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Movement Profile

Community Agriculture as Environmental Justice

"Though there is no legal definition of what a food desert actually constitutes," according to a report from the Illinois Advisory Committee to the United States Commission on Civil Rights, the term 'food desert' generally describes "neighborhoods and communities that have limited access to affordable and nutritious foods" (5). However, the report notes that, because the term fails to account for the variety of other factors involved in limited food access in the United States, including race, poverty, and access to reliable transportation, some researchers prefer the term "food apartheid" to describe the issue, which itself is more a result of structural inequities than environmental shortcomings (Illinois Advisory Committee 2011, 5).

Supermarkets

In the literature, food marketplaces are generally separated into four types: chain supermarkets, non-chain supermarkets, grocery stores and convenience stores (Powell 180). Where access is concerned, the concept of food deserts has less to do with access to sources of food than it does it the prevalence of *healthy foods*, namely fruits and vegetables which, in the United States, is typically limited to supermarkets and grocery stores, whose presence alone in an area has been shown to be associated with diets higher in fruits and vegetables, healthier diets, and lower rates of obesity (Illinois Advisory Committee 2011, 189).

Larger markets typically offer more variety and are able to offer their customer foods at lower prices, being able to take advantage of economies of scale and discounts for larger purchases (Nickelson 6). According to a 2009 report to Congress from the US Department of Agriculture titled *Access to Affordable and Nutritious Food*, "supermarket prices are 10 percent lower, on average, than those of smaller foodstores, in part, due to lower per unit costs resulting in lower margins over cost of goods sold" (Illinois Advisory Committee 2011, 14).

Lack of variety and affordability are heavily associated with overall diet quality, making these factors important in identifying communities impacted by the effects of food deserts (Powell 189).

Race

Prevalence of sources of healthy foods also vary significantly according to a neighborhood's racial and ethnic demographics. Neighborhoods with higher proportions of African Americans are especially affected. According to a report from the University of Illinois, "The availability of chain supermarkets in African American neighborhoods is roughly just one half that of their counterpart White neighborhoods" (190). According to the report from the Illinois Advisory Committee, "food desert neighborhoods are almost exclusively in African American neighborhoods" and, in turn "the problem of food deserts in Chicago is not simply a public health issue, but an urgent civil rights issue" (iii). Of the 22 Chicago neighborhoods with no grocery stores, 15 were predominantly African American (7).

Chicago is one of America's most segregated cities. According to the report, "In order for blacks to be as evenly distributed as whites in the city, 81 percent of Chicago's African Americans would have to move" (4). It is worth noting that the food desert phenomenon is mostly present on the south and west sides of Chicago (4).

Disparities in access to grocery stores and large supermarkets are unsurprisingly associated with drastically different health outcomes in non-white populations. Rates of obesity are "significantly higher among Black and Hispanic populations compared to their White counterparts" (Powell 190). And, according to the Illinois Advisory Committee report, in Chicago, these health disparities for Black communities increased for 20 of 22 of the health indicators studied between 1990 and 1998, despite improvement for the rest of the country (1). In one prominent Chicago food desert zip code "between 45 and 55 percent of the residents suffer from stage 2 chronic kidney disease" (6). The committee went on to report that secondary diseases associated with obesity costs the state of Illinois \$3.4 billion annually.

However, what these disadvantaged communities lack in fully stocked grocery stores, they retain in access to cheap fast food. Across all racial groupings, access to fast food is about equal (Food Deserts in Chicago 11).

It is worth noting that, within the range of the Chicago report, Latino neighborhoods generally have better food access than African American neighborhoods because of the presence of independent grocery stores that specifically target Latino populations (10).

The Illinois Advisory Committee's report is also supported by a comprehensive survey by the faculty at the University of Illinois and the Chicago Department of Public Health's Englewood Neighborhood Center, in which researchers conducted 103 "in-depth ethnographic interviews" with African American residents of Chicago's South Side (11).

South Side residents often expressed concerns about the environment inside of, including discriminatory marketing practices in neighborhood stores, where "they first saw chips instead of fruits and vegetables," as well as "poor upkeep and customer services" (13).

Respondents also described issues with the environment outside of stores, "such as community violence and proximity to liquor stores" (13). Dangerous neighborhood environments proved a real barrier to regular food access to many South Side residents. According to an in-person audit conducted as a part of the survey, over half of the stores in the Englewood/West Englewood neighborhoods were equipped with bulletproof glass (13).

