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JUST SOUTHERN FOOD:
FOOD JUSTICE FOR THE MISSISSIPPI DELTA

A Thesis

Presented for the

Master of Arts

Degree

Department of Southern Studies

Center for the Study of Southern Culture

The University of Mississippi

Christian Owen

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ABSTRACT

The primary objective of this research is to promote food justice for the Mississippi Delta by investigating facts about the intersections of extreme poverty, food insecurity, and chronic illness in the Mississippi Delta. By exploring relevant literature and highlighting current initiatives, this work looks at the semantics of food justice and related terms, discusses challenges unique to the Mississippi Delta, and broadly characterizes public health models with the greatest potential for food justice advancement in this region. Pivotal to interpreting food justice not only for the Mississippi Delta or the Global South, but for any community, is a clear understanding of what these concepts are, not just as talking points in theoretical conversations, but as applied, real solutions and initiatives. The premise for this research is that understanding of food justice goals paired with the Mississippi Delta condition facilitates turning well-intentioned concepts into actionable steps.

Keywords: food justice, public health, wellness, Mississippi Delta, Global South, poverty, food insecurity, chronic illness

DEDICATION

This work is dedicated to Davis; Davis, Jr.; Catherine; and Mac.

ACKNOWLEDGMENTS

I would like to thank my thesis advisor Catarina Passidomo and review committee members Andrew C. Harper and Rex Jones.

AUTHOR'S NOTE

Writing about the Mississippi Delta may be problematic for me because it is my home and, while what affects one person ultimately touches everyone, I do not experience the daily struggles faced in populations affected by issues of poverty and food insecurity. In a sense, after living in the South most of my life and specifically in the Mississippi Delta for 25 years, I know too much, *i.e.*, too much to share the full actuality with others. Or, because I am sensitive to and mindful of intricate nuances of the Delta story as a long-time resident, I could also be considered one of the best navigators for this work. But the idea that I, or anyone, can verbalize step-by-step solutions for a vast, complicated landscape of interrelated issues, cultures, histories, and opinions is irresponsible and belittles the importance of what is at the center of it all: people. However, it is equally irresponsible to remain silent.

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INTRODUCTION

This research was prompted by documented, widespread issues of poverty, food insecurity, and chronic illness in the Mississippi Delta region. There is arguably no better example of a broken food system than here. Empirical evidence has shown that high levels of unemployment, low access to affordable and healthy food, high food insecurity, as well as high rates of non-communicable diseases such as diabetes and obesity (Hossfeld et al., 2019) characterize Mississippi, especially in its rural communities. Collective findings by Clemson Behavioral, Social, and Health Sciences professor Leslie Hossfeld, MSU Sociology professor Laura J. Kerr, and Judy Belue of the Delta Fresh Foods Initiative, have summarized that of 82 counties in the state of Mississippi, 63 are classified as food deserts, or areas that have limited access to healthy and affordable food, limited amounts of food, and high rates of poverty, all of which contribute to health issues such as obesity, diabetes, and heart disease. (Hossfeld and Rico Mendez 2018; as cited in Hossfeld and Belue, 2019, p. 1)

As Ruth Cummins observed in a story for The University of Mississippi Medical Center in 2017:

Thousands still live in what's called a food desert – communities with no grocery store and little or no access to fresh fruits and vegetables. They live with food insecurity, which means they're unsure where their next meal will come from. Mississippi leads the nation in food insecurity, with 22 percent affected, much of it in the Delta. (Cummins, 2017)

Poverty and food insecurity are linked global problems, contributing significantly to poor nutritional and health outcomes among the affected populations. The Mississippi Delta region exemplifies one of the largest focuses of countryside, persistent food insecurity and poverty in the United States (Kulo, 2020) and comprises 18 counties. Meter and Goldenberg (2014) have noted that when traveling through the Delta, a person is instantaneously captured by the noticeable lack of vegetal farming, sparse availability of healthy and fresh food, and the unavailability of grocery stores.

Besides the high degrees of poverty and food scarcity in the Mississippi Delta, the region also has the highest rates of chronic illnesses such as obesity, diabetes, and heart diseases. Risk factors for chronic disease are generally categorized into one of two categories: modifiable and non-modifiable. Modifiable health risk behaviors such as lack of physical activity, poor nutrition, tobacco use, and excessive alcohol consumption are responsible for much of the illness, suffering, and early death related to chronic disease, and it has been estimated that if major risk factors for chronic diseases such as these were eliminated, at least 80 percent of all heart disease, stroke, and type 2 diabetes, as well as 40 percent of all cancer cases could be prevented (Short, 2014, p. 12). Obesity rates in the nation have been reported to be 40.8 percent of the population with the lowest life expectancy of 74.5 years (Mendy et al., 2018). In 2011 in Mississippi, seven of the leading causes of death were related to chronic diseases such as diseases of the heart, cancer, chronic obstructive pulmonary disease, stroke, Alzheimer's disease, diabetes and kidney disease, and 55 percent of all deaths in Mississippi were due to cardiovascular-related diseases, cancer, and diabetes (Short, 2014, p. 8). Additionally, in 2013 it was reported that Mississippi's cardiovascular disease death rate was the highest in the nation; the state ranked second in the United States for overall diabetes prevalence among adults;

Mississippi had the second highest age-adjusted death rate due to cancer in the nation and ranked second in the country for obesity prevalence among adults and sixth in the for overall smoking prevalence among adults. According to recent statistics by the Centers for Disease Control and Prevention (CDC) (2017), the major leading causes of death in Mississippi included non-communicable maladies such as heart disease, diabetes, and chronic lower respiratory diseases. Hossfeld et al. (2019) pointed out that the limited access to adequate food and nutrition and poverty in the Mississippi Delta region have significantly contributed to health issues such as heart diseases, obesity, and diabetes.

According to Mendy et al. (2018), food insecurity in the Mississippi Delta has been recognized as a significant public health concern. It is associated with increased risks of cardiovascular diseases among its populace. According to the authors, food scarcity is also linked with poor nutrition and diet, which is related to a range of detrimental health consequences, including diabetes, depression, heart disease, cardiovascular health problems, amplified healthcare utilization, and poorer general health. Similar findings by Champagne et al. (2007) revealed that the consequences of poverty and diminished nutrients intake and food factors have compromised the health status of both children and adults and play an integral role in controlling and preventing chronic ailments in Mississippi. Therefore, based on the high rates of poverty and chronic illnesses, unavailability of grocery stores, and the inadequacy of nutritional food, it can be concluded that the Mississippi Delta Region contributes to Mississippi's reputation as one of the most food-insecure states. In fact, Rozier revealed (2018) that Mississippi was identified as the "most food insecure state in the country" for eight subsequent years as reported by the nationwide network of food banks, Feeding America. A similar study reported that in 2018 the state of Mississippi's 15.9-percent food insecurity rate

was significantly above the national average of 11.1 percent, placing Mississippi second in the nation behind New Mexico, which was reported to have a food insecurity rate of 16.8 percent (Reeder et al., 2020).

Statistics from the University of Mississippi's Center of Population Studies (CPS) revealed that more than 550,370 people in Mississippi face hunger annually, with 155,560 of them being children (Haggard et al., 2017). Moreover, the region's poverty and food insecurity situations have been coupled with significant health issues, particularly heart diseases, diabetes, and obesity, all of which are significantly higher in the state than in other states in the country (Hossfeld et al., 2019).

This research also identifies three characteristics of food system initiatives for the Mississippi Delta and similar locations that promote a sustainable, just state of health and wellness. First, an honest evaluation of motivations and objectives is essential. Second, a food system plan with longevity requires movement towards a participatory approach (Loo, 2014). Third, the circumstances of a place or region provide crucial context for project design (Lyson, 2014). Implementing positive change within the Mississippi Delta poses unique challenges such as a rural setting, demographics, historic issues of racism and food insecurity, a lack of substantial precedents or resources, and even the complex Southern diet, especially popular in what is known as the Deep South, a diet defined not only by nutrition and content, but also by culture, access, and social norms (Kolasa, 2020).

An overriding theme of *Just Southern Food: An Interpretation of Food Justice for the Mississippi Delta* is the Global South mindset that the Mississippi Delta provides an arena for research which can be replicated in comparable locations worldwide. James Cobb, author of *The Most Southern Place on Earth: The Mississippi Delta and the Roots of Regional Identity*, said he

wrote about the Delta because “the story of the Delta might afford the opportunity to study in sharply defined geographical miniature the rich history and culture of the Deep South” (Cobb, 1992, Loc. 23). Looking beyond the Deep South from Cobb’s same vantage point, it is also enlightening to place the Mississippi Delta alongside places throughout the world with similar histories and struggles.

As will be discussed in this work, one of the greatest hindrances to campaigns for ethical eating, food justice, and related philanthropic campaigns is ambiguity. Often publicized in the context of extremist politics and market trends as opposed to being emphasized alongside grassroots, innovative initiatives, many good, sustainable food system ideas might be lost in an “intention-action gap” (White et al., 2019). This research is a literature review that examines material relevant to food justice and the Mississippi Delta with an emphasis on the intersections of extreme poverty, food insecurity, and chronic illness. The aforementioned issues are first analyzed in the context of internal and external historical trauma that has impacted the Mississippi Delta. To combat ambiguity, an overview of food justice semantics alongside popular, analogous concepts, as well as a discussion about public messages related to nutrition and the agriculture-food-health nexus are included. Further examination of food justice for the Mississippi Delta is documented according to community development and local food initiatives.

CHAPTER I
HISTORICAL TRAUMA

*Reasons for Chronic Illnesses, Food Insecurity, and Extreme Poverty
in the Mississippi Delta*

The Mississippi Delta refers to the northwest corner of the state of Mississippi, bounded by the Mississippi and Yazoo rivers, a region known for layers of rich, alluvial soil, which led to its central role in the agricultural economy of the South (Elleh, 2016, p. 80). In contrast, the geographical delta of the Mississippi River empties into the Gulf of Mexico. One well-known description of the culturally defined Mississippi Delta provided by David Cohn (1967) tied the region to well-known landmarks: “The Delta region begins in the lobby of the Peabody Hotel in Memphis and ends on Catfish Row in Vicksburg” (Elleh, 2016, p. 80). The core counties of the Mississippi Delta’s culturally defined region and the focus of this research are Bolivar, Coahoma, Humphreys, Issaquena, Leflore, Quitman, Sharkey, Sunflower, Tunica, and Washington. The counties of Carroll, DeSoto, Grenada, Holmes, Panola, Tallahatchie, Tate, Warren, and Yazoo mark the boundaries of Mississippi’s cultural Delta, also contain alluvial deposits, and have been “part of the Delta’s human history” (Wilson, 2020).

For seven centuries, Native Americans lived in the Delta and dominated the Mississippi River Valley until the arrival of European explorers. In 1541, Hernando de Soto led Gulf Coast expeditions across the Mississippi River. It has been suggested that these first Europeans to traverse the Delta crossed the river at the location of present-day Tunica County. Over the next

200 years, white settlers and their enslaved workers transformed the Delta land, eventually building vast cotton plantations that replaced the natural forests, canebrakes, and swamplands (Wilson, 2020). Most of the area we now call the Mississippi Delta was originally swampland. Here is a vivid description from Luther Brown (2009), Director of the Delta Center for Culture Learning at Delta State University:

The overall statistic is that over 90 percent of what we call the Mississippi Delta today was swamp wilderness in 1860, so at the beginning of the Civil War, only 10 percent of the delta was settled. That 10 percent was in a very specific part of the delta, which was the natural levees along the major rivers; these are the banks of the rivers, mainly the Mississippi but also the Yazoo and some of the smaller ones—anything that was navigable, because people could get there by boat. (Brown, 2009 as cited in Elleh, 2016, p. 80)

Ultimately, the Mississippi Delta swamp and wilderness revealed an alluvial plain, east of the river and west of the Mississippi Hill country, with some of the most fertile soil in the continental United States. Paired with the warm climate, the Delta landscape would prove to be ideal for growing cotton, a discovery that not only defined a soon-to-be booming agricultural economy, but also, because of the manpower farming cotton required, kickstarted a series of human rights issues grounded in an industry primarily supported by American slavery, issues that are still embedded in societal trials of today.

