of distribution centers, which grocery stores rely upon to stay in business,^{liv} diminishing critical food infrastructure and food access for entire towns and local communities.^{Iv}Additionally, many actions taken by large wholesale distributors involve the closure of distribution facilities in order to increase profits through reducing capacity and increasing transportation fees to retailers.^{Ivi}

Consolidating distribution centers can leave a community reliant on shockingly few hubs of essential goods. According to a 2019 Federal Emergency Management Agency report, "it is common for 80 percent of key goods and services serving a densely populated area to depend on seven or fewer distribution centers."^{Wii} Should a natural disaster or technological glitch take down even one, let alone an entire region of distribution centers, communities would be starved of food and supplies.

This vulnerability is evident in the New York City region, particularly after Hurricane Sandy in 2012. Much of the city relies on extremely lean supply chains. Consolidation has resulted in the decline of local distribution for food and reliance on distribution centers hundreds of miles away. During Hurricane Sandy, many of the region's gas stations lost capacity as a result of both the flooding of oil refineries and power outages affecting gas pipelines. This meant that truckers carrying food from distribution centers located long distances from the city were not able to fulfill many stores' demand for food.^{Iviii} Many of these stores have limited storage space to increase inventory during disasters, which makes the goal of having an efficient food distribution system extremely important. Fortunately, New York sources much of its food from the Hunts Point Distribution Center, which distributes over 2 billion pounds of food per year for the city,^{lix} consists of 155 public and private wholesalers,^{lx} and houses 70% of the city's wholesale facilities.^{lxi} But Hunts Point is located on a 100-year flood plain, which is vulnerable to the effects of climate change. Luckily, Hurricane Sandy avoided contact with Hunts Point, but reports authored after Sandy make clear the risk of having a centralized distribution center in an area prone to the adverse effects of climate change.

In New Orleans, food transportation trucks have routes into the city. Interstate 10 is the most critical route for food distribution to the city. During Hurricane Katrina, 33 bridges were destroyed, as well as parts of the interstate highway system.^[xii] This damage affected the ability of distributors to deliver food across the city.^[xiii] During the hurricane, the number of supermarkets in the city fell from 36 to 15.^[xiv] The damage done to the food supply chain after Hurricane Katrina lasted years. Two years after the event, half of the city's supermarkets were still shut down, while Black communities were 65% less likely to have more supermarkets compared with other communities.^[kv] Two years after Hurricane Katrina, the number of food access points fell from 392 to 148.^[kvi]

Beyond horizontal consolidation, vertical integration of food distribution builds dominant retailers' market power and contributes to the food system's fragility. With the rise of Walmart and parallel grocery consolidation^{lxvii}, many retailers have found it easier to negotiate directly with food manufacturers ^{lxviii} and build their own distribution facilities.^{lxix} By 1990 nearly all the top 10 grocery chains had vertically integrated wholesaling for their general-line grocery products.^{lxx} This contributes to consolidated grocers' buyer power, which has been used to squash smaller independent competitors.

During the pandemic, there have been reports of the inability of smaller independent grocers, mostly located in low-income communities and rural areas, to supply basic goods because manufacturers are prioritizing larger retail chains, simply because they have the market power to demand better terms.^{lxxi} Vertical integration also led to a decline in the number of wholesalers for smaller independent grocers who do not have the resources to create their own vertically integrated supply chains, leaving these smaller grocers captive to major grocery wholesalers.^{lxxii}

Consolidation in grocery and foodservice distribution has downstream impacts for the larger food system, as it leaves fewer entry points into retail markets for producers.^{lxxiii} Smaller independent farms, food processors, and manufacturers are left without major wholesalers to take their products to market, as wholesalers prioritize larger

manufacturers.^{lxxiv} As such, small and midsize farmers are inadequately equipped to compete with larger competitors preferred by large supermarket chains. This reduces the diversity of sources within the food supply chain, with much of the produce in grocery stores coming from sole producers.^{lxxv}

"There are numerous examples of how these acquisitions often result in the shutdown of distribution centers, diminishing critical food infrastructure and food access for entire towns and local communities.^{Ixxvi}"