To make matters worse, according to the report, "well over 100,000 food desert residents are children" (11). Children of low-income families in these underserved areas are particularly vulnerable to the effects of food deserts, partially because of low availability, but also because parents may have to work multiple jobs and are unable to cook at home, making them further reliant on cheap sources of nutrition and fast food (14).

Urban vs. Rural

Rural communities also suffer from the effects of inequities in food accessibility. As described in a literature review by Joseph Richard Nickelson at the School of Community Health Sciences at the University of Nevada. Focusing on disparities between select rural and urban areas in Nevada, Nickelson notes that "rural areas are of unique concern due to poor health indicators such as higher obesity rates, higher diabetes rates, lower incomes and lower educations than urban residents" (Nickelson 2017, iii).

According to Nickelson, rural food destinations in Nevada generally offer "a lower variety of high quality fruits and vegetables," as well as higher costs to consumers due to the same prevalence of small venues with less shelf space, as well as lack of access to economies of scale and bulk-purchase discounts (Nickelson 2017, 6).

Nickelson speculates that some of this limited large grocer availability in rural areas may be due to heavily tourism-based economies. He reasons that vacationers often lack access to their own kitchens, limiting desire and ability to cook healthy meals at home, which may contribute to unusually high-density rates of fast-foot venues in some areas (Nickelson 2017, 119). He also notes that government officials in rural areas may be wary of attempts to "define or designate" unhealthy venues out of fear of "overgovernment," and county-level government may lack the oversight ability to advocate for themselves or to remove potential barriers to market entry (116).

In a state where studies show that 24% and 27% of adults consume "less than a single serving a day of fruits and vegetables respectively" (Nickelson 2017, 12), these findings are especially significant.

These findings are consistent with other rural areas in the United States as well. Another study included in the review determined that 72% of food venues in rural communities in Florida were convenience stores (Nickelson 2017, 62), and, of a 1,106 square mile sample of primarily rural census tracts in Orangeburg County, South Carolina, in which the majority of the population is African American, of the 77 venues studied, 74% were convenience stores (62). Again, the study found that convenience store prices compared to nearby supermarkets (64).

Food accessibility in rural areas is also substantially affected by rates of vehicle ownership, especially in low-income communities. According to the Department of Agriculture Report to Congress, of the 40.6% of households in the United States that are located further than a mile from the nearest supermarket, nearly half (22.1%) were without access to a vehicle (Nickelson 2017, 19).

Part 2: Solving the Problem

Though access to affordable and nutritious food is by no means a new issue, the last century's move towards globalization, industrialization, and urbanization has certainly been significant in the creation of food deserts in America.

Rosing and Block's *Farming Chicago* describes Chicago's agricultural history from the Miami and Potawatomi peoples' cultivation of corn, squash, beans, and nuts in northeastern Illinois to

the city's sudden transition to one of America's major centers of grain aggregation and meatpacking after the introduction of the railroad in the 19th century (2017, 28-29).

For much of Chicago's first century, the city produced much of what it needed within its borders, or very nearby, including grain, vegetables, and dairy (Rosing and Block 2017, 29). By the 20th century, Chicago was America's hub for produce trading and export (Rosing and Block 2017, 29).

Today, less than 0.2% of Illinois farm sales are consumed locally – most of food feeding the city's population travels an average of 1,500 miles before it reaches Chicago (Rosing and Block 2017, 29).

The city's legacy is not forgotten, however, despite its decline. Former Chicago Mayor Rahm Emanuel made food systems reform a large part of his platform during his first campaign, advertising a comprehensive plan to combat food deserts "based on finding creative solutions that draw on the strength of the public-private partnerships, community organizations and corporate investment" (Illinois Advisory Committee 2011, 17). As a part of his first official "Food Desert Summit," Mayor Emanuel met with six CEOs of large retail grocery stores as part of an effort to "sell the South Side" (Illinois Advisory Committee 2011, 17). Ignoring the project's ironic neo-liberal branding, Emanuel reportedly told CEOs that he wanted "low-income neighborhoods to be within a one-mile walk of a store with fresh fruits and vegetables" (Illinois Advisory Committee 2011, 18). By describing "where each had faced the greatest challenges in opening stores, from highways to transportation, security, real estate and bureaucratic red tape,"

the city was able to identify possible action to be taken in order to encourage large food retailers to locate in underserved communities (Illinois Advisory Committee 2011, 18).