Poverty issues in Mississippi are interwoven with the history of agriculture and, in turn, the most rural parts of the state and the center of American slavery. The transatlantic slave trade, which began in the 15th century, caused the involuntary migration of millions of enslaved people to the New World, the Caribbean, and South America with an estimated 500,000 taken directly

from Africa to North America (Scruggs, 2019). The domestic slave trade started in the 1760s and represented an additional layer of displacement and family separation. About 1.2 million African Americans were moved from the upper South to the Deep South, which includes the Mississippi Delta, from areas in Virginia, Maryland and North Carolina, “forced to go by foot and by train to the Deep South to develop cotton plantations” (Scruggs, 2019, March 11).

A significant number of newly emancipated African Americans stayed in the South after the Civil War, and many of their descendants still reside there to date. Even in the post-Civil War era, the fertile Delta was “the destination for tens of thousands of migrants from throughout the South hoping to join the booming cotton industry” (Elleh, 2016, pp. 80-81). Over time, as fewer landowners gained control over larger expanses of farmland, a system of sharecropping evolved, which was a method of securing low-priced labor for production of the labor-intensive cotton crop:

In the sharecropping system, a landowner would use tenant farmers to work the land, providing the tenant with housing (and occasionally equipment). In return for this ‘furnishing,’ the landlord would take from the tenant farmer—by contract—a portion of the crops produced (typically around 50 percent). The sharecropping system, in one form or another, had existed previously in Africa, Ireland, Scotland, and some Islamic cultures, but was used most extensively in the post-Civil War Southern United States. (Elleh, 2016, p. 81)

The sharecropping system made room for dishonest landowners to take advantage of tenant farmers. Landlords oversaw all accounting and could pay their tenant farmers in scrip. Because this form of payment was “valid only at the plantation commissary, the sharecropper never knew if they were getting a fair deal” (Elleh, 2016, p. 81). If the sharecropper’s seasonal pay was

inadequate, the landlord would extend further credit for the purchase of necessities such as seed for the subsequent farming year. In turn, an extended debt cycle could leave the tenant farmer in a state of continued economic servitude (Elleh, 2016, p. 81), and a cycle of limiting opportunity for African American and poor white sharecroppers was perpetuated.

Although blacks outnumbered whites, the sharecropping system that replaced slavery helped ensure they remained poor and virtually locked out of any opportunity for land ownership or basic human rights. The system grew from the struggle between planters and ex-slaves on how to organize production. Planters wanted gang labor, like they had used under slavery, to work the fields; freed people wanted to own and work their own land. (PBS, n.d., Locked into Poverty section)

Conditions on the plantations aside, opportunities to work in the familiar agricultural sector proved a powerful draw for formerly enslaved people to the Delta (Elleh, 2016, p. 82). By 1940, African Americans comprised seventy-two percent of the region's population (16th census of the United States, 1940), a majority of the population. However, they remained vulnerable to social and political challenges such as Mississippi's Black Codes of 1865, a list of crimes such as vagrancy, animal cruelty, and possession of firearms, that were specifically applied only to African Americans, and Jim Crow laws, which were a legal platform for the practice of segregation from 1840 up until the 1960s (Elleh, 2016, p. 82).

Closely associated with slavery is racism, which is another reason for the persistent poverty in the Mississippi Delta. According to T.J. Ward (2017), regardless of whether the Delta region receives significant federal funding annually, systemic racism has made poverty eradication difficult for Blacks and Hispanics. Consider *Pigford v. Glickman* (1999), a historic civil rights settlement in which the United States Department of Agriculture (USDA) was

accused of discriminating against African American, and in subsequent law suits, against Hispanic, American Indian, and female farmers in various programs, but particularly in its Farm Service Agency loan programs. The suits generally accused USDA of unlawfully denying loans, processing loan applications slowly, constructing unnecessary obstacles in the loan application process. These burdensome barriers imposed by the federal government have contributed to the marginalization of races in the Mississippi Delta such as Hispanics and African Americans, who are most affected by food insecurity and poverty.

Studies have exposed a relationship between food insecurity and racial or ethnic discrimination in Mississippi. For instance, food insecurity in Arkansas, Louisiana, and Mississippi, categorized as the “Lower Mississippi Delta” region in a study by Stuff, et al. (2004) revealed that the prevalence of hunger in Lower Mississippi Delta households with white children was 3.2 percent and in households with black children was 11.0 percent. Also, within the Lower Delta, “groups with the highest rates of food insecurity were households with income below \$15,000, black households, and households with children” (Stuff et al., p. 173). In the United States, being of a minority race has been associated with an increased risk for experiencing food insecurity and an increased risk for development of chronic diseases (Reeder et al., 2020). “African American and Hispanic headed households have greater than average rates of food insecurity and are also at a greater risk for type 2 diabetes, hypertension, and cardiovascular disease” (Reeder et al., 2020, p. 2). And specifically, Reeder et al. (2020) reported that in Mississippi, the African American population has the highest mortality rate due to heart disease, hypertension, stroke, and diabetes and a significantly greater prevalence of food insecurity compared to Mississippi’s Caucasian population. “These data consistently demonstrate that food insecurity, race, and health outcomes are all closely related” (Reeder et al., 2020, p. 2).

Around the last quarter of the 20th century, the federal rule through the United States Department of Agriculture (USDA) started quantifying domestic food insecurity to comprehend if households have adequate and reliable nourishment to live healthy and active lives (Berkowitz, et al., 2019). As a result, food insecurity in the Mississippi Delta region has been majorly associated with the populace residing in food deserts (Hossfeld et al., 2019).

Extreme Poverty

Mississippi has been identified as the poorest state in the United States, with its average household income standing at \$45,792 in 2019, which is the lowest in the country (Hossfeld et al., 2019). Additionally, Mississippi's poverty rate is at 19.6 percent, significantly higher than in any other state, and the Delta's poverty rate is much higher still. According to a *Clarion Ledger* report by Emily Wagster Pettus (2017) of the Associated Press, the numbers have been even more astounding in the recent past when compared to the national poverty rate of about 15 percent in 2017. At that time, Pettus (2017) reported a 22-percent poverty rate for Mississippi, and in most Delta counties, as much as 30 to 40 percent.

According to Hossfeld and Rico Mendez (2018), 50 counties out of the 82 counties in Mississippi are perceived to be poverty obstinate or characterized by persistent poverty. Persistent poverty is measured in a time dimension. Therefore, these regions have poverty proportions of more than 20 percent over the past three decades as determined by the decennial population and housing census.

Three measurements of poverty – monetary, social, and capability (Kwadzo, 2015) – reveal that the Mississippi Delta's issues are trifold. A measure of monetary poverty “is a commodity- or utility-based approach that defines poverty in the context of the distribution and

utilization of goods as well as the fact of individuals possessing such goods” (Kwadzo, 2015, p. 411). Social exclusion poverty describes a person’s lack of access to certain commodities or services common to others in society (Laderchi et al., 2003 as cited in Kwadzo, 2015, p. 411). “The concept of social exclusion was advanced in industrialized countries to demonstrate the process of marginalization and deprivation” (Kwadzo, 2015). Capability poverty refers to deprivation from the ability or opportunity to developing capabilities “to achieve a certain level of functioning” and measures “the individual’s abilities ... to adequately fulfill certain crucial roles at a minimum, whereas *functioning* refers to what a person has succeeded in achieving or doing with his or her abilities” (Laderchi et al., 2003; Saith, 2001; Sen, 1985 as cited in Kwadzo, 2015, p. 413). The later benchmark appears to be a close relative of access to education, training, and opportunity.

While historic hardships of poverty endured by enslaved people, sharecroppers, and tenant farmers as well as the coexisting health challenges ensued are undeniable, it is especially disheartening to realize that progress in more recent years is tainted with manipulation, apathy and inaction. Some believe that a detrimental system of federal paternalism soon replaced the former plantation paternalism, a contentious point of view that has been widely discredited among those who study poverty and suggests too much government support is partly to blame for persistent poverty. Without diving too deeply into the politics of poverty and public policy debates, it is foundational to consider that defining a paternalistic condition depends on the rationale behind it and the way in which harm and consent are defined (Thomas and Buckmaster, 2010). That is, because the institutionalization of oppressive societal norms has been a theme throughout world history, it is right to question the motives behind any public policy put forth to *assist* a population by asking who that policy truly benefits both short- and long-term. However,

following the era of plantation paternalism, the poor continued to fall through the cracks of yet another indisputably confounded system (Cobb, 1992, Loc. 4480). While there were many planters who guaranteed and maintained medical needs for their tenant families, “the collapse of a labor-intensive agricultural system left penniless blacks to fend for themselves whenever illness or injury struck” (Cobb, 1992, Loc. 4480). As Cobb recorded about healthcare in a post-sharecropping era when “hospitals operated on a ‘fee for services’ system,” it was illogical to expect a positive outcome for the sharecropper population because, “Cash and carry medicine doesn’t work when there is no money” (Cobb, 1992, Loc. 4486). The Delta was also an unfavorable healthcare environment for its impoverished blacks in the mid-1960s:

One physician testified that 81 percent of 501 Washington County children tested were anemic. A survey of 509 families in Washington and Sunflower counties showed that fully 60 percent of them were receiving less than two-thirds of the generally recognized minimum daily dietary requirement. This figure stood in stark contrast to a national figure of only 13 percent. Infant mortality statistics were similarly striking. The mortality rate for black infants in the Delta was 30 percent higher than for other Mississippi blacks and 109 percent higher than that for whites in the Delta. The infant mortality rate among black Mississippians actually rose as the farm economy modernized, climbing from 40.8 deaths per 1,000 births in 1946 to 55.1 in 1965. The Delta counties were at the cutting edge of this trend. (Cobb, 1992, Loc. 4502-4507)

One inescapable cause-and-effect relationship is that of poverty and health. Research has shown that “their effects on each other are often bidirectional: poverty leads to poor health and poor health leads to poverty” (Jack, 2007, p. 1). Poverty is extreme for the approximately 51 percent of Mississippians who live in rural counties and is indicative of “conditions that reduce

household savings, lower learning ability, and reduce physical and emotional well-being, all of which endanger people's health" (Jack, 2007, p. 1).

Determinants of a person's state of health may be biological, socioeconomic, psychosocial, behavioral, or social. Social determinants of health include education, income, occupation, and access to health care, and chronic disease rates are frequently elevated among socioeconomically disadvantaged groups as well as some minority populations. Of note, Mississippi has the highest percentage of non-whites (40 percent) among all 50 states, and the population is generally poorer and less educated than the rest of the nation (Short, 2014, p. 13).

In the mid-20th century, meals in a severely impoverished Delta home might have been bread and Kool-Aid or water for the children and nothing for the adults. A common dinner menu might have included baked beans, cornbread, rice, peanut butter, and a canned meat substitute. "Lacking refrigeration, such a home might reveal rat- or roach-infested commodities stacked in the corner" (Cobb, 1992, Loc. 4518). It was reported by a team of physicians of the day that children were "living under 'such primitive conditions that we found it hard to believe we were examining American children of the twentieth century'" (Cobb, 1992, Loc. 4523). These observations are reminiscent of Ellen Meacham's book, *Delta Epiphany*, which documented Robert Kennedy's visit to the Mississippi Delta in April 1967 as part of a Senate subcommittee investigation of poverty programs. Kennedy saw children malnourished to a degree that, without witnessing such poverty first-hand, would have been thought impossible in America at the time (Meacham, 2018).

In the 21st century, data from the Equality of Opportunity Project (Opportunity Insights, n.d.), shows that "the upward mobility odds of a child born in the Delta are the worst in the country. ... In those areas, there is nearly a 40 percent chance that a child born into poverty will

never rise out of the lowest income bracket. In other words, the Delta is an ‘opportunity desert’” (Walton, 2018, October 8). Opportunity in recent years has proven to be even more scarce for poor Mississippians who have “faced heavy job losses in industries that once provided high wages and good benefits” (Jack, 2007, p. 1). According to Jack (2007), from 2000 to 2003, median household incomes fell by \$3,910 to \$32,728. In a cycle of defeat, job losses have led to decreases in income and increases in bankruptcies, and a declining number of people with health insurance (Jack, 2007).

