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Seeds for Change: Examining the Association between Race, Food Security, and Urban Agriculture

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Seeds for Change:

Examining the Association between Race, Food Security, and Urban Agriculture

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Abstract

Access to healthy, nutritious food is one of the most basic human needs. Unfortunately, a large portion of the global population, including that of the United States, has limited access to such food, hence putting families in a state of food insecurity. Food insecurity occurs when households are unable to (or struggle to) provide adequate food to all household members due to lack of funds or food resources. This phenomenon is considered to be a major concern in many urban settings such as Detroit, as it is a characteristic of societal distress. Interestingly, research has shown that while food insecurity is widespread, it has greater prevalence amongst minority groups who report higher rates of food insecurity when compared to their white suburban counterparts (“Food security in the United States”, 2011). This leads one to ask, what is the connection between food security and race? Analyzing this issue reveals a structural conflict within society which works to the advantage of some racial groups at the expense of others. While urban minorities experience food insecurity, a shift towards urban agriculture is underway that aims to ameliorate structural inequality in the food system. This study investigates the links between race and food security as well as the urban agricultural movement as a response to an inadequate food system, especially that which exists in Detroit.

Keywords: food insecurity, food security, race, urban agriculture, food system

Introduction and Significance

In 1825, a renowned French gastronome named Jean Brillat-Savarin famously stated, “Tell me what you eat and I’ll tell you who you are” (Food & Culture, 2008). This quotation speaks of a deep connection between people, their culture, health, and society. In a world where significant breakthroughs in science and technology are frequent and the human population grows at an exponential rate, millions of people still lack access to a basic life necessity: nutritious food. This dearth weakens their connection with culture and health with the lack of food limiting cultural expression while simultaneously contributing to an insufficient diet. The difficulty to obtain adequate, nutritious food for all household members is known as food insecurity, a problem that is global in scope.

Communities struggle with food insecurity for a variety of reasons including poverty and food scarcity. However, other causes of food insecurity are deeply rooted in many societies and may not be explicitly recognized because the public often focuses on current conditions without considering crucial historical contexts. Further examination of the conflict reveals that food insecurity is perpetuated by historical ills against minority communities. Research has shown that the prevalence of food insecurity amongst minorities is systematic. Of the millions of people that struggle with food insecurity, minority households, especially those in urban settings, are disproportionately affected by this phenomenon (Dubbeling, M., Veenhuizen, R., & Zeeuw, H., 2010, "Food security in the United States", 2011).

Furthermore, urban food insecurity is often overlooked since social and economic circumstances in urban areas are thought to be better than those in rural areas. However, overall urban social and economic conditions do not always account for inequality within an urban population, which can be greater than inequality in rural areas. Urban food insecurity is also of

great concern because “unlike in rural areas, problems of food insecurity in urban areas are strongly related to the inadequate purchasing power of the urban poor which limits their access to adequate quantities of nutritious food” (Dubbeling M., Veenhuizen R., & Zeeuw H., 2010). The concept of race builds onto this conflict when it is seen that urban settings made up of predominately minority groups, such as Blacks and Hispanics, struggle with higher rates of food insecurity compared to their white, suburban counterparts.

All of the above inferences show that there is a strong correlation between race and food insecurity in urban areas. This article will first discuss the importance of food security. It will then examine the global, national, and local contexts of food insecurity before discussing racial significance in the food system. This piece will also address the role of urban agriculture in combating food insecurity, specifically in Detroit, while using two urban agriculture sites within the city as case analyses. Finally, the article will conclude with a discussion on future steps and concerns regarding food insecurity in Detroit.

The Importance of Food Security

Food security is characterized by having access and the ability, at all times, to obtain nutritious food for all household members. The opposite of this concept is food insecurity, where households lack access to or are unable to obtain nutritious food for household members. Food insecurity is innately undesirable because food is more than just nourishment, it is at the core of cultural and social behavior. In many societies worldwide, food is seen as something that brings households together and is used for cultural expression. For instance, many social groups use food as a marker of identity such as vegetarianism or as dietary guidelines like kosher and halal food. Furthermore, food also represents cultural roots, culinary traditions, and serves as a means

of social cohesion. The lack of access to food, therefore, strains ties with cultural heritage, tradition, and expression of identity. In addition to the social meanings attached to food, food security is also important for more explicit reasons, namely that of health and overall well-being.

It is evident that diet and nutrition directly affect one's physical and mental performance, especially in children with regards to development and education as a nutritious diet is a key factor for proper growth and brain development. When a household's nutritious diet is compromised, this directly correlates with the overall health of its members. Health concerns brought on by food insecurity affect more than just food insecure households. Rather, they concern the greater community.