"Just in time" procurement strategies — which require producers and distributors to be "at the ready" with available products for retailers — have also contributed to fragility and consolidation in the food supply chain. Companies' desire to increase short-term profits, at the requests of investors, has led to cost and capacity cutting in infrastructure and inventory.^{lxxvii} This inventory reduction led to a decline in capacity for warehouses and a reduction in rent, utilities, and labor.^{lxxviii} Just-in-time strategies have major forecasting risks^{lxxix} as cycles of demand can fluctuate due to any exogenous shock.^{lxxx} This can result in late deliveries and empty store shelves, as we have seen during the coronavirus pandemic. This also results in food producers, particularly perishable goods producers, throwing away their food.^{lxxxi} It is difficult for food producers, especially those that supply major retailers, to pivot to smaller retail outlets because of difficulties in changing production equipment and practices, and distribution systems.^{lxxxii}

Meat processing and grocery distribution illustrate just two of numerous risky bottlenecks at every step along the food supply chain. From egg shortages driven by just one genetic change by one dominant chicken genetics firm, to private equity firms rolling up and neglecting to invest in critical cold storage infrastructure, the vulnerabilities created by rampant food systems consolidation are almost too numerous to name.^{Ixxxiii} But a common characteristic is clear: Putting too much control over food production in too few hands creates inherent risk, especially when those powerful few prioritize short-term profits over the public interest.

II. Models of Food Systems Resilience

While the COVID-19 pandemic exposed many vulnerabilities in our food system and national food security, it also demonstrated which businesses and business structures are best suited to adapt to crisis and serve communities. Principally, it revealed the importance of having a diversity of business forms and scales. Nondominant food businesses and organizations, including small-scale processors, direct-to-consumer food producers and businesses, nonprofit organizations, mutual aid collaboratives, and cooperatives, experienced unprecedented demand for their services and stepped in to feed people when concentrated corporate systems collapsed. These more resilient food providers benefited from either shorter supply chains or prioritization of democracy, diversity, and equity as a part of their organizational design.

CASE STUDY 1: REGIONAL FOOD SYSTEMS

In the aftermath of the pandemic, experts are still studying which food systems were able to withstand widespread disruption. Many are interested in studying regional food systems. Their hypothesis is simple: A shorter, community-focused supply chain will be less vulnerable to disruption along the chain and more able to adapt.^{lxxxiv} This is true for American researchers and scholars around the globe: In an analysis of the Chinese food system's response to the pandemic, the Food and Agriculture Organization of the United Nations found that "fostering local food production and strengthening linkages and effective synergies between urban centers and rural territories contribute to resilience of local food systems."^{lxxxv}

"Nondominant food businesses, including small-scale processors, direct-to-consumer food producers and businesses, nonprofit organizations, mutual aid collaboratives, and cooperatives, experienced unprecedented demand for their services and stepped in to feed people when concentrated corporate systems collapsed." Existing decentralized regional markets exemplify the potential for resilience. While some small and midsize farms suffered during the pandemic, many prospered. The key to success seemed to be diversification within a decentralized market. Small farms, like G. Flores Produce in Virginia, sold a variety of crops into a diversity of markets, and could easily pivot to meet new demand, and thrive during the lockdown.^{Ixxxvi} As Jordan Green of J&L Green Farm recounted in an interview, "If you put 50 percent of your business in any one thing and it changes, you're done." The Greens raise pigs, chickens, turkeys, and cattle on 200 acres in Virginia. They sell direct to consumers via an online platform and experienced their best year to date during the pandemic. Notably, they own an on-farm processing facility, so they were not crippled by the shutdowns of centralized processors. When sales boomed, they sold out of four months of inventory in only six weeks. The Greens coordinated with other small farms that had relied heavily on sales to restaurants and pivoted to becoming wholesalers as well.^{Ixxxvii}

Interest in community-supported agriculture programs (CSAs) also surged in the spring of 2020 amid grocery store shortages and restrictions on in-person shopping. Google searches for "community-supported agriculture" quadrupled during this time.^{Ixxxviii} Several farms reported record interest and waitlists, and so far in 2021, CSA demand seems to remain high even as cities lift COVID-19 restrictions.^{Ixxxix} Local food aggregators also saw spikes in demand, especially for food box subscriptions. The mid-Atlantic local food distributor 4P Foods employs six times more people than before the pandemic.^{xc} This wasn't just true in the U.S.: Sales of locally grown vegetable boxes doubled in the first six weeks of the U.K.'s lockdown.^{xci}