Low educational attainment in the Mississippi Delta can also be associated with the persistent poverty rates in the region, with most of the state’s students not accessing and acquiring higher education. In addition, with some of the students leaving Mississippi for other states, the Mississippi Delta has experienced bad “brain drain” problems (Rutherford et al., 2011). High unemployment rates in the region have also contributed to the prevailing poverty rates, with limited jobs for individuals in the Delta areas (Bishaw and Glassman, 2016). Given the well-documented statistics related to poverty in the Mississippi Delta region, it is surprising to learn that, according to the National Committee for Responsive Philanthropy and Grantmakers for Southern Progress (Schlegel and Peng, n.d.), the Mississippi Delta received just \$41 per person in philanthropic funding from 2010-2014 compared to \$995 per person in New York state and \$451 nationally. Therefore, a child in the Delta has access to only one tenth of the funding that the average American child does. (Walton, 2018, October 8)

Rural Poverty

Another reason for food insecurity in the region is associated with the fact that the Mississippi Delta area is primarily rural, which is one of the reasons many residents are several

miles away from the nearest grocery store where they can purchase fresh and healthy groceries (Hossfeld, and Rico Mendez, 2018). “Rural communities make up 63 percent of counties in the United States and 87 percent of counties with the highest rates of overall food insecurity” (Feeding America, n.d., Millions of people in rural communities face hunger section).

In a study to examine the variances in the longitudinal dispersal of poverty across non-metropolitan regions in the Mississippi Delta, Parisi et al. (2007) established that the rural areas were more persistently poor as compared to the urban areas. This finding was based on the argument that rural places hardly attain economies of scale due to economic and social marginalization thus are more likely to rely on external sources, which then weaken the control of their resources. In turn, the concept of environmental justice comes into play, because when a community of people cannot pursue the American dream because they do not have access to environmental resources that are helpful for achieving their highest potential as citizens of the United States, that community is a victim of environmental justice (Owen, 2021). “There needs to be fair and meaningful involvement of all people, regardless of race, origin, or income concerning the development and distribution of environmental laws, regulations, and resources” (EPA, 2021 as cited in Owen, 2021, p.1).

A study by Champagne et al. (2007) revealed that food insecurity rates in Mississippi’s rural areas are significantly higher, as is also the case in the urban areas, due to the households’ lack of resources to acquire healthy food. According to the researchers, rural counties in the southern region of the state whose populations are not close to metropolitan centers have even higher insecurity rates than the urban counties in the northeast areas of the state. Therefore, rural poverty and lack of proximity to metropolitan areas have been associated with food insecurity in the Mississippi Delta Region.

The human faces of poverty for many Americans are the inner-city homeless who sleep on grates, beg on corners and line up, mornings and afternoons, at local parks for a cup of soup and a sandwich. But of the 50 counties with the highest child-poverty rates, 48 are rural American. Compared with urban areas, unemployment is typically higher, education poorer and services severely limited because people are so spread out . . . A lot of people believe it's got to be cheap to live there [rural area] and food has got to be more available. But cheap is relative to income. Your ability to move yourself around is limited. There is no public transportation. (Pierre, 2004, July 17 as cited in Jack, 2007, p. 1)

According to Ward (2017), the predominantly rural, primarily agricultural, and minority counties bordering the Mississippi River in Louisiana, Arkansas, and Mississippi have the highest poverty pervasiveness rates. Thus, researchers have repeatedly validated that rural households are characterized by higher poverty rates as compared to urban households. Additionally, higher poverty rates in non-metro counties in Mississippi have been associated with low income among their residents (Parisi et al., 2007).

Whether a result of government, organizational, or individual policy, it is incontrovertible that “the world of food is changing. From agriculture to discussions on public health, foodies are working hard to get the public engaged in food issues and politics. If we want a better food system, we have to keep fighting for it. Be they journalists, farmers, or simply believers in the value of real food . . .” (Brones, 2013, November 11). A good place to begin from all angles is from the vantage point of semantics, as popular concepts that have emerged from well-intentioned movements often leave the public in a quandary over what choices to make.

CHAPTER II

THE SEMANTICS OF FOOD JUSTICE

This is a time of ethical eating. No argument there. But what *exactly* does that mean? Herein lies one of the primary obstacles in developing a society where lessons in ethical eating are followed by actionable steps. An “intention-action gap” (White et al., 2019) in individual-, organizational-, and government-level food policy exists in part because the concepts are vaguely defined. The lack of a clear and consistent message regarding ethical, wise food choices, especially the more commercialized terms such as going green, local eating, opting for organic, as well as more philanthropic concepts of food insecurity, food deserts, food justice, and food sovereignty can create confusion on supermarket shelves.

Food Insecurity

According to the USDA, food security for a household means there is “access by all members at all times to enough food for an active, healthy life, including at a minimum ready availability of nutritionally adequate and safe foods and the assured ability to acquire acceptable foods in socially acceptable ways without resorting to emergency food supplies, scavenging, stealing, or other coping strategies” (USDA Economic Research, 2020, What is Food Security? section).

“Between 2007 and 2009, during the financial recession, the US food insecurity rate rose from 11 percent to 14 percent” (Rabbitt et al., 2017 as cited in Leonard et al., 2018, section 1.1).

Since that time, overall economic conditions in the US have improved, but food insecurity rates have not returned to pre-recession levels, with about a quarter of the United States population enrolled in a public nutrition assistance program aimed at alleviating food insecurity (Leonard et al., 2018). Because food insecure households have difficulty meeting basic needs such as proper nutrition (Duffy et al., 2009 as cited in Leonard et al., 2018), there is a parallel between food insecurity and poor health (Leonard et al., 2018). According to Leonard et al. (2018, section 1.1.1), “Food insecurity is associated with poorer self-rated mental and physical health among adults (Alaimo, 2005; Stuff et al., 2004, Stuff et al., 2004 as cited in Leonard et al., 2018), and food insecure households with children have higher risk of iron deficiency and poorer dental outcomes” (Chi et al., 2014, Skalicky et al., 2006 as cited in Leonard et al., 2018).

Data shared by Healthy People 2030 (ODPHP, n.d.) has clearly shown that food insecurity does not exist in isolation, just as low-income families are affected by interrelated issues such as lack of affordable housing, social isolation, chronic or acute health problems, high medical costs, and low wages. And “taken together, these issues are important social determinants of health, defined as the ‘conditions in the environments in which people are born, live, learn, work, play, worship and age that affect a wide range of health, functioning and quality-of-life outcomes and risks’ (ODPHP, n.d., Understanding Social Determinants of Health section)” (Hunger + Health, n.d).

Food Deserts

Food deserts are categorized as such by the USDA using measures of food access such as distance (anywhere from .5 to 1 mile for urban areas and 10 to 20 miles in a rural area) to a supermarket. A more telling, complex measure of food access factors vehicle access into the

measure (USDA Economic Research, 2021). Under this measure, a tract is considered low access if at least 100 households are more than one-half mile from the nearest supermarket and have no access to a vehicle; or at least 500 people or 33 percent of the population live more than 20 miles from the nearest supermarket, regardless of vehicle access. Using this measure, an estimated 1.9 million households, or 1.7 percent of all households, are in low-income and low-access census tracts, are far from a supermarket, and do not have a vehicle. An additional 0.2 million people are more than 20 miles from a supermarket. (USDA Economic Research, 2021, Low access census tracts section)

Food deserts do not cause food insecurity, but they do indicate areas where food insecurity is more likely to occur (Haggard et al., 2017), and these areas are primarily in lower-income communities, which are disproportionately, but not exclusively, populated by African Americans, Hispanics, and other marginalized racial and ethnic group. Food justice activist Karen Washington (in Brones, 2018, May 15) has promoted the term “food apartheid” to replace food desert to emphasize the deeper issues of America’s food system. Washington has pointed out that current initiatives focus on finding solutions to “food deserts” – defined as areas empty of good-quality, affordable fresh food – by working to ensure that affected neighborhoods have better access. “But some advocates, and studies, have argued that the proximity of a well-stocked grocery store is not enough of a solution given this country’s elaborate food problems” (in Brones, 2018, May 15). Instead, Washington has clarified, a movement that emphasizes themes of apartheid such as race and economics in addition to geography is needed. According to America’s Health Rankings (2016-2018) the prevalence of food insecurity is higher among:

- Non-Hispanic Black or Hispanic households, in which the prevalence of food insecurity is more than two times greater than non-Hispanic white households.
- Lower-income households (those below 185% of the poverty threshold) compared with higher-income households. (America’s Health Rankings, 2016-2018 in Public Health Impact: Food Insecurity section)

Socioeconomic and demographic characteristics of food desert tracts identified by the USDA “tend to have smaller populations, higher rates of abandoned or vacant homes, and residents who have lower levels of education, lower incomes, and higher unemployment” (Dutko et al., 2012, p. 9). In a study about overlapping geographic clusters of food security and health, Leonard et al. (2018) proposed, “Policy solutions for improving food insecurity and health are geographic in nature” because not only are food deserts and food insecurity found in environments characterized by scarcity, these areas are also influenced by a varying range of available nonprofit services, healthcare systems and government policies, as “health services providers generally serve distinct geographic regions” (Leonard, 2018). Geographic patterns are now being used in conjunction with knowledge about site-specific healthcare options to identify “overlapping geographic clusters—i.e., regions with significant burdens of both poor health and high food insecurity” (Leonard, 2018) to inform future interventions and initiatives.

Food Justice

Well-intentioned concepts such as food justice are often suspended in a void of broad, contradictory descriptions. In a 2016 thought piece written for the sustainable agriculture nonprofit, Oregon Tilth, Jeff Rowe encouraged specific messaging related to food justice and suggested, “When care is taken in crafting a definition, its significance swells by offering the

community actionable plans in the fight against injustices.” Key points of current definitions include community, inclusiveness, access, cultural appropriateness, poverty, and health outcomes (Rowe, 2016). The fine-tuning of food justice is imperative for progress within the movement: “The terms ‘food justice,’ ‘food sovereignty’ and ‘community food security’ are imbued with race, class and cultural identities, which makes defining the language of food justice vital. Likewise, the definitions themselves should serve, and be informed by, the communities they seek to represent” (Rowe, 2016, July 6).

The Institute of Agriculture and Trade Policy (IATP) defines food justice as: “The right of communities everywhere to produce, process, distribute, access, and eat good food regardless of race, class, gender, ethnicity, citizenship, ability, religion, or community” (IATP, 2012, October 18). Here are a few more examples of how various organizations define food justice, retrieved from North Carolina State University’s Extension site (Bradley, 2019):

- Food justice is communities exercising their right to grow, sell, and eat healthy food. (Just Food, n.d. as cited in NCSU Food Justice Definitions)
- Food justice seeks to ensure that the benefits and risks of where, what, and how food is grown, produced, transported, distributed, accessed and eaten are shared fairly. (Community to Community Development, n.d. as cited in NCSU Food Justice Definitions)
- Food justice asserts that no one should live without enough food because of economic constraints or social inequalities... The food justice movement is a different approach to a community’s needs that seeks to truly advance self-reliance and social justice by placing communities in leadership of their own solutions and providing them with the tools to address the disparities within our

food systems and within society at large. (Ahmadi, 2010; Holt-Giménez and Yi Wang, 2011 as cited in NCSU Food Justice Definitions)

- Food justice work is the incredibly difficult work of building new local healthy food systems, not opposing the global food industry. (Herrera, 2011 as cited in NCSU Food Justice Definitions)

A detailed definition from food justice advocate Malik Yakini shared by the IATP leaves less room than most for misunderstanding. Yakini is founder of the Detroit Black Community Food Security Network and D-Town Farms, an IATP Food and Community Fellow, and was recently recognized as a James Beard Foundation Leadership Award Honoree (IATP, 2012, August 28). He has fully outlined what food justice should be:

Justice requires a conscious, vigilant, and active populace. Building towards food justice requires that we conduct public education campaigns to make communities aware of the impact of the current food system on our planet, our health, and the economies of our communities. It requires that we provide local food–related models of what sustainability and justice might look like. These models must provide real ways that people can participate in growing, processing, distributing, and selling healthy foods and realizing economic benefit from their efforts. They must provide communities with the opportunity to shape their food system and the policies driving it. (Yakini, 2012 as cited in IATP, 2012, August 28)

Definitions are “the perfect place to demonstrate injustices; what they are, how they will be addressed, and lastly, who will resolve the injustices. These elements provide a framework that can — and should — be reproduced with deference to individual communities” (Rowe, 2016, July 6). The conundrum obstructing many well-meaning food justice dialogues rests in a lack of

precision regarding which injustices warrant the requirement for food justice. One pitfall Rowe (2016) called attention to is the claiming of food justice as a “right,” which sends productive conversations down a theoretical rabbit hole of liability:

While human rights are universal, they do allow some latitude for differing interpretations, depending on local circumstances. They are mainly, but not exclusively, about the obligations of national governments to people living under their jurisdictions, as spelled out in international human rights law. (Kent, 2010, Human Rights and Other Rights section)

In 1996, the World Food Summit concluded with a declaration supporting “the right to adequate food and the fundamental right of everyone to be free from hunger” (Kent). Circling back to the intention-action gap (White et al., 2019), prior to the 1996 Summit, “talk about the right to food was mainly rhetorical, a nice flourish in global conferences, but there was little discussion of what it meant” (Kent, 2010, The Human Right to Adequate Food section). In contrast, the 1996 Summit concluded with the *Plan of Action*, and Objective 7.4 called upon the UN High Commissioner for Human Rights and other essential entities to better define the rights related to food (Kent, 2010). Future international initiatives followed:

Then, in May 1999, the UN Committee on Economic, Social and Cultural Rights released its landmark document, *Substantive Issues Arising in the Implementation of the International Covenant on Economic, Social and Cultural Rights: General Comment 12 (Twentieth Session, 1999), The Right to Adequate Food (Art. 11)*. (Kent, 2010, The Human Right to Adequate Food section)

The General Comment 12 document was a definitive contribution to international jurisprudence and put forth a core definition foundational to the meaning of food justice: “The right to adequate

food is realized when every man, woman and child, alone or in community with others, has physical and economic access at all times to adequate food or means for its procurement” (Kent, 2010, The Human Right to Adequate Food section). An important distinction between availability and access within the above definition is relevant: “Fundamentally, the roots of the problem of hunger and malnutrition are not lack of food but lack of access to available food, inter alia because of poverty, by large segments of the world’s population” (Kent, 2010, The Human Right to Adequate Food section). For example, food is available when there is plenty of food on store shelves, “but people without money cannot make a claim on that food, so they do not have *access* to it” (Kent, 2010, The Human Right to Adequate Food section).