Food insecurity and its health effects carry many economic consequences for society. Children raised in food insecure households are known to be more susceptible to illness during youth with higher hospitalization rates. In 2003, nearly 400 children ages five and below were hospitalized due to nutritional deficiencies at a cost of about \$16,000 per child (Cook, J., & Jeng, K., 2009). The fact that many food insecure families cannot afford health insurance means that such expenses transfer onto federal taxpayers. Furthermore, school aged children suffering from food insecurity may not perform at the same level as their food secure counterparts due to developmental issues. Many of them must look into special education courses which costs the school system an extra \$6,000 per pupil (Cook, J., & Jeng, K., 2009). Children that suffer from inadequate nutrition do not receive the same opportunities for future success when compared to others who receive adequate amounts of nutritious food and, thus, do not perform as well in school and in their futures. The long term health effects of nutrient-scarce food include diabetes, hypertension, and heart-disease. Each is known to cost federal taxpayers thousands of dollars annually through state-provided health insurance.

Food Insecurity: Global Perspective

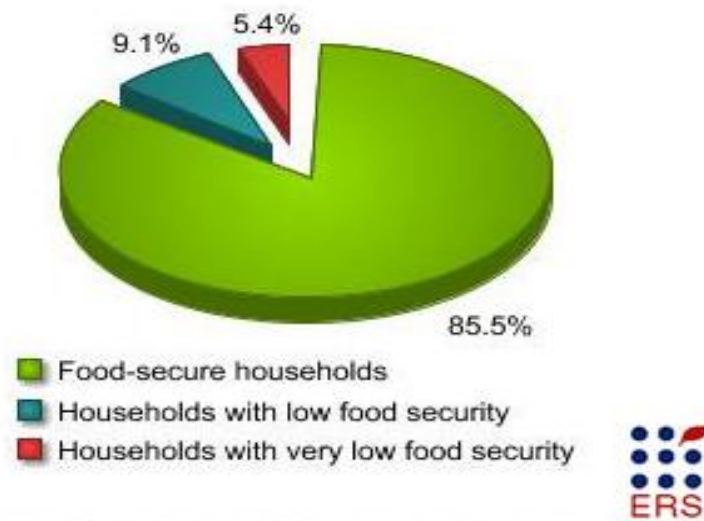
As of 2010, more than 850 million people in 77 developing countries struggle to provide adequate food for themselves and family members (“Global food security”, 2011). Some of this is an immediate result of inadequate food production while much of it is caused by unequal purchasing power in which the poor lack access to food due to insufficient funds. Some developing countries have been successful in improving their food security situations partially through economic growth and policy changes while others have not been so fortunate. Sub-Saharan Africa has seen very little progress in this area and many humanitarian efforts have been unsuccessful in implementing sustainable food initiatives.

What is it about Africa that makes achieving food security so difficult? The answer lies within a historical context in which African countries were hit the hardest with colonial domination, economic exploitation, and slavery. It is estimated that between 10 and 50 million West Africans and another 1.2-3 million East Africans were sent to the New World and Eurasia for slave labor, thus leaving the continent’s labor force crippled (Lamb, 1982). Colonialism and slavery have had an enduring impact upon Sub-Saharan Africa, as many countries within the region still suffer from unstable economies, extreme poverty, and unequal spending power which place them at the forefront of food insecurity. However, the problem of food insecurity is not a concern restricted solely to foreign lands, but rather one that is prevalent here in the United States as large populations of people struggle with food insecurity on a daily basis.

Food Insecurity: The United States Perspective

The unfortunate fact about the United States, one of the most prosperous countries in the world, is that millions of people lack access to food. In 2010, in this nation alone, about 48.8 million people struggled with food insecurity at some point during the year (“Food security in the United States”, 2011). This population includes those who struggled with low and very low food security. Low food security is characterized by households who managed to obtain enough food in order to prevent the altering of diets or eating patterns. Very low food security, on the other hand, is characterized by the fact that one or more household members’ eating patterns were disrupted due to the lack of food access.