"The Greens coordinated with other small farms that had relied heavily on sales to restaurants and pivoted to becoming wholesalers as well.^{xcii} "

Regional food hubs and aggregators also stepped up to find new markets for farmers who lost access to foodservice and institutional channels while feeding people in need. The Common Market, a nonprofit food distributor based out of Philadelphia, connected farmers who had lost their usual market with community organizations and schools. In 2020, the Common Market coordinated with 165 farmers to distribute more than 31 million meal equivalents.^{xciii} Their Farm-Fresh Box program was massively successful, reaching over 32,000 families, and investing over \$480,000 in local economies.^{xciv} Common Market co-founder Tatiana Garcia-Granados attributes the organization's success to short supply chains and the direct relationships afforded by being a small,

community-centered organization. "We already had strong relationships with farmers, community organizations, and schools." Garcia-Granados recounts. "Some of the larger projects were not able to connect [people with food] as quickly."^{xcv}

The Common Market was one of 200 recipients of the USDA Farmers to Families Food Box contracts, ^{xcvi} and is a clear success story of the program. However, many small distributors, who may have been best suited to coordinate local communities, were excluded from the program in favor of large, and in some cases entirely unprepared, distributors. Procurement language proved to be vitally important: Language specifically tailored to small and midsize operations had greater accessibility and was ultimately more effective. As the Farmers to Families Food Box program continued into subsequent funding phases, contracts increasingly went to more national corporate providers over regional food hubs and cooperatives.^{xcvii} Contracts also went to some dubious contractors including an airport kiosk company, a high-end caterer, and an export management firm.^{xcviii} In the end, many contracts failed to deliver what they promised, and food-aid professionals estimated that USDA paid far too much for the food and service.^{xcix}

"Regional food hubs also stepped up to find new markets for farmers who lost access to foodservice and institutional channels while feeding people in need."

But lack of USDA funding did not stop other regional food hubs from stepping up. The Western Montana Growers Cooperative and the Mission Mountain Enterprise Center, with support from the Headwaters Foundation and the Montana Farmers Union, also developed a locally sourced hunger relief box program, despite not being offered a contract in USDA's first phase of Farmers to Families Food Box funding.^c The program delivered some 600 boxes a week to 20 locations across western Montana and the Flathead Reservation.^{ci}

The resilience of small and decentralized food processors was exemplified during the early days of the pandemic. "When everything falls away around us, we'll be standing here doing what we've always been doing." Heather Marold Thomason, the butcherfounder of Philadelphia's Primal Supply Meats, told Civil Eats in a 2020 interview.^{cii} One key element to resilience was the scale and personal connections that made accommodating the new requirements a possibility. Many local processors had an easier time implementing worker protections like social distancing, sanitization, and

compartmentalizing teams, and thus were able to avoid closures.^{ciii} When the largest processors began to shut down, local processors across the country faced higher demand than ever. Cypress Valley Meat Company in Arkansas, for instance, operated all five of its processing locations at maximum capacity.^{civ} Mike Callicrate of Ranch Foods Direct saw his business double from the year before.^{cv} Even while operating at full capacity, small processors were largely unable to offset the closures of the largest processing plants. Small plants quickly backlogged; as early as May 2020, some plants were completely booked through June 2021.^{cvi}

Several states allocated COVID relief aid to small processors. Arkansas, for instance, awarded \$5 million in grants to local processors.^{cvii} Jeff Hodges, who operates a small processing facility in Iowa, put \$33,000 of federal aid toward new processing equipment.^{cviii} However, to substantially increase production, he estimates he would need closer to \$750,000.^{cix} While emergency federal aid is helpful to keep small processors afloat, the USDA must commit to fundamentally restructuring the supply chain for resilience. This undoubtedly means a sturdy network of small and midsize processors.