In his examination of food justice meanings, Rowe (2016) did add that food justice is not “how” change comes to a food system. Instead, it is “simply identifying a problem without proposing how it may be changed.”

In a discussion about the language of food movements in the United States, Clendenning et al. (2016) has determined that the food justice movement seeks to address injustices that disproportionately impact people based on race and class (Gottlieb and Joshi, 2010; Mares and Alkon, 2012 as cited in Clendenning et al., 2016). The food justice movement has been traced back to the Black Panther Party’s Free Breakfast for School Children Program, which spread throughout the United States in 1969 (Holt-Giménez and Wang, 2011 as cited in Clendenning et al., 2016). “Decades on, food justice remains high on the community agenda and ‘...[is] possibly the largest and fastest growing grassroots expression of the food movement” (Holt- Giménez and Shattuck, 2011, p. 124 as cited in Clendenning et al., 2016, p. 170).

Food justice has been categorized with other United States food movements that focus on mobilizing communities to solve local problems (Clendenning et al., 2016). Critics have pointed

out that while localized, market-based strategies may bring about positive changes regarding access to fresh food, they may fail to address the bigger, structural and political issues integral to the current food system, one that dominated by a “corporate food regime that governs urban access to affordable, healthy food choices” (Holt-Giménez and Shattuck, 2011 as cited in Clendenning et al., 2016, p. 170). Food justice strategies have even been referred to as a way to “work around” the larger food system in small ways to provide communities food access (Clendenning et al., 2016, p. 170).

The Food First Institute for Food and Development Policy has characterized food justice as a movement that emphasizes empowerment whose model is built upon the following disciplines and principles: Agroecologically produced local food; investment in underserved communities; new business models and community benefit packages for production, processing, and retail; better wages for agriculture workers; solidarity economies; land and food access (Food First, 2010).

Food Sovereignty

Food sovereignty refers to rights to food and production systems and is constantly being defined, re-defined and negotiated (Clendenning et al., 2016).

The Food First Institute for Food and Development Policy has characterized food sovereignty in contrast to food justice as a movement that is more radical in that it seeks change through entitlement with a model built upon the following disciplines and principles: Dismantle corporate agri-foods’ monopoly power; parity; redistributive land reform; community rights to water and seed; regionally based food systems; democratization of food systems; sustainable livelihoods; protection from dumping/ overproduction; revival of agroecologically managed

peasant agriculture to distribute wealth and cool the planet; regulated markets and supply (Food First, 2010).

Many communities are embracing the concept of *food sovereignty* and creating projects and movements around the right to food with emphasis given to the right of people to define not only their own food, but also the agricultural production of their food. Origins of this concept have been connected to 1990s policies and practices regarding food security and global, large-scale agribusiness production of food, and, as a result, the decline of small family farmers and producers. Food sovereignty is now a global movement motivated by how and where food is produced and seeks to create a radically new system for providing healthy and culturally appropriate food through ecologically sound and sustainable methods (Clendenning et al., 2016).

While food sovereignty should be an objective both within and outside of the Mississippi Delta, and big-picture changes in government policy should take a positive, leadership role in the form of informational policy, especially with respect to food, health, and agriculture, and inspiration for innovation in the private sector, food justice is defined as grassroots in nature and local in emphasis, making it a logical next step and an integral movement towards long-term goals of food sovereignty.

CHAPTER III

NUTRITION: THE AGRICULTURE-FOOD-HEALTH NEXUS

In substance, one of the biggest public health issues related to food justice in the U.S. is that human diets, which have the potential to nurture both human health and the environment, are not in line with current, scientifically based recommendations for best practices and nutrition. “Increased food production over the past 50 years has helped improve life expectancy and reduce hunger, infant and child mortality rates, and global poverty. However, such benefits are now being offset by shifts towards unhealthy diets” (Plate and the Planet, n.d.).

Agriculture

An honest discussion of food justice begins with agriculture. Over the past two centuries, agriculture has become more and more industrialized, “which was inevitable under the dominant ideologies of political power and economic growth that founded the Industrial Revolution” (Sabaté et al., 2016, p. 816). Rooted in history and still true today, the structure of agriculture contributes to food insecurity concerns in Mississippi:

Mississippi is a highly agricultural state, yet it imports approximately 90 percent of the food that is consumed. Most of the agricultural land in Mississippi is dedicated to commodity crops, particularly soybean and cotton. They are mostly located in the Delta, where poverty rates are highest in the state and the nation. (Hossfeld and Rico Mendez, 2018)

Before expansive agriculture practices began to evolve, food production was based on inputs of solar energy, rain, and surface water, and featured multi-crop enterprises that simultaneously raised plants and animals and utilized animal waste as fertilizer, a system with relatively few detrimental impacts on the physical environment (Sabaté et al., 2016). Among other factors, population size and production techniques have permanently altered agriculture facilitated by domestication and, in turn, four main crops – wheat, rice, corn, and potatoes – “became the key foods to support the expansion of human populations” (Sabaté et al., 2016, p. 816). Alongside the intensifying of food production, the environment and human health “through exposure to antimicrobial agents such as antibiotics, biological agents such as viruses, and toxic chemicals such as some pesticides” (Sabaté et al., 2016, p. 816) have been adversely affected:

In addition to the manufacture of synthetic fertilizers, the use of vitamins and antibiotics allowed more intensive types of agriculture, including animal farming, to become dominant. Globally, agricultural production doubled four times between 1820 and 1975. Monocultures replaced polycultures as the main crop production model. The Green Revolution [*which began in the mid-20th century*] saw the development of disease-resistant high-yield grain varieties and the implementation of irrigation, further increasing the intensity of food production. (Sabaté et al., 2016, p. 816)

While methods used throughout the Green Revolution have allowed agriculture to meet the world’s food needs for a population that has doubled over the past four decades, advocates of sustainable agriculture would argue that this process of food production has come at a high cost.

According to the American Heart Association and American Stroke Association report, it may be of benefit for government policy to forge collaboration between the public health and agriculture communities “to develop significant food policy initiatives and a collective effort to

link agriculture and food production with the health of the U.S. population” (American Heart Association and American Stroke Association Policy Brief, n.d. in Potential Policy section). The suggested coalition would be responsible for policy development “for a healthier food environment from ‘farm to fork,’ showing the connections between farm policy and chronic disease prevention” (American Heart Association and American Stroke Association Policy Brief, n.d. in Health-related initiatives section).

Intermixed with linking agriculture, food production and the health of the United States population is the need to protect farmers’ livelihoods – a significant part of the puzzle:

Between 1980 and 2000, the proportion of each food dollar allocated to farmers dropped from 31 percent to 19 percent, leaving 81 cents of every dollar spent on food to go toward non-farm-related expenditures including processing, packaging, transport, and marketing. Industrial farming is essential to the food industry, particularly in the context of a growing world population; by industry standards, the abundant provision of cheap food is likely to remain a viable business venture (Franck et al., 2013, p. 329).

Agriculture’s role can be further understood in facts related to economics and employment:

Agriculture, food, and related industries contributed \$1.109 trillion to the U.S. gross domestic product (GDP) in 2019, a 5.2-percent share. The output of America’s farms contributed \$136.1 billion of this sum—about 0.6 percent of GDP. The overall contribution of agriculture to GDP is actually larger than 0.6 percent because sectors related to agriculture rely on agricultural inputs in order to contribute added value to the economy. Sectors related to agriculture include: food and beverage manufacturing; food and beverage stores; food services and eating and drinking places; textiles, apparel, and

leather products; and forestry and fishing. (USDA Economic Research Service, 2021, Ag and Food Sectors)

Jobs created by agriculture and its related industries are also impacted by policy shifts:

In 2019, 22.2 million full- and part-time jobs were related to the agricultural and food sectors—10.9 percent of total U.S. employment. Direct on-farm employment accounted for about 2.6 million of these jobs, or 1.3 percent of U.S. employment. Employment in agriculture- and food-related industries supported another 19.6 million jobs. Of this, food service, eating and drinking places accounted for the largest share—13.0 million jobs—and food/beverage stores supported 3.2 million jobs. The remaining agriculture-related industries together added another 3.4 million jobs. (USDA Economic Research Service, 2021, Ag and Food Sectors)

Sustainable agriculture activist Ted Foley has stated that agriculture’s ubiquitous presence is one of the primary challenges to a food sovereignty movement and simplifying of the food system by enacting sustainable agriculture policies. “The world needs agriculture to fuel the world, and the conclusion of environmental degradation can be prevented if we pursue mitigative measures of agricultural practices” (Foley on TED, 2010). People have asked Foley, “Well, isn’t blank the answer? – organic food, local food, GMOs, new trade subsidies, new farm bills” (Foley on TED, 2010). Foley’s answer is that the complexity of sustainable agriculture is like silver buckshot in contrast to a silver bullet solution. “And I love silver buckshot,” he said. “You put it together and you’ve got something really powerful, but we need to put them together. . . . We need to invest in real solutions: incentives for farmers, precision agriculture, new crop varieties, drip irrigation, gray water recycling, better tillage practices, smarter diets. We need everyone at

the table. Advocates of commercial agriculture, environmental conservation, and organic farming... must work together. There is no single solution (Foley on TED, 2010).

Improving the relationship between agriculture, food, and health in the United States will require the combined effort of government, organizational, and individual policy, but initiating and inspiring positive change should begin with government. “Government does play an important and even critical role if we are to have a sustainable future. Good government can provide vehicles for informed decision-making and invest in and maintain the checks and balances of a democratic system. Good government can develop and maintain strategies, policies, and programs that will help us all find a future that works” (Hawken, n.d.).

Malnutrition in the United States

Images of poverty and food deprivation around the world are typically associated with being underweight and malnourished, but food insecurity in the 21st century presents a different set of malnutrition. Malnutrition in the United States is associated with both undernutrition and obesity (Hossfeld and Rico Mendez, 2018). “If we simply look at high poverty counties and neighborhoods in the United States and overlay these data with obesity rates, we see a striking pattern emerge: the higher the poverty, the higher the obesity rate” (Hossfeld and Rico Mendez, 2018, p. S10).