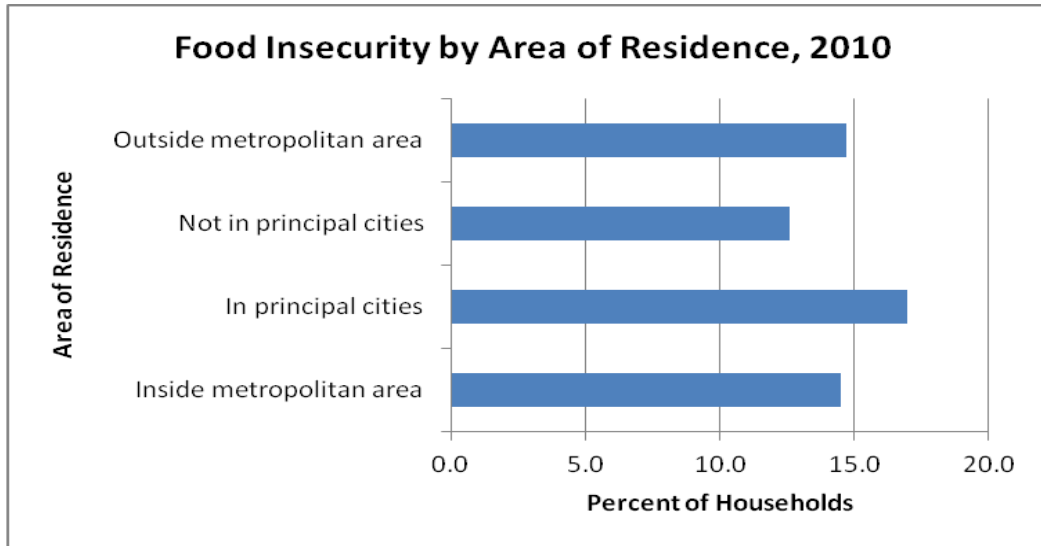
The pie graph on the next page is taken from the U.S Department of Agriculture’s Economic Research Service’s (ERS/USDA) briefing room. From the image, one may be quick to conclude that since 85.5% of households were food secure in 2010, the issue of food insecurity is not substantial; however, such a conclusion would be erroneous. The statistics below do not account for certain crucial factors such as area of residence and racial categories which can significantly affect the rate of food insecurity within a given area. For instance, principal cities that suffer from food deserts, neighborhoods that have limited access to affordable and nutritious foods, such as Detroit, report higher rates of food insecurity compared to cities where residents have easier access to grocery stores. In fact, out of the 6,500 food deserts in the nation, 75% of them are in urban areas where millions of households are more than a mile away from a grocery store (Hunger and Food Insecurity, 2011). Thus, while the national food security rate may be impressively high, it does not represent the disparities of food insecurity in principal cities.

Food security status of U.S. households, 2010

Note: Food-insecure households include those with low food security and very low food security.

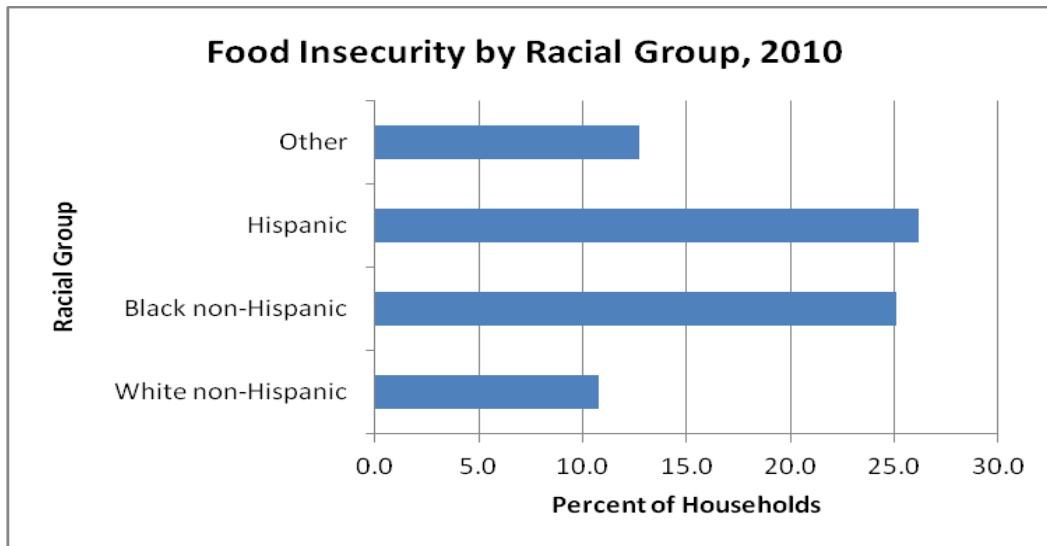
Figure 1: Data ERS/USDA. December 2010 Current Population Survey Food Security Supplement. Food Security Status of U.S. Households [Graph]

The following graphs were compiled to account for food insecurity rates by area of residence and race using data provided by the ERS/USDA website with 2010 statistics. The first graph shows the prevalence of food insecurity based on residential area which is more representative of the occurrence of food insecurity by region. It shows that residents of principal cities report higher rates of food insecurity; 17% in 2010 as compared to those residents not living in principal cities. This is a notable result of urbanization which causes cities to grow at astounding rates and push back rural agricultural sites further from the city center as the need for residential and industrial space increases. Urban residents typically travel further for their food and spend larger portions of their income on it when compared to rural or non-metropolitan residents.