According to the Federal Emergency Management Agency, "Building resilience within, and providing for the rapid restoration of, supply chain systems is key to responding to any catastrophic incident.¹"

Despite their potential, more regional food production and distribution models remain on the fringe of the food system. Direct to consumer farm sales, which include CSAs and farmers' markets, made up only 0.7% of all food sales in 2017.^{cx} Even if sales from CSAs and farmers markets triple in the aftermath of the pandemic, they would still present just 2.1% of all U.S. food sales. Consolidation exacerbates the gulf between the largest processors and distributors and the smallest. For instance, an industrial hog plant can process upward of 10,000 pigs a day, while smaller plants process 200 or even just 20 hogs a day.^{cxi} Terry Houser, a meat processing expert at Iowa State University, told the Iowa Gazette, "Small plants cannot replace the big plants when they go down." Corporate consolidation has primarily eliminated many of the midsize competitors that could have picked up the slack. The key to a resilient food system is fostering policies that allow for a more viable and vibrant diversity of businesses of different scales. With greater diversity, communities can turn to alternatives in times of crisis and a wider variety of businesses and organizations can step in to fill needs. The pandemic spurred some growth and interest in some of the smallest and most local players in the food chain, but a truly diverse system also allows for more midsize players to compete.

CASE STUDY 2: COOPERATIVES AND ALTERNATIVE ORGANIZATIONAL FORMS

Beyond just supporting businesses of different scales, the pandemic also highlighted the benefits of growing, processing, and distributing food through a variety of organizational forms. Some of the issues of worker safety and overspecialization that spurred the largest supply chain disruptions during COVID-19 are the product of highly consolidated, investor-owned business models organized around maximizing shortterm returns to shareholders. This business organization rewards the capacity-cutting, worker exploitation, and specialization that made for especially brittle supply chains.

By contrast, cooperatively owned and community-run organizations with different operational goals were more prepared to weather disruptions and support communities during this public health and economic crisis.

In the wake of global financial crises, earthquakes, and other natural disasters, experts around the world have recommended the greater development of cooperative, mutual, and member-owned firms to improve community resiliency and spur sustainable development.¹ In many instances, cooperatives outperformed investor-owned firms in responding to the coronavirus crisis by centering the interests of workers, farmers, and consumers.

"The average co-op grocery store sources from 300 vendors, while a large conventional store will source only from 30.^{cxii}"

For example, the only cooperatively owned food distributor in the U.S., Co-op Partners Warehouse, told *Civil Eats* that "we found we were able to get product where other distributors, which carried items from the same farms, could not," due to their longterm commitments to fair dealing and relationship building with their suppliers.^{cxiii} Similarly, consumer-owned co-op grocers exhibited faster decision-making in response to COVID-19 than centralized, hierarchical, corporate entities.^{cxiv} Many also avoided shortages by sourcing from a broader range of suppliers. The average co-op grocery store sources from 300 vendors, while a large conventional store will source only from 30.^{cxv} Herein shows how a more democratic business model, the cooperative, can promote beneficial attributes for resilience such as diversity and relationship building.

Worker-owned cooperatives afford similar characteristics of resilience. When workers own and manage enterprises, they naturally focus more on protecting workers over returns for shareholders. COVID-19 displayed how worker power and protection are also essential components of resiliency: Essential services cannot continue to run without safe workers. The Erreka Group, one of the 96 cooperatives that make up the Mondragon Corporation in the Basque region of Spain, temporarily trimmed wages 5% and paid workers to stay at home while sick in exchange for making up some hours in the future.^{cxvi} This protected workers from contracting COVID-19 and from losing their jobs – production did decline significantly at many Mondragon factories, but normal levels resumed months later, and entities expected to remain profitable for the year.^{cxvii} Mondragon cooperatives also contribute to collective funds to cover unemployment benefits and aid to other cooperatives, preparing for times of crisis.^{cxviii}

However, when cooperatives compete in highly consolidated markets without sufficient oversight, they can grow distant and unaccountable to their members and begin to make decisions against members' best interests. For instance, the nation's largest dairy cooperative, Dairy Farmers of America (DFA), instructed its members to dump as much as 3.7 million gallons of milk a day after losing major buyers due to COVID-19 — a financial burden that was spread across its members.^{cxix}