The Delta County of Issaquena, for example, with a population of about 1,300 people, of whom 40 percent fall below the poverty line, “has one of the highest obesity rates in the nation, with 38 percent of adults in the county considered obese” (Hossfeld and Rico Mendez, 2018, p. S7). According to Hossfeld and Rico Mendez (2018), the Great Recession that occurred between 2007 and 2009 brought into focus the newly poor as well as those living in persistent poverty

whose circumstances may have been exacerbated by the economic downturn (Hossfeld and Rico Mendez, 2018). In turn, food insecurity and the number of people enrolled in federal food assistance programs like the Supplemental Nutrition Assistance Program (SNAP) skyrocketed, and, ironically, increasing problems of obesity have paralleled compromised access to food (Hossfeld and Rico Mendez, 2018):

The story of food and poverty in the United States is a complex and compelling story with many moving parts, many of which focus on the way in which food production has changed significantly in a fairly short amount of time. Indeed there have been dramatic shifts in food production since World War II, changes to meet the increased needs of families and a growing population, and changes due to new technology. Since the 1940s there has been a marked decrease in the number of small family farms, once the mainstay of US food production, to a notable increase in commodity production (soy and corn) together with an increase in large-scale agricultural production. (Hossfeld and Rico Mendez, 2018, p. S10)

To control market prices, the cost of commodities such as corn and soybeans has decreased over time with USDA-sponsored, subsidy programs supportive of farmers growing these crops, known as commodity crops, in the background. As a result, unhealthy byproducts of commodity crops – like fructose corn syrup, hydrogenated vegetable oils – have become a mainstay in the American diet as ingredients in “products that make snacks, soda, candy, and fats very inexpensive, and indeed economical” (Hossfeld and Rico Mendez, 2018, p. S10).

Simultaneously, fruit and vegetable prices have not received significant subsidies and prices for these food items have, instead, gone up. In summary, “It has become easier, and indeed cheaper, to buy ‘junk food’—the low-nutritional, low cost, long-shelf-life, mass-produced food that is

found at every corner store, at every convenience store, and on grocery store shelves” (Hossfeld and Rico Mendez, 2018, p. S10).

The United States health crisis related to malnutrition, therefore, is quite different from the hunger issues found in developing nations and has more to do with food choices and the government as well as organizational policies that circumscribe individual policies of choice. “The type of food we eat, the food that is cheap and plentiful and easy to access, is often food that has little to no nutritional value and is high in calories and fat” (Hossfeld and Rico Mendez, 2018, p. S7).

Mixed Messages

Blame for worsening obesity trends in America has often pointed to agriculture and government subsidies:

Current agricultural policy remains largely uninformed by public health discourse.

Although findings suggest that eliminating all subsidies would have a mild impact on the prevalence of obesity, a revision of commodity programs could have a measurable public health impact on a population scale, over time. (Franck et al., 2013, p. 329)

Time magazine confirmed this accusation in an article linking obesity and agricultural subsidies: “If you want to eat healthy in America, don’t expect government subsidies to help” (Oaklander, 2016, July 6). Government subsidized foods are not the foods the government tells us to eat with their dietary guidelines. Instead, they’re the foods the government makes cheap (Oaklander, 2016).

An overwhelming percentage of government subsidies have gone to the cultivation of commodity crops as opposed to the fruits and vegetables that should, according to MyPlate recommendations, fill half of our plates:

Of the roughly \$200 billion spent to subsidize U.S. commodity crops from 1995 to 2010 (commodity crops are interchangeable, storable foods such as grains and certain beans, and cotton), roughly two-thirds went to animal-feed crops, tobacco and cotton. Roughly \$50 billion went to human-food crops, including wheat, peanuts, rice, oil seeds and other crops that become sweeteners, according to a database compiled by the Environmental Working Group, an advocacy group. About \$12 billion went to crops that were turned into ethanol, a use that is consuming a growing share of the harvest. (Allen, 2011, October 3)

The contradictions between government recommendations and spending have primarily been a result of economic interests. Food giants in the meat industry and other commodity crop producers, combined with politicians who are tied to each have complicated the public nutrition message. While government policy does support households at risk of food insecurity, the relationship between nutrition and farm programs has been increasingly complicated as financial and political interests have been in the driver's seat. The result has been a source of mixed messages and missed opportunities. "This is evident in the dissonance between our farm policies, which tend to give preference to commodity crops like corn and soy, and our dietary guidelines, which encourage us to consume more foods like fruits and vegetables" (Reinhardt, 2017, December 20).

The Farm Bill

In the United States, a primary catalyst for change related to diet and nutrition within the agriculture-food-health nexus is the Farm Bill, a multi-year piece of legislation that comprehensively addresses agriculture, food, nutrition, hunger, and public health policies. United States farm policy and the Farm Bill grew “out of the economic hardships suffered by Midwestern farmers in the 1930s due to unpredictable swings in agricultural markets and the desire to protect the national food supply. Many critics feel the policy is no longer relevant and should be redesigned to promote healthful eating” (Allen, 2011, October 3).

Through the medium of America’s Farm Bill, the USDA and Health and Human Services (HHS) have the ability to neutralize contradictions put forth by the agriculture-food-health nexus. Within the Farm Bill’s scope, opportunities appropriate for greater communication and action related to food justice include inserting information about sustainable food choices into the Dietary Guidelines for Americans (DGA); assuring the USDA continues to improve the concentration of healthy foods that are provided in government feeding programs such as SNAP to remain congruent with the DGA; and reallocating funding to diminish the overabundance of food with low nutritional value and elevate production of fruits and vegetables.

Nutrition education is a primary component of the Farm Bill. Within the Farm Bill, “the title governing nutrition programs is actually the largest, and by a long shot. It accounts for approximately 80 percent of the bill’s spending, and its programs are among the most important resources in the federal safety net” (Reinhardt, 2017, December 20). “Nutrition education programs authorized in the Farm Bill are tailored to participants’ education levels and lifestyles to help them make lifelong healthful behavior changes” (Eat Right Pro, n.d.).

Education provided by the Farm Bill regarding healthy food choices begins with the DGA, published every 5 years by the USDA and HHS. This document is considered the Nation's source for nutrition advice based on current, science-based research:

The latest edition of the DGA reflects the current body of nutrition science, helps health professionals and policymakers guide Americans to make healthy food and beverage choices, and serves as the science-based foundation for vital nutrition policies and programs across the United States. (Food & Nutrition, 2020)

Mixed messages circulated by government policy are apparent in contradictions between recommendations within the DGA and USDA spending in the form of subsidies. The USDA's MyPlate project is an example. MyPlate was introduced along with the updating of USDA food patterns for the 2010 DGA. MyPlate, which is still included in the 2020-2025 DGA as well, is a guide for making healthier, dietary choices: "When deciding what to eat or drink, choose options that are full of nutrients. Make every bite count" (DGA, 2020). To discourage excessive animal fats, which have been linked to obesity and such related illnesses as diabetes, high blood pressure, and cancer, the MyPlate food diagram includes a plate halfway filled with fruits and vegetables and discourages excess red and processed meat, sugar-sweetened foods and beverages, and refined grains that are "associated with detrimental health outcomes" (DGA, 2020). Marion Nestle, a professor of food science and public health at New York University, has argued, "The [*DGA MyPlate*] chart, thankfully, shows very clearly what people should aim for" (in Allen, 2011, October 3), and the MyPlate food plate "looks healthful enough, but federal incentives to farmers reflect an entirely different agenda. In large part, the government pays farmers who grow food for animals that become meat" (in Allen, 2011, October 3). Not only is

too much red meat a health concern for people, the production of red meat is also at the center of many debates about environmental health and sustainability.

Ecologically speaking, a comparison by Blackstone and Conrad (2020) between the global reference diet from the EAT-Lancet Commission on Healthy Diets from Sustainable Food Systems (EAT-Lancet) and the healthy eating patterns from the 2015–2020 Dietary Guidelines for Americans (DGA) concluded that the recommended eating patterns of the DGA and EAT-Lancet align and diverge in several ways. The study pointed out that current diet patterns worldwide have remained far below optimal, despite decades of dietary guidance, especially in the United States, and represent an urgent public health problem:

For example, 0.5 million deaths per year are attributable to poor diet in the USA, which now represents the leading cause of death. Thus, this transformational approach recommends more immediate, extensive changes to diet patterns. Although diet transformation could be argued solely based on health, the contribution of diets to ecological crises, such as climate change, that require rapid, large-scale mitigation efforts provides additional justification for this approach. (Blackstone and Conrad, 2020, p. 4).

The EAT-Lancet eating pattern was developed to promote human health while staying within the ecological carrying capacity of the planet with goals such as curbing global food waste, improving the resource-use efficiency of agriculture, and putting the worldwide food system on a sustainable trajectory by 2050. One heated question surrounding the EAT-Lancet pattern has been the degree to which this diet pattern contrasts with existing dietary guidance, especially in the United States, “since most food-based dietary guidelines have been developed without reference to environmental sustainability” (Blackstone and Conrad, 2020, p. 1).

The Farm Bill's horticulture title supports fruit and vegetable production, as well as organic and local foods, and funds innovative programs that small, community-based organizations depend on, like the National Organic Certification Cost-Share Program, as well as funding for the Specialty Crop Block Grants. "Value-Added Producer Grants and the Farmers Market and Local Food Promotion Programs are now part of this title's Local Agriculture Market Program, which supports small, local food producers and has been given permanent funding" (The Farm Bill, n.d.).

Building on support for fruit and vegetable farming, "Government policy should provide additional research and a segment of the extension services to support growth, production, transport, and safety of fruit and vegetable crops" (American Heart Association and American Stroke Association Policy Brief, n.d. in Potential Policy section). While organic farming and sustainability's common goal of emphasizing fruits and vegetables is included in the Farm Bill:

Shockingly, only one percent of the cost of the current Farm Bill actually goes to a combination of fresh produce production, rural communities, and local agriculture programs. This small piece of the pie has included funding for beginning and minority farmers, value-added programs, rural business development, organic farming, fruits and vegetables, local food, nutrition incentives and agricultural research. Outside of nutrition programs for low-income families, on the whole, the Farm Bill has largely supported and incentivized the production of large-scale monocrops of commodities, dairy and factory farmed meat [*instead of fresh produce production*] through its funding and grant programs. (The Farm Bill, n.d.)

Progress in the support of specialty crops (fruits, vegetables, tree nuts, dried fruits, horticulture, and nursery crops (including floriculture) has been made. The Specialty Crops Competitiveness

Act (SCBGP) was first authorized in the 2004 but did not receive any funding until 2006. The 2008 Farm Bill provided SCBGP with its first mandatory funds at \$55 million per year. The 2014 Farm Bill subsequently increased the program's mandatory funding to \$72.5 million per year through 2017, and then \$85 million per year in perpetuity starting in 2018 (Condra, 2011). The 2018 Farm Bill reauthorized the program and continued its funding at \$85 million per year in perpetuity. The amount allocated to each state is based on a formula that considers specialty crop acreage and production value within the state. The 2018 Farm Bill also made a number of minor but important changes to the underlying program. For example, the Bill added language regarding periodic evaluation and performance measures for the states and projects funded through the program. The Bill also made permanent the \$5 million in annual mandatory funding for the Specialty Crop Multi-State subprogram (SCMP) (Condra, 2011).

The American Heart Association and the American Stroke Association have recommended that government policy should continue to improve food assistance programs by making sure they are congruent with the DGA. Equal access to healthy foods should continue to be addressed by offering “incentives in the Supplemental Nutrition Assistance Program (SNAP) that support the purchase of healthy foods, especially fruits, vegetables, and whole grains” (American Heart Association and American Stroke Association Policy Brief, n.d.). Both Associations have also advocated “for other privately or publicly funded initiatives that support the purchase of healthy foods such as Double Up Food Bucks and Wholesome Wave” (American Heart Association and American Stroke Association Policy Brief, n.d.). Double Up Food Bucks is a program that doubles the value of federal nutrition (SNAP or food stamps) benefits spent at participating markets and grocery stores, “helping people bring home more healthy fruits and vegetables while supporting local farmers. The wins are tripled: low-income consumers eat more

healthy food, local farmers gain new customers and make more money, and more food dollars stay in the local economy” (Double Up Food Bucks, n.d.). Wholesome Wave was founded in 2007 by Chef Michel Nischan and the late Gus Schumacher, a former farmer and USDA official “who knew there were decision-makers in Washington D.C. ready to listen. For more than a decade, Wholesome Wave has led the movement to ensure that underserved Americans have access to affordable fruits and vegetables – in Washington D.C. and at other levels of government” (Wholesome Wave, n.d.).

Paradox of Choice

In a discussion of food justice and nutrition, it is also important to acknowledge that quality of life is increased not only by structured health and wellness initiatives that encompass nutrition and exercise, but also by components such as emotional, social, spiritual, environmental, and intellectual health. In contrast to the mixed messages previously discussed, food choices are often based on individual beliefs, customs, and lifestyles. Relative to food justice, while one food item might be a more nutritious choice, it would be unjust to expect a person to eat something that goes against their culture, religion, family traditions, or personal preferences.