Providing incentives for retailers has long been a popular model for reducing the effects of food deserts within a politician's constituency. As a part of First Lady Michelle Obama's 2011 "Let's Move" campaign, major food retailers committed to opening and expanding as many as 1,500 stores in underserved areas nationwide (Illinois Advisory Committee 2011, 18). In addition, other non-food retailers, including Food 4 Less, Save A Lot, and CVS, and Peapod have all taken action in recent years to stock additional non-perishable foods and, in some cases, fresh fruits and vegetables, in their existing retail stores located in food deserts (Illinois Advisory Committee 2011, 15).

However, providing incentives to large corporations is far from the only model for bringing healthy, nutritious food to underserved communities.

The Case for Civic Agriculture

During Chicago's industrialization over the course of the 20th century, decades before the emergence of modern zoning and welfare legislation, Chicago corporations offered their workers growing plots and settlement houses sponsored gardens for low-income residents of city tenement housing (Rosing and Block 2017, 29). As early as 1909, a non-profit entity called the City Gardens Association established 150 plots for resident growing projects at the Hull House settlement, which was at the time the largest urban farming project in the United States (Rosing and Block 2017, 29).

Today, the City of Chicago's official motto is *Urbs in Horto*, or "City in a Garden" (Rosing and Block 2017, 29).

In order to solve the problem of food deserts and pay homage to its urban agriculture heritage, Former Chicago Mayor Richard Daley, who is remembered for his commitment to making Chicago "the greenest city in the country," created the City of Chicago Department of Environment, which would oversee the construction of America's first municipal rooftop raingarden atop Chicago City Hall in 2001 (Rosing and Block 2017, 32). His administration also funded a number of projects in the 1990s intended to expand permitting for farmers markets and continue the city's legacy of urban agriculture, including the founding of NeighborSpace, a non-profit land trust for Chicago's green spaces, and Greencorps, a community gardening jobs training program (Rosing and Block 2017, 32).

Over the course of the last thirty years, sustainable food systems has become an important priority for Chicago. Informed by the 2009 *Food Systems Report* funded by the Chicago Community Trust, the Chicago Metropolitan Agency for Planning (CMAP) published a revised comprehensive regional plan in 2010, which would establish guidelines for all city planning policy for the next thirty years— its title was "GO TO 2040" (Rosing and Block 2017, 31). In Chapter 4 of the comprehensive plan, called "Promote Sustainable Local Food" (31), the first step was to "Support urban agriculture as a source of local food," ignoring the fact that the city lacked any existing zoning codes to support the food production that was already happening (32).

The American Planning Association has published a set of general and specific policies for supporting community agriculture in urban environments (APA 2007), recommending: "a comprehensive food planning process at the community and regional levels, food systems that strengthen the local and regional economy by promoting community and regional food systems, food systems that improve the health of the region's residents, food systems that support food systems that are ecologically sustainable, food systems that support food systems that are socially equitable and just, and food systems that support food systems that preserve and sustain diverse traditional food cultures of Native American and other ethnic minority communities" (2007, 11-22).

A publication from Allison Kaika and Alexis Racelis at the University of Texas Rio Grande Valley does an excellent job of describing community agriculture as it relates to civic community theory in *Civic Agriculture in Review*, describing findings that "community economies represented by local, craft production that is locally operated and independently owned were positively associated with social welfare when compared with community economies that center around globalization and mass production" (2021, 556). The study also found that communities with an abundance of small businesses and public meeting spaces were associated with "higher levels of social welfare, defined by higher median income, lower poverty rates, nonmigration, and lower unemployment" and that communities with high levels of associated civic engagement suffered from less violent crime and "all-cause mortality" (Kaika and Racelis 2021, 557).

Co-benefits of an environment rich with community agriculture include "unique and visible space for small business and community members to test new ideas, generate feedback, and learn

from other vendors," as well as higher property values, and recycling of income money into the community, acting as a powerful multiplier with profound effects for low-income communities (Kaika and Racelis 2021, 557). According to a report from the United States Department of Agriculture Economic Research Service, "fruit and vegetable farms selling into local and regional markets employ 13 full-time workers per US\$1 million in revenue earned, compared to the three full-time workers per US\$1 million in revenue earned by fruit and vegetable farmers selling elsewhere" (2021, 559). Another study included in the University of Texas report concluded that the Hardwick, Vermont's increase in "small agriculture related-businesses" resulted in a noticeable decrease in poverty rates and unemployment, earning it the nickname "the town that food saved" (2021, 559).