"Mondragon cooperatives also contribute to collective funds to cover unemployment benefits and aid to other cooperatives, preparing for times of crisis.^{cxx}"

Even though DFA directly owns or partners with a large network of processing plants, the co-op had no excess capacity in its processing network to shift milk destined for schools and restaurants to retail channels. The centralized processing and lack of redundancy created by this unregulated concentration of power had devastating effects on co-op members and consumers alike. In fact, milk supplies exceeded milk processing capacity well before COVID-19.^{cxxi} Perversely, DFA's

processing business benefits when there is a glut of milk because it can get away with paying its members less to maximize its processing profits. DFA does not share these processing profits with farmers and instead pads its managers' and executives' pockets and finances further acquisitions.^{cxxii}

Therefore, it is not enough to simply promote cooperative enterprise, but the USDA must support governance regimes designed to ensure truly democratic cooperatives. It must also use its authority under the Capper-Volstead Act to revoke antitrust exemptions for cooperatives that engage in anti-competitive behavior or act against their members' interests.

"Examples of mutual aid, solidarity networks, nonprofits, and cooperatives all go to show that community organizations beyond the investor-owned firm have great capacities to feed communities, especially those that have been historically cut off from investment and government support."

It is also important to acknowledge the important role that nonprofit organizations and rapid-response community networks and solidarity efforts, such as mutual aid and community response groups, played in feeding communities during the pandemic. Such community solidarity groups have deep roots in communities of color facing barriers to equal resources.^{cxxiii} Black American mutual aid societies date back to the 1700s.^{cxxiv}

While the full impact of mutual aid efforts is difficult to quantify, the sheer number of tracked mutual aid groups on the Town Hall Project's Mutual Aid hub ballooned from 50 in March 2020 to more than 800 by May 2020.^{cxxv} Just one mutual aid group in the historically Black Bedford-Stuyvesant neighborhood in Brooklyn delivered weekly groceries to 22,000 people, providing at least a half-million meals.^{cxxvi} Broader New York City now has at least 100 community refrigerators for distributing free food.^{cxxvii}

Hundreds of other examples exist around the U.S., and thousands more globally, as solidarity networks contributed to food security resilience in the U.K.^{cxxviii} and Rome^{cxxix}, among many other locations. Dozens of cooperatives around the world also stepped up to provide direct aid, donations, and monetary support to their members and communities.^{cxxx} A group of Minnesota cooperatives, farmers markets, and regional

food hubs formed a relief fund that bought up to \$5,000 of produce from small-scale farmers of color to redistribute to people experiencing food insecurity. ^{cxxxi} The fund bought 148,930 pounds of food from 47 farmers of color. Traditional food banks and hunger relief nonprofits also played a major role in feeding people: According to Feeding America, the number of people seeking help from food banks increased 55% and the organization's network distributed 6 billion meals between March 2020 and January 2021.^{cxxxii}

These examples of mutual aid, solidarity networks, nonprofits, and cooperatives all go to show that community organizations beyond the investor-owned firm have great capacities to feed communities, especially those that have been historically cut off from investment and government support. USDA can orient its policies to direct more resources to support such localized and community-based efforts, especially as safety nets in times of need and emergency. To build a truly resilient food system, the USDA should allocate resources to a broad array of organizations, at different scales and with different governance structures and priorities.

"Equitably distributing resources includes investing in a diversity of food system producers, owners, and participants."

Equitably distributing resources includes investing in a diversity of food system producers, owners, and participants. Today, white people own 98% of all agricultural land.^{cxxxiii} Black and Indigenous communities as well as other communities of color (BIPOC) have been systemically excluded from or dispossessed of land ownership and face structural barriers to accessing capital to start and grow food businesses.^{cxxxiv}

It is no coincidence that these communities also disproportionately experience food insecurity and a lack of access to healthy, affordable, and culturally relevant foods. BIPOC farmers and food businesses are in the best position to serve their communities. Addressing wealth and health inequities requires equitable investment in expanding the number of BIPOC farmers and food providers.