“Avoid the ‘*Southern Diet? What, Really, Do You Mean?*’” (Kolasa, et al., 2020) retrospectively analyzed the diets of regionally defined populations. This article revisited the pattern of a “Southern Diet” as defined by the REGARDS (Reasons for Geographic and Racial Differences in Stroke) study and pointed out that the definition of “Southern” food became a bit muddled when the “great diversity of cuisine as well as culture” (Kolasa et al., 2020) was considered. Kolasa et al. (2020) also explored individualized behavior modifications. The points

raised by this research are important for further defining the Southern diet, for nutritionists in search of actionable steps when treating individual patients, and for the general Southern audience interested in preventative forms of health and wellness through diet that may be unique to the South.

Food isn't just nutrition, and ethical intentions are not universally predictable. For example, research has revealed that consumers with positive attitudes toward eco-friendly products and services have not always followed suit with their wallets:

In one recent survey 65 percent said they want to buy purpose-driven brands that advocate sustainability, yet only about 26 percent actually do so. Narrowing this “intention-action gap” is important not just for meeting corporate sustainability goals but also for the planet. (White et al., 2019)

Culture, family traditions, personal preferences and access are as much a part of ethical food choices as individual edible ingredients:

The research clearly shows that many consumers want nutrition information, but that they often do not employ it because it is hard to use, not readily available, or not perceived as useful or new. Food shoppers have been found to consider nutrition as only one of several factors influencing purchases. (Glanz, 1992, Abstract section)

As a result of hard-to-use, hard-to-find nutritional information, shoppers often make choices based on heuristic psychology:

A heuristic is a mental shortcut that allows an individual to make a decision, pass judgment, or solve a problem quickly and with minimal mental effort. While heuristics can reduce the burden of decision-making and free up limited cognitive resources, they

can also be costly when they lead individuals to miss critical information or act on unjust biases. (Psychology Today, n.d.)

The general public is most vulnerable to the ambiguities of choice on a simple trip to the grocery store. Barry Schwartz's umbrella description of a world with more choices and less satisfaction, characterized in his book, *The Paradox of Choice: Why More is Less*, can be applied to this ethical eating dilemma of choice. Schwartz recorded that his neighborhood supermarket already offers 85 different varieties and brands of crackers, 285 varieties of cookies, and 175 different prepared dressings. Arguably, a shopper will leave the store with a grocery item that does not match their needs, a selection they do not truly understand, or they will leave with nothing at all. Choice overload can produce still waters and missed opportunities (Schwartz, 2004).

“Heuristics, while useful, are imperfect; if relied on too heavily, they can result in incorrect judgments or cognitive biases. Some are more likely to steer people wrong than others” (Psychology Today, n.d.).

Making nutrition information readily available would be best served in transparent labeling of foods and beverages. The U.S. Food & Drug Administration (FDA) should continue to push forward and display as much dietary information as possible on food labels. “On May 27, 2016, the FDA published final rules on the new Nutrition Facts label for packaged foods to reflect new scientific information, including the link between diet and chronic diseases such as obesity and heart disease. The new label makes it easier for consumers to make better informed food choices” (U.S. Food & Drug Administration, 2016). One recent change, for example, is in regard to the ingredient sugar. Labels are now required to include information about “added sugars,” whereas all forms of sugar, such as naturally occurring sugar in fruits, were grouped together in the former label (U.S. Food & Drug Administration, Side-By-Side Comparison, n.d.).

A recent Lancet Planetary Health study of the gaps between fruit and vegetable production, demand, and recommended consumption at global and national levels discovered that “in isolation, informational policies are likely to be slow and ineffective” (Mason-D’Croz et al., 2019, Discussion section) at encouraging healthy choices. Regarding the increase of fruit and vegetable consumption, the study found:

For example, in the USA, 5 years after a 2007 update to fruit and vegetable consumption targets, only 6 percent of surveyed consumers were familiar with the new consumption targets and only an additional 30 percent were familiar with the previous targets established in 1991. (Mason-D’Croz et al., 2019, Discussion section)

Misguided opinions are also formed by unchecked news from a free-for-all media landscape inundated with political extremists and opportunistic marketing campaigns. The Digital Age is filled an overabundance of communication and it is challenging to separate news from entertainment, science from politics, and merit from marketing. Because of technology, the number of people now participating in all aspects of media is revolutionary. With 68 percent of United States adults using a smartphone and tablet / computer ownership up to 45 percent among adults, according to 2015 survey data from the Pew Research Center (Anderson, 2015), communication has been proven to be a powerful force for both good and infamous causes. Today, over-communication may be the source of misinformed choices.

If a consumer intends to make the right choices and purchase good food, that individual needs to be comfortable with their understanding of what *good food* is: There is on-going debate within the agri-food system about the nature of *good food*. Is locally grown organic food good? Is locally grown conventional food better than organic food transported thousands of miles? (Martinez et al., 2010). These are complicated choices that add even greater challenge to the

advancement of nutrition education and food justice. As will be discussed, defining “local” food leads to even more indecision when the category of local is juxtaposed with the concept of community.

While mixed messages and an overabundance of choices can hinder progress, the most alarming source of confusion is the paradoxical communication within The Farm Bill, which is simultaneously advising people to consume more fruits and vegetables while subsidizing foods that are the source of substantial health impacts, both directly and indirectly, such as red meat and foods high in the inexpensive ingredient, corn syrup, as well as sugar. Also, by generating more profit for large food producers and less for small and diverse family farmers; subsidizing the production of lower-cost fats, sugars, and oils that intensify the health-destroying obesity epidemic; and by amplifying environmentally destructive agricultural practices that impact air, water, and other resources, the Farm Bill’s mixed messaging greatly influences the health of Americans more than is immediately apparent but can be directly traced to rising obesity and, in turn, a rise in chronic disease as well as environmental health impacts, especially exposure to toxic substances and pesticides (Jackson, 2009).

CHAPTER IV

COMMUNITY DEVELOPMENT AND LOCAL FOOD INITIATIVES

According to Cornell University, a community food system is a “system in which food production, processing, distribution, and consumption are integrated to enhance the environmental, economic, social and nutritional health of a particular place” (Hossfeld and Rico Mendez, 2018). In addition, Hossfeld and Rico Mendez (2018) have distinguished between the descriptors “community” and “local” when describing a food system by clarifying that a successful community system focuses not only on food, but also on sustainability, i.e., a community food system emphasizes long-term goals related to local economy, environmental concerns, and social issues unique to that community.

There is a trend in the United States towards “relocalization,” or a return to local community food production as an alternative to the generally structured industrial food system:

These movements are a direct response to the development of big agriculture and the dramatic change in food production since World War II. These initiatives have at their core localized responses to food production, distribution, and consumption. The community food system, in particular, is more concerned with issues of equity and social justice, and grounding this work in community concerns around sustainability, food security, and food access. (Hossfeld and Rico Mendez, 2018)

The definition of local food is complex, “varying with purpose, geography, and data availability” (Martinez et al., 2010). Much like the aforementioned questions about semantics, a USDA

Economic Research report, “Trends in U.S. Local and Regional Food Systems” (2015) confirmed that whether or not a product is considered local can be determined by different consumers in a variety of ways: distance, local ownership of the farm (Adams and Adams, 2011), or the extent to which the product is considered natural, organic, or qualified by other current *ethical* food terms.

Local Food Initiatives

Over time, government policies and programs have played an integral role in addressing the persistent issues of poverty, food insecurity, and the related prevalence of chronic diseases in the Mississippi Delta region (Kerstetter et al., 2014). For instance, federal domestic food and nutrition initiatives such as the School Lunch Program; the Women, Infants, and Children Program (WIC); and the Supplemental Nutrition Assistant Program (SNAP) have played a critical role in keeping millions of individuals, including Mississippians, from languishing in hunger, poverty, and related illnesses. In Mississippi, the SNAP program gives monthly nutritional benefits to low-income households, which enable them to purchase healthy and adequate food for good health outcomes (Goodman et al., 2020). Individuals eligible for these benefits include the poorest and households with older persons and individuals living with disabilities. In addition, school-based food programs have been put in place in the Mississippi Delta, particularly for children from rural communities, who, through the program, were offered vegetable and fruit snacks as part of the regular school day (McCabe-Sellers et al., 2009).

Besides such programs, the North Bolivar Good Food Revolution, a multi-sectoral partnership, has concentrated on enhancing economic development prospects for Mississippi residents and improving their health outcomes (Hossfeld et al., 2019). For instance, one of the

most successful initiatives is the Delta Fresh Foods Initiative, which has collectively engaged farmers, health instructors, foodstuff vendors, consumers, healthy food promoters, funders, and organizers. As a result, these stakeholders have learned about the food insecurity, poverty, and disease issues in Bolivar County and have put community mechanisms, processes, and strategies in place. Additionally, the federal administration, through the USDA, has assigned funding to enhance community food initiatives and food systems in the Farm Bill through strategies such as: the Community Food Program, a Farmers' Market Promotion Program, and Community Food Projects (Hossfeld and Rico Mendez, 2018).

Local food systems are growing in popularity, and the value of local food sales, defined as the sale of food for human consumption through both direct-to-consumer (e.g., farmers' markets) and intermediated marketing channels (e.g., sales to institutions or regional distributors), appears to be increasing (USDA Economic Research, 2015). However, it is difficult to quantify the economic impact at this point:

... it is difficult to draw conclusions about the local economic impact of local foods systems because the existing literature has narrow geographic and market scope, making comparing studies complicated. Data necessary to conduct economic impact analyses are costly to obtain, and researchers have yet to agree on a standard way of accounting for the opportunity costs involved when local foods are produced and purchased or on a standard set of economic modeling assumptions. (USDA Economic Research, 2015)

Hossfeld and Rico Mendez (2018) have provided examples of imitable projects that future initiatives can learn from: The Good Food Revolution in Bolivar County, Mileston Farmer Cooperative in Holmes County, and the Mississippi Food Policy Council. Descriptions of each of these follow:

- **Good Food Revolution:** A multisector collaboration in Bolivar County, Mississippi, focused on economic development opportunities and improved health outcomes for residents of Mound Bayou, Winstonville, and Shelby, Mississippi. This project supports and facilitates local food growth and production for the purpose of expanding the local economy, generating jobs, and increasing access to nutrition in the three target communities. Hossfeld and Rico Mendez (2018)
- **Mileston Farmer Cooperative (MCA):** Established in 1942, this Holmes County, Mississippi, initiative is located in one of the poorest counties in the Mississippi Delta, and the United States. MCA is a farmer cooperative of limited-resource growers, considered socially disadvantaged growers by the USDA. There are currently 13 African American farmers working in the cooperative, along with a youth training program. Mileston is a result of the New Deal Resettlement Administration program created by President Franklin Roosevelt. Hossfeld and Rico Mendez (2018)
- **Mississippi Food Policy Council:** The Mississippi Food Policy Council formed in 2010 to focus on food and farm policies that build healthy communities and strengthen local food systems in Mississippi. Their work mirrors national food policy councils that have developed to bring together diverse stakeholders to address food system development, health and nutrition, food access and food insecurity, and food and farm policy. The cross-sector membership of food policy councils ensures that representation from all sectors of the food system come together promote more resilient food systems in their communities. Hossfeld and Rico Mendez (2018)

USDA Economic Research (2015) has also called attention to the emergence of regional food hubs “as collaborative enterprises for moving local foods into larger mainstream markets, providing scale-appropriate markets for midsized farmers and opportunities for small and beginning farmers to scale up without increasing time spent marketing food” (Barham, et al., 2012 as cited in USDA Economic Research, 2015). A 2013 National Food Hub Survey, conducted by scientists at Michigan State University, revealed that 76 percent of food hubs worked exclusively or mostly with farmers with sales under \$500,000, of which 26 percent were beginning farmers (those with less than 10 years’ experience farming) (Fischer, 2013 as cited in USDA Economic Research, 2015). To encourage transparency, “Food hubs work with farmers to preserve the source-identified characteristic of the food’s origin and any special practices or circumstances under which the food was grown. ... Most food hubs do not necessarily require that farmers adopt specific production practices but give preference to food grown meeting certain standards” such as USDA organic, humane, Fair Trade, or food safety practices (Fischer et al., 2013 as cited in USDA Economic Research, 2015). Many food hubs also offer technical assistance, production and post-harvesting services, business management services, and food safety training (USDA Economic Research, 2015). Over 60 percent provided product differentiation marketing strategies, and 80 percent offered marketing services to producers or helped them find new markets (Fischer, et al., 2013 as cited in USDA Economic Research, 2015). A variety of business models and missions exist to allow food hubs flexibility when responding to the unique needs of local producers, consumers, and communities (USDA Economic Research, 2015).