The same report also emphasized the co-benefit of "reflexive localism," where localized economic systems encourage a heightened awareness of community-level injustice, contributing to further community engagement and future social justice campaigns (Kaika and Racelis 2021, 560).

There are however a few risks associated with community agriculture worth keeping in-mind. First, co-benefits like higher property values associated with farmers markets and community gardening initiatives may further threaten disadvantaged communities with displacement through gentrification, making it even more important to see that community members are included in all these economic co-factors (Kaika and Racelis 2021, 559). It is also worth noting that most local farm spending is concentrated in urban areas on the East and West coasts (2021, 559), and that studies of CSA, farmers markets, and local food sales have shown that participating groups

presently skew towards white, wealthy, female, and college educated populations (2021, 562). Remembering these potential shortcomings, it is important that communities are aware of an individual project's broader context to prevent further displacement and injustice.

Planning Strategies

A project called *Planning for Healthy Places* offered two potential land use policies recommended for communities interested in community agriculture (Public Health Law & Policy 2009). They are as follows:

Open Space Protections for Community Gardens. The model zoning code language provides that a community garden can be zoned as a sub-district or sub-use within an open space zoning district. By enacting this policy, a community can protect and preserve community gardens as an open space use.

Use Zone Protections for Community Gardens. The model zoning code language provides that community gardens are an approved use of land in

residential, multifamily, industrial, and other districts added by the community where appropriate. This designation allows citizens to develop and maintain community gardens in the enumerated districts without requiring the sponsor to obtain a permit, finding, variance, or other government approval.

Cities across the country have made use of a variety of personalized policy implementations to support community agriculture. including the City of Escondido, California's "Adopt-a-Lot" policy, enabling community gardens to operate temporarily on vacant land (Public Health Law & Policy 2009, 4). Minneapolis offers garden projects free use of properties seized from landowners for unpaid taxes (2009, 6). Municipalities such as Washington, D.C., and Hartford, Connecticut have their own versions of this program and keep a public inventory of public or private land that support the effort (2009, 5).

Other municipalities have specific programs to finance potential community agriculture projects. Seattle's "P-Patch Program" provides initiatives with "bond monies, public housing funds, and neighborhood matching grants," supporting over 6,800 gardens (Seattle 2021). Seattle also hosts 16 volunteer managed community fruit orchards through their Orchard Steward Program, as well as supportive policies like a transfer of development rights with King County which offers zoning protections to 17 nearby farms, comprising 1,100 acres of farmland, to support its farmers market initiative (Seattle 2021).

An interesting project developed by students at the University of Massachusetts – Amherst's Landscape Architecture department involves the development of a 4.6-acre site in Chicopee,

Massachusetts, a designated food desert, in order to build a public space for community agriculture, either in the form of a restaurant incubator, maker space, regional food market, and/or permanent farmer's market facility (Burke et. al 2015, 2).

Community Organizations

Beyond governmental and planning initiatives, various grassroots and non-profit efforts have proven effective strategists in fighting the battle against food insecurity. Activists at Food Desert Action, a Chicago-based non-profit, were able to buy a used Chicago Transit Authority bus for \$1, which they retrofitted to become a fruit and vegitable stand that operates in the Austin and North Lawndale neighborhoods, both of which were classified as food deserts – the bus's name is "Fresh Moves" (Illinois Advisory Committee 2011, 17).

Additionally, an article from the Chicago Tribute highlighted a series of South Side activists involved in creating urban agriculture initiatives. DeAndre Brooks, the farm manager at a non-profit called **Growing Home**, spearheaded the organization's effort to bring fresh produce and job training to candidates with "criminal records, childcare issues and housing needs" (Lukach et. al 2019). Erika Allen, the co-founder and CEO of the Urban Grower's Collective, has established multiple urban farms, and has made community engagement a priority (Lukach et. al 2019).

Erika said in her interview with the Tribune:

Food is a tool of resistance and resilience but we've always used it to heal ourselves. It really is important to think about how, if we're not in control of our food system, we're really not free.

And we need to think about how we take care of ourselves and each other through food."

(Lukach et. al 2019).

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