III. What USDA Can Do to Remove Risks and Support Resilience

USDA has numerous policy levers at its disposal to mitigate the risks of highly consolidated corporatized food production and invest in more resilient food systems. Concentrated corporate food producers, processors, and distributors did not naturally come to dominate food production. These entities are the product of policy choices and market rules that allow the wealthiest and largest actors to abuse their market power and violate fair market rules that have been severely diminished in recent decades or simply not enforced. The USDA should reverse this course and level the playing field for more resilient food operations.

In addition, the USDA should redirect resources to support more resilient organizations. The agency has taken a big step in this direction by planning to invest more than \$4 billion "to strengthen critical supply chains," with a focus on small meat processing, local food systems, and food distribution.^{cxxxv} We applaud this investment and hope to see these funds distributed with a particular focus on community-based organizations, cooperatives, and businesses owned by people of color and other socially disadvantaged groups. The Open Markets Institute, joined by Friends of the Earth and Food & Water Watch, urges USDA to take the following actions to create more resilient food supply chains:

A. PREVENT FURTHER MEAT PROCESSING CONSOLIDATION

Consolidated meatpacking systems created clear systemic fragilities. The USDA has broad authority to set fair terms of trade in the livestock industry using rulemaking authorities granted in the Packers and Stockyards Act (PSA), to level the competitive playing field, protect farmers, and prevent further meatpacking consolidation.

- USDA should make it easier to pursue violations of the PSA by removing the need to prove harm to industrywide competition.
- The agency should eliminate the ability of corporations to claim unfair, deceptive, predatory, or anticompetitive conduct as "a reasonable business decision" or a "legitimate business justification."
- The agency should strengthen PSA rules to ban the following harmful practices: meatpackers owning livestock, tournament ranking payment systems, retaliation, and discrimination based on race and other protected classes.

- USDA should require packers to offer the same terms to groups of small producers as offered to large producers when the group can collectively meet the same quantity commitments.
- USDA should also require packers to submit sample contracts that clearly set out currently offered terms and conditions to the Agricultural Markets Service (AMS) for posting to the public and keep records of all contracts for at least five years.
- Finally, to improve PSA enforcement, the USDA should restore the Grain Inspection, Packers and Stockyards Administration as an independent USDA agency with fully funded offices and increased staffing.

B. WORK WITH DOJ AND FTC TO HALT RETAIL AND WAREHOUSING CONSOLIDATION

Several parts of the supply chain over which USDA lacks jurisdiction nonetheless have major implications for fairness and resiliency in downstream agricultural markets. The USDA should forcefully call on the Department of Justice and the FTC to (1) enforce strict, bright-line standards for horizontal and vertical merger review; (2) ban exclusive dealing as illegal *per se*; (3) enforce the Robinson-Patman Act to combat economic discrimination favoring large and dominant firms. The USDA should take every opportunity to advocate for these reforms, including weighing in on proposed rules.

C. SUPPORT DOMESTIC SUPPLY CHAINS WITH HONEST LABELING

To protect the rights of the American farmer and the American consumer, and the safety of the American public by ensuring a greater supply of food within the borders of the United States, the Food Safety and Inspection Services (FSIS) should immediately issue a rule to require all meat to be labeled with its country of origin. USDA should also direct FSIS to close loopholes that allow foreign-raised meats repackaged in USDA facilities to be labeled as a "product of the USA." The largest meatpackers gain an unfair advantage in U.S. markets by deceptively swapping in the lowest-cost products across their international supply chains, disadvantaging American producers and, by extension, threatening the domestic meat supply.

D. RAMP UP CREATION OF FARMER- AND WORKER-CONTROLLED COOPERATIVES

The USDA should rebuild its cooperative services department, whose staffing and funding have declined significantly since its peak in the late 1960s.^{cxxxvi} Cooperative supports at the USDA need to be restored to an independent division, as they were up until 1994, with significantly more resources to support critical cooperative research, education, and technical assistance. These resources are especially important to help smaller co-ops and their members develop strong managerial and governance structures and to develop new co-ops. Where possible, the USDA should also work with Congress to appropriate more public financing opportunities to provide capital for the creation of new co-ops and help established co-ops looking to expand or stay afloat in economic crisis.^{cxxxvii}