Despite the recent growth in local food systems and markets, economic impact assessments of these activities are still nascent (Boys and Hughes, 2013; O’Hara and Pirog,

2013). Martinez et al. (2010) found empirical support for the notion that local economic benefits may accrue from greater local retention of the spent food dollar, from spillovers to nearby businesses, and from increased entrepreneurship (USDA Economic Research, 2015). Case studies are the most revealing form of research when studying local food systems “because policy, non-governmental organization contributions, and other circumstances that affect local food markets tend to vary across locales” (USDA Economic Research, 2015), but the case study approach makes generalizing research results difficult.

How impacts from local food systems are distributed between urban and rural places is another unexplored dimension of opportunity (USDA Economic Research, 2015). As one might expect, the demand for local food appears to be concentrated in urban areas (Lichter and Brown, 2011; Hinrichs and Charles, 2012; Jablonski, 2014; Jackson-Smith and Sharp, 2008; Low and Vogel, 2011 as cited in USDA Economic Research, 2015). Studies of rural farmers’ markets point toward urban advantages (USDA Economic Research, 2015). Even in studies of rural communities demonstrating consumer willingness to pay a premium for locally grown produce, evidence shows that there are often not enough customers to offset the production and harvesting expenses (Biermacher et al., 2007 as cited in USDA Economic Research, 2015). Additional research about the economy of local food systems focused on consumer motivation for buying locally produced goods from farmers characterized these shoppers as strongly influenced by others around them and confident that their actions “make a difference” for public and private outcomes (Onozaka et al., 2010 as cited in USDA Economic Research, 2015). While food safety did not show up as a top motivation for purchasing local food, interest in knowing the food’s source, which was often cited as a priority, could reflect a prevalent concern for food safety. Studies in the Southeast and Arkansas did find food safety to be among

the motivations of farmers' market shoppers, with respect to both general food safety concern (Maples et al., 2013 as cited in USDA Economic Research, 2015) and there were conscious attempts recorded in which shoppers sought to avoid synthetic chemicals in food (Crandall et al., 2011 as cited in USDA Economic Research, 2015). "The 2011 Trends survey found that 27 percent of respondents cited concern over the environmental impact of transporting food, but this was not one of the top motivations for buying local food in grocery stores" (USDA Economic Research, 2015), and a 2003 national study found that concern for the environment did increase the likelihood of buying locally (Zepeda and Nie, 2012 as cited in USDA Economic Research, 2015).

Farmers' Markets and Community Gardens

From a community perspective, ethical eating might simply mean: We are all in this together, or as Chef Mac Edwards puts it, "Eating local is about building relationships." Edwards is a 50-year veteran of the Memphis, Tennessee, restaurant and hospitality business, founding board member of the Memphis Farmers Market, and executive director of Caritas Village, a community center with a farm-to-table theme "for people to eat, meet, serve in the community and share life" located in the traditionally underprivileged neighborhood of Binghampton (Chandler, 2018).

In the same spirit that Caritas Village was founded to, as stated by founder Onie Johns, "break down walls of hostility between races, rich and poor, and provide a positive street-corner alternative for neighborhood children," there are a multitude of organizations throughout the United States that have identified food production in the form of community gardens and farmers' markets as a tool for positive change.

Returning to the issue of proximity to healthy, fresh food sources for rural communities, distance to the local food outlet may be equally or more important than the metro status or region of consumers' location (USDA Economic Research, 2015). There are State programs run through the federally subsidized Farmers' Market Nutrition Program, Farmers' Market Coupon Program, and Seniors Farmers' Market Nutrition Program (NCSL, 2014a) that support farmers' markets. "In 2012, Illinois, Massachusetts, Mississippi, New Jersey, and West Virginia each appropriated State funds for one or more of these programs, ranging in amount from \$30,000 to \$1.5 million" (USDA Economic Research, 2015). Government policies that engage local communities with funding on a federal level for farmers' markets are found, as discussed above, in the Farm Bill's horticulture title, such as the Agricultural Marketing Service's Farmers' Market Promotion Program (FMPP):

The FMPP is a competitive grant program that makes funds available to eligible entities for projects to establish, expand, and promote farmers markets, roadside stands, community-supported agriculture programs, agritourism activities, and other direct producer-to-consumer opportunities. (American Heart Association and American Stroke Association Policy Brief, n.d.).

However, according to the 2021 USDA Budget Summary, "The Budget does not include [additional] funding for the Market Protection and Promotion-Farmers Market and Local Food Promotion program and will continue to implement initiatives using mandatory funding provided by Section 10102 of the 2018 Farm Bill (USDA Budget Summary, 2021, p. 70).

The Centers for Disease Control and Prevention (CDC) defines farmers' markets as:
...an ongoing gathering of farmers selling their food products directly to consumers. It can be held in community settings, health clinics, places of worship, schools, and

workplaces. These food retailers can offer direct and indirect economic benefits to a community by providing access to locally grown fruits and vegetables and space for farmers to sell their harvests and by cultivating a sense of community connectedness and shared space. (Current Practices in Developing and Supporting Farmers' Markets, n.d., p. 2)

In the context of health and wellness, the CDC has reported that farmers' markets can serve as an effective way to offer healthier food options, including traditional and culturally appropriate foods and fresh fruits and vegetables, in underserved areas" (Current Practices in Developing and Supporting Farmers' Markets, n.d., p. 2), especially when federal nutrition assistance benefits programs such as SNAP are accepted.

In 1996, the Farm Bill replaced the SNAP paper coupon system with an electronic benefit transfer (EBT) debit card system. EBT is a system for delivering SNAP and Families First benefits. The change was rolled out State by State and completed in 2004 (USDA Economic Research Overview, 2020). That same year, SNAP participants redeemed \$5.8 million in food stamps at 643 farmers' markets. In 2004, however, SNAP transactions at farmers' markets had declined to \$2.7 million, with only 289 markets nationwide accepting SNAP, likely due to technology challenges at remote markets and the expense of EBT equipment, which might be prohibitively expensive for small markets (National Sustainable Agriculture Coalition, 2014):

USDA regulations currently require State agencies to provide free, hard-wired EBT terminals to markets that conduct \$100 or more in monthly SNAP transactions but, according to the Community Food Security Coalition, many markets lack the telephone line and electricity necessary to accommodate these devices. (Briggs et al., 2010 as cited in Trends in U.S. Local and Regional Food Systems, 2015, p. 54)

With the advancement of wireless technology in recent years and additional support from State agencies, “SNAP redemption in farmers’ markets has increased” (USDA Economic Research Overview, 2020). Beginning in 2014, the Farm Bill addressed several issues that enabled SNAP benefits to be used in more Direct to Customer (DTC) outlets. One measure exempted farmers’ markets and other DTC outlets from paying Electronic Benefit Transfer (EBT) equipment and implementation costs (USDA Economic Research Overview, 2020).

Michelle Webster is the Community Health Director for Region 1-Team 1 with Mississippi State Department of Health, which partners with local municipalities to increase the commitment of local leadership to prioritize community health. She helps initiate the process of launching farmers’ markets and provides technical assistance to guide new markets into sustainability. Webster has confirmed that farmers’ markets are one way to address food insecurity. She engages local officials in discussions about community health and the adoption of policies related to improved access to healthier food options, which includes farmers’ markets. Also, along with the local leadership, she identifies the community’s health assets and needs through community forums and community assessment tools. Currently, she is working with Mayor Nichole Harris of Tutwiler, Mississippi, to lay the groundwork for a new farmers’ market in the Mississippi Delta county of Tallahatchie. This newest Mississippi Delta market in west Tallahatchie opened on July 16, 2021 and was held from 3 p.m. to 6 p.m. at the Tutwiler Activities and Convention Complex. “It did rain, which affected the attendance,” Webster said, “but they are scheduled to open twice in the month of August. They opened with one farmer, which isn’t bad, but others have signed on to participate.”

Another model that has the potential to aid food-insecure locations is the community garden. According to North Carolina State Extension, there are five types of community gardens:

Plot Gardens (divide into individual plots), Cooperative Gardens (work as a team on one large garden), Youth Gardens, Entrepreneurial Market Gardens (sell produce), and Therapeutic Gardens (Bradley, 2019).

In Charleston, South Carolina, The Green Heart Project is located in a low-income neighborhood and utilizes an urban farm affiliated with a nearby school as a vehicle for teaching, “connecting students to food, health, culture and the environment” (Green Heart, n.d.). ... Additionally, students are introduced to fresh, locally grown fruits and vegetables as they participate in the growing, harvesting, and cooking processes” (Green Heart, n.d.).

Across the river in a setting much like the Mississippi Delta, the Arkansas Delta is home to Wilson Gardens, a community garden project that brings people together to celebrate all aspects of food—how it is planted, plowed, prepared, and partaken. Locavores from Arkansas and surrounding states are loyal Community Supported Agriculture (CSA) members of Wilson Gardens. The Grange at Wilson Gardens is a learning lab and hub for an array of events.

There is ample research supporting the conclusion that community gardens are beneficial on many levels. Gardens are a source for healthy food, increased access to nutrition and physical activity, and they are a positive focal point for community interventions (Stluka, 2019). Community gardens provide numerous health benefits, educational opportunities, and build social cohesion as well (Bradley, 2019).

The knowledge that community gardens are catalysts for positive change is a first step towards building a garden initiative that achieves its goals. The community garden initiative should be customized to the population it intends to serve:

While all these [community] gardens serve as catalysts for bringing people together and improving community, some of them focus on growing food for the gardeners

themselves. Others donate their produce to the hungry. Some focus on education, some on nutrition and exercise, still others on selling produce for income. Some simply provide a venue for sharing the love of gardening. All community gardens provide opportunities for neighborhood renewal and beautification. (Bradley, 2019)

Research has shown, “Community gardens have potential to improve food choices of youth and increase physical activity while decreasing chronic diseases such as diabetes and obesity” (Landry et al., 2015). Qualitative research of gardening initiatives connected to elementary school programs in the Mississippi Delta have even demonstrated an increase in positive attitude, teamwork, and leadership skills in youth (Holmes, 2020).

Judy Belue, executive director of the Delta Fresh Foods Initiative, is an experienced community garden leader. Delta Fresh Foods is based in Hernando, a small town in Desoto County that borders the northern Delta County of Tunica. One of her first Mississippi garden ventures that exposed unforeseen challenges was in the west end of Hernando at the Gale Center, a Hernando Parks and Recreation community center. In a recent interview, Belue recalled, “To me, this seemed like an ideal place to start a community garden.” Belue and her partner, a friend who Belue said had a “passion for school gardens even when it was not a ‘thing,’” chose the west end of Hernando because they thought people there needed better access to inexpensive – in this case, free – healthy foods. Their initial concerns included how to ensure the garden would service a targeted population of people in need and how to safeguard against trespassing and theft. Ironically, instead of issues with supply, demand, reaching specific neighborhoods and stealing, they discovered two years in that not only were they challenged to find participants who would plant and maintain the garden, they couldn’t even get people to come pick the food. Belue explained:

We just had this idea that we would build it and they would all just rush to it. It's not at all like that. It just didn't [*work*], as well intentioned as we were. I learned a lot from those days. It was very disappointing. It was heartbreaking for me. It just simply did not do what we hoped it would do.

Belue has developed theories over the years about why that community garden initiative as well as countless others have not lasted, one of them being the age-old problem of societal barriers. Belue said the conflicts along racial lines that James Cobb wrote about in 1992 are still especially real in settings that call on people to work together:

I think we were in an affluent area, and the people we were targeting were the least affluent, and I would say that was a variable, even though the Parks and Recreation director was very outgoing, just a great guy. There was [*an unwillingness*] to participate together. There's so much [*still*] there, whether we like it or not, we shouldn't ignore. Whether we want to accept it or not isn't changing anything."

After taking an honest look at the Hernando community garden and similar outreach programs she has been involved with, Belue has learned that projects typically fail if they do not originate and operate under the leadership of the community being served. "Everybody loved the idea. The word community is just soothing and comforting. We like to think of it that way, but it [the Hernando community garden] didn't come out of the community that we wanted it to serve." That has been the case in most of the projects Belue has witnessed in the Mississippi Delta. They have not been rooted in the community that they hoped or attempted to serve. She has recognized that a nonprofit business plan might secure the grant; "it might satisfy the person giving you the money; it might have a little flash advertising, some coverage; it might serve a few people, but it is not going to last unless it comes from the community."