E. REVOKE LEGAL PRIVILEGES FOR COOPERATIVES THAT DO NOT SERVE THEIR MEMBERS

The USDA should publish a policy statement and file amicus briefs that affirm the "mutual benefit of members" requirement of Capper-Volstead and that articulate what constitutes "mutual benefit" to cooperative members. ^{cxxxviii} Under the Capper-Volstead Act, the USDA has the authority to issue a cease-and-desist order if the government determines that a monopolistic co-op has "unduly enhanced" the price of an agricultural product. But the law is largely silent on USDA's authority to regulate cooperatives that may unduly suppress prices paid to members. The Capper-Volstead Act makes plain that cooperatives should be "operated for the mutual benefit of members." To protect farmers and ranchers and support legitimately democratic cooperatives, a cooperative should lose its antitrust protections and tax benefits if it is found to harm its members or work against their best interests.

F. PROTECT AND EMPOWER WORKERS

The USDA Farm Labor Survey should be redesigned to ensure fair wages for farmworkers and then regularly conducted. USDA should also revoke all recent waivers allowing meatpacking plants to run at faster speeds, given the demonstrated risk of worker injury with increased processing line speeds.^{cxxxix} The USDA should also ensure all plants abide by a federal judge's order to reinstate line speed caps in hog processing. Pandemic closures made abundantly clear that there is no resilience without workers. Protecting and empowering the people who put food on our plates are among the most essential actions for creating a just and resilient food system.

G. REVERSE DECADES OF DISCRIMINATION BY USDA

The USDA should form an independent Civil Rights Oversight Board and an agency-wide Equity Commission to improve the agency's enforcement of civil rights laws and rebuild trust with communities of color that have long experienced and continue to experience discrimination by USDA.^{cxl} The independent Civil Rights Oversight Board would assess the Office of the Assistant Secretary of Civil Rights (OASCR) conduct, investigations, data handling, and compliance with existing civil rights law. It would also be able to review and appeal decisions made by OASCR. An Equity Commission would review USDA's existing programs and assess their equity and identify barriers that farmers and food producers of color experience in accessing USDA resources, including credit. Addressing USDA's history of discrimination against farmers of color is critical to diversify farmland owners and food producers, increasing food sovereignty for marginalized communities and thus overall food systems resilience.

H. INVEST IN BLACK AND INDIGENOUS PRODUCERS AND PRODUCERS OF COLOR

The USDA should greatly expand programs aimed at supporting beginning, socially disadvantaged, and limited-resource farmers, especially targeting producers of color long excluded from federal agricultural supports or dispossessed of their land. The USDA should dedicate more resources to outreach in communities of color, including caseworkers to navigate federal programs. The agency should also prioritize Black, Indigenous, and people of color for its forthcoming supply-chain-resiliency investments. Once again, the pandemic demonstrated the resiliency of diversified modes of food production, including regional- and community-based producers. All communities, especially those that have been systemically oppressed and excluded, deserve equitable access to resources and opportunities to produce food for themselves.

I. PRIORITIZE COMMUNITY-FOCUSED ORGANIZATIONS FOR PROCUREMENT CONTRACTS

The Farmers to Families Box Program provided valuable insights for promoting more resilient food systems through USDA procurement—both for what worked and what did not.^{cxli} The USDA should incorporate these lessons learned into future procurement programs and: emphasize fair prices to farmers by removing low-bid priorities; establish program standards early on, and stick to those standards; explicitly target regional economies; provide longer contracts to reduce administrative costs and uncertainty; allow flexibility for regionally appropriate variation; and provide adequate administrative resources to AMS or relevant USDA agencies for implementation to

encourage timely communication, a greater number of smaller contracts, and quality monitoring. USDA should also terminate any federal purchasing contracts the agency has with harmful businesses that are undermining resiliency — namely, businesses that have violated labor or environmental regulations.

IV. Conclusion

A truly resilient food system will promote food sovereignty, allowing all communities to have a say in what they eat and how its produced, including greater opportunities for all communities to directly participate in their own food production and distribution. This is one of the core promises of American democracy. And the USDA can help achieve this promise by regulating unfair corporate advantages and investing in marginalized communities and alternative modes of food production and distribution.

Authors & Acknowledgements

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