Motive, Participation, and a Sense of Place

Belue's observations that philanthropic initiatives will not last unless the plan originates in the community is a message based on her real experiences as a long-time food justice advocate in the Mississippi Delta. Her statement is a concrete example of three characteristics of food system initiatives for the Mississippi Delta and similar locations that promote a sustainable, just state of health and wellness. First, an honest evaluation of motivations and objectives is essential. Second, a food system plan with longevity requires movement towards a participatory approach (Loo, 2014). Third, the circumstances of a place or region provide crucial context for project design (Lyson, 2014).

Motivation for the work carried out by nonprofit organizations or well-meaning individuals requires honest reflection and restraint to avoid what Belue called a "missionary mentality," i.e., an attitude that an *outsider* will be able to save the community with a formulaic solution. She explained that while so many philanthropic projects in the Mississippi Delta have been well intentioned, they have often been self-serving as well. Judy added, "You know, everybody does research on the Delta." She recalled that she has witnessed a lot of funders who have come to the Delta, gathered a group together to do their community-based research, asked members of a community what their problems are, and worked to determine solutions. But then, Belue said, "They write their paper and go away. Or maybe they'd send copies back, but nothing changes." She has seen big grants come in that covered a lot of big salaries and spending on administration, evaluation, promotion, "everything, but just a dribble [was spent] in the real community, which was the reason the grant got funded to begin with. It's just a vicious, wrong system."

In a study about rebuilding others' communities conducted in New Orleans, researchers looked at the staying power of a "proliferation" of nonprofits in aftermath of Hurricane Katrina. "Many residents in New Orleans, having become exasperated at 'waiting for the white man to fix things' (Hawkins and Maurer 2012, p. 1 as cited in Harvey et al., 2016), have grown wary of the presence of non-profits" (Harvey et al., 2016). The New Orleans study found that it was additionally problematic when nonprofit leadership "did not demographically represent the constituents that they were intending to serve" (Harvey et al., 2016) in the largely low-income, African American communities (DeVita et al. 2012 as cited in Harvey et al., 2016). Harvey et al. (2016) concluded that "the most enduring projects relied on a coalition led by local residents and supported by post-Katrina newcomers who have themselves remained in the city" (Harvey et al., 2016).

Rowe (2016), in his food justice messaging for Oregon Tilth, said, "One major pitfall — for many of the definitions — is a lack of a defined audience, which is beneficial when considering food justice as a community activity. Identification of leadership, specifically who will be implementing the change, is also crucial. This way the food justice movement is better served by focusing on specific messaging." Included in this task of defining an audience for a food justice initiative is determining what is required for participation within the community being served. Loo (2014, p. 806), in a paper that has outlined a participative definition of food justice, has suggested that "participation in governing or decision-making minimally requires similar criteria be met as informed consent." In this argument, language taken from the official definition of informed consent was used to support a participatory model for food justice. Legally, informed consent requires that stakeholders (1) have the likely benefits and risks of a decision disclosed to them, (2) are provided resources and information such that they can

adequately understand the implications of those likely consequences, (3) are competent to make that decision, and (4) are able voluntarily to assent (or refrain from assenting) to the choice at hand. With strong support outlined throughout this paper, Loo (2014, p. 807) concluded, “As such, one way to start thinking about how fair participation is to be achieved is to think about what minimally is required for individuals and communities to consent to decisions or activities that may affect their food system.”

Jack (2007) has shown that communities, rich or poor, are more likely to participate in public health interventions “if they are developed in concert with community members and if they incorporate community competencies and assets” as opposed to interventions developed by outsiders without dialogue between that includes stakeholders, i.e., members of the community to be served. “However, making culturally tailored public health interventions available and providing access to health services is not sufficient if the underlying social determinants of poor health go ignored” (Jack, 2007).

A testimony to the participatory model and inspiring story about the origin of the community healthcare system in the United States is *Out in the Rural* by Thomas J. Ward Jr. and H. Jack Geiger, a book about the first two community health centers in the United States: The Tufts–Delta Health Center in Mound Bayou, Mississippi, and the Columbia Point Health Center in Boston, established as part of the 1965 War on Poverty project of the Office of Economic Opportunity. These two community centers pioneered a healthcare system that now includes more than 1,200 community centers across the country that provide care to more than 24 million Americans annually (Ward, 2017). According to *Out in the Rural*, The Tufts–Delta Health Center in the rural Bolivar County town of Mound Bayou, Mississippi, experienced success by

engaging the local community not only through healthcare, but also through education, employment and, ultimately, a pathway out of poverty.

To do so the health center assembled a staff extending well beyond the usual array of essentially clinical personnel—physicians, dentists, nurses, nurse midwives, pharmacists, psychologists, and technicians. To these it added community organizers, environmental engineers, social workers, sanitarians, health educators, agricultural experts, and lawyers. Its most important tool in these efforts was slow, patient, community organization, rooted in the belief that even poor, largely unemployed, often poorly educated, politically oppressed and socially isolated people and communities had within themselves the intelligence, resilience, and determination to confront those problems and create significant change. The ultimate goal was to establish pathways out of poverty and into a better life. (Ward, 2017)

The Tufts–Delta Health Center opened its own Office of Education and launched training programs for local staff recruits, an initiative that produced “medical record librarians, secretaries, mid-level administrators, and technicians” (Ward, 2017) and “arranged admissions to prep schools, colleges, and professional schools across the nation” (Ward, 2017). These pathways to higher education produced “black physicians, nurses, dentists, social workers, psychologists, environmental engineers and business managers on a scale not previously imagined” (Ward, 2017). According to Ward (2017), “For a population largely unemployed, displaced by the mechanization of cotton agriculture, but increasingly determined to find a road out and change the very structure of their society, this was perhaps the project’s most important impact.”

CONCLUSION & FUTURE DIRECTIONS

The Mississippi Delta's rural landscape and listless small towns are strewn with boarded-up downtown buildings, shacks, and vacant residential and commercial buildings that are images of complex and unjust geographies in rural Mississippi (Lopez Barrera, 2018). Concerns about endemic challenges such as a substandard environment are integral to the food justice movement. For example, a recent study of food environments in rural, Lower Mississippi Delta towns documented that the five neighborhoods studied were not supportive of healthful eating, "containing both food deserts and food swamps, often in overlapping patterns" (Goodman, 2020, p.1). However, access is not simply a matter of geography, and outsiders who pass through with theoretical solutions and a missionary mentality have proven to be less effective than the sum of their programs and travel expenses would indicate. As Belue has expressed, "We are not going to 'save' people;" instead, "we have to empower people." Otherwise, Belue added, "We're kidding ourselves and our funders. Look at the money that's pouring into Mississippi. We ought to be so different. We have gotten an unfair share of grant dollars." In follow-up to Belue's statement that Mississippi has received an unfair share of grant dollars, it does appear that the state should, as Belue stated, be better off than it is. While a record of private-sector and publicly supported grant money added together would supply a more complete picture of Belue's frustration with inefficient spending, a glance at federal funding alone does support Belue's assertion. A 2021 report of federal funding by state has documented that Mississippi received a total of \$37.08 billion in total federal funding and \$6,880 per resident, making this state sixth in the country in

the per-resident spending category. If these funds were applied to initiatives with staying power and truly delivered to those in need, the author agrees with Belue that Mississippi's efforts would be more rewarding not only for outsiders whose motivation might often be self-driven, but for insiders in need who deserve greater autonomy but are, in many cases, trapped within a cycle of poverty created by a flawed system of solutions. Further examination of current research as well as future studies that both quantitatively and qualitatively compare grant money taken in by the state of Mississippi to the amount of spending towards root causes of poverty, food insecurity, and chronic disease issues in the Mississippi Delta would be a merited continuation of this research because the eighteen counties of the Mississippi Delta represent one of the largest conglomerations of countryside, persistent food insecurity and poverty in the United States (Kulo, 2020).

Additional questions that have emerged from this research include but are not limited to: (1) How did rural people get disconnected from self-sufficiency and the land? There is a need for additional exploration of the paradox that people who live in an area with suitable land and climate for food production are unable to produce enough food to feed themselves. (2) How are privilege and "ethical" eating related? Further definition of "ethical" eating as it relates to cultural divides should be pursued, as the semantics of the food justice movement still need clarification of goals and objectives. For example, ethical eating is often relegated to those who have the time, money, education and privilege to do so, while populations facing extreme poverty, food insecurity, and high rates of chronic disease are more than likely focused on survival. The question of ethical eating for whom should be addressed. (3) Further dialogue regarding nutrition and the Southern diet also has great merit for further research. Relative to the food justice movement, is the Southern diet just in terms of health and nutrition?

The intersections of extreme and rural poverty, food insecurity, and chronic illness are the source of an interlocking lack of opportunity for escaping poverty's cruel cycle. Food justice seeks to address these interlocking obstacles with an emphasis on empowerment and access alongside nutrition as a form of preventative healthcare. For these reasons, this research supports food justice more so than its similar but more radical movement, food sovereignty, as a guiding concept for an expedited disentangling of the Mississippi Delta's complex food insecurity issues. Food movement terms are not decidedly independent from each other within comprehensive discourse about creating a more sustainable food system locally, nationally, and globally. However, food sovereignty is more external in nature and concerned with change on a grand, even international scale. Likewise, food justice recognizes both external and internal systemic issues that emanate from a flawed agriculture-food-health nexus, but food justice places a stronger emphasis on "local." The ideology and actions dictated by food justice are logical first steps that can lead to more extreme, long-term changes in a predominantly industrial, worldwide food system. Explanations of the food justice movement lean towards local food initiatives and address communities as coalitions for change instead of populations in need of saving by a dominant, outside force. Food justice is a principle with engaging implications of grassroots, actionable change within and, therefore, a productive mindset for steps towards healing of the Mississippi Delta.

To determine pragmatic, actionable steps for future food justice-motivated community initiatives in the Mississippi Delta with a goal to promote health and wellness in deprived communities, a series of case studies should be conducted. Case studies of current initiatives should be identified, observed, and evaluated using qualitative methods to gather data such as surveys. This research might include but not be limited to observations and detailed record-

keeping related to daily, seasonal, short- and long-term routines of the programs, informal interviews with program founders, paid and volunteer workers involved, and participants who use and are expected to benefit from the community initiative, i.e., the targeted benefactors of each initiative. Quantitative research should involve official documents, for example, reports of individual and community health trends and records of improvement in groups such as students, which should be accessible through general numbers and grades typical of school records. These are only a few of the possible sources for gathering quantitative information.

In addition to case studies, both of individuals and specific groups, and both qualitative and quantitative, it would be beneficial to this research to also identify within the target community the exposed (those who participate in the initiative) and the unexposed (those who do not participate in the initiative) to conduct cohort studies, which should be ongoing to gather both short- and long-term information. Cohort studies can observe subgroups within target populations to gather detailed information about who benefits most from these initiatives as well as inform future programs in not only the Mississippi Delta, but, from a Global South perspective, also in other rural communities who share similar characteristics.

In summary, the use of case studies using qualitative, observational techniques such as informal interviews, retrospective surveys of individuals and specific groups, as well as quantitative research using, for example, official public health records, school reports, and, if available, notes kept by each garden program, will provide valuable, initial information. In follow-up, cohort studies should be implemented to further inspect the effectiveness on health and wellness in specific groups as well as for individuals. Through a combination of case study and cohort study designs, this research has the potential to grow through exploration of past successes and failures, hold accountable those entities charged with the responsibility of building

similar initiatives, contribute to insight for best practices, and move towards creation of more efficient, effective future initiatives in small towns of the Mississippi Delta.

Limitations

This research has been limited to study of broad topics related to the intersections of poverty, food insecurity, and chronic disease. Great respect has been given to the magnitude, complexity, and importance of this topic. Within the scope of this work, assessments have been made, but fulfilling the vision for this work has been limited by the time and lock-down restrictions imposed by the 2020-2021 COVID-19 pandemic. The case studies described above are a logical next step in rounding out this work in the immediate future. Long-term, the material included in this study combined with additional documentary work, both written and visual, will provide a more complete and cohesive examination of the subject matter and a dependable resource for future initiatives

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Education

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Editor, *Midsouth* magazine (2005-2011)

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