**Figure 2: Data compiled from ERS/USDA, December 2010
Current Population Survey Food Security Supplement [Graph]**

The graph below (using the same ERS/USDA data) shows the disparities in the rate of food insecurity reported within 2010 by various racial groups. Hispanic and Black households reported the highest rates of food insecurity at 26% and 25% which is double the rate of food insecurity amongst White non-Hispanics, hence, implying a racial significance.



**Figure 3: Data compiled from USDA/ERS, December 2010
Current Population Survey Food Security Supplement [Graph]**

Food Insecurity: Local Perspective (Detroit)

Detroit is well known as a shrinking city- one that is characterized by poverty, poor education, and high rates of unemployment. As of 2010, Detroit's unemployment rate was nearing 50% (The Huffington Post, 2010). The city also suffers from an inadequate transportation system that makes it difficult for residents to travel in and out of the city. This issue is further exacerbated by the fact that one fifth of Detroit's population is without a car (Gallagher, 2007). The lack of reliable transport hinders Detroiters' access to job sites, grocery stores, schools, health clinics etc., hence aggravating the challenges of city life.

Of equal concern is the lack of chain grocery stores within the city, giving Detroit its designation of a food desert. The shortage of grocery stores with healthy food options is not a mere coincidence; rather, statistics have shown that the access to grocery stores by various racial and socioeconomic groups is marred with inequalities. To provide perspective, Detroit is reported to have ten grocery stores for every 100,000 people compared to 40 stores per 100,000 residents in Chicago and 23 in Ann Arbor, Michigan ("Detroit grocery incubator project", 2010). The few grocery stores that do exist are located too far for many residents to reach without reliable transportation.

Over 90% of retailers in Detroit are categorized as fringe retailers that specialize in selling tobacco products, alcohol, and small quantities of prepackaged food stuffs that are low in nutritional worth which could explain the poor health of many Detroit residents (Gallagher, 2007). Due to these pressing concerns, Detroit's food insecurity rate in 2009-2010 was recorded at a staggering 14.7% (Pothukuchi, 2011). Even more disturbing is the fact that there is only one Black-owned supermarket in a city where 4 out of 5 residents are Black (Pothukuchi, 2011). The city has turned into an empty shell where grocers and other businesses have left the city for the

suburbs. Yet, these racial disparities are not recent; they have always been a major part of Detroit's history.

Detroit has long been considered one of the nation's most segregated cities with a score of 85 out of 100 on the Dissimilarity Index scale where zero represents no segregation and 100 represents full segregation (Galster, 2007). Discriminatory policies such as the housing practices of the 1960s (even after the Fair Housing Act) created a concentration of poverty within the city. This phenomenon further perpetuated social ills such as the emergence of a weak tax base caused by wealthier residents and businesses leaving the city, a decline educational standards, and, of course, massive food insecurity rates. In addition to these realities, race also carries great significance in regards to food insecurity.

Significance of Race

In order to understand the connection between race and food security, it is imperative to define race. Until fairly recently in our historical record, many people worldwide viewed racial categories as being biological divisions within the human species which were primarily based on physical characteristics. Fortunately, genetic research has proven that many physical characteristics are inherited independently of one another, thus showing that the presence of one physical trait does not necessarily dictate the presence of another. The concept of race is now commonly understood as being a social construct and is thus, biologically meaningless.

Nonetheless, it is well known that 'race' has always carried more meanings than just physical differences; this concept is also political in nature. Scholars from a variety of backgrounds argue that race as we understand it in the United States was "invented during the 18th century to refer to those populations brought together in colonial America: the English and

the other Europeans, the conquered Indian peoples, and those peoples of Africa brought in to provide slave labor” (AAA, 1998).

From its inception, race has been a growing ideology based on inequality which was used to rationalize European attitudes and treatments towards the conquered and enslaved peoples. Race soon became a concept imbedded in our country’s history in which those of European descent were seen as superior to other races, especially the Black population. The effects of racial discrimination have left their mark upon the minority Black community as they are currently under-represented in the workforce, educational institutions, and the food system. According to the American Anthropological Association, “how people have been accepted and treated within the context of a given society or culture has a direct impact on how they perform in that society” (AAA, 1998). Indeed, racial ideals that have stemmed from our country’s history put minority groups in a perpetual low status not based on biological factors but on cultural, social, and political conditions.

Race and the Food System

The food system is comprised of numerous parts, from production to cultivation, marketing, and distribution. Many consider it a representation of our nation’s prosperity, progress, and power. However, what the public fails to realize is that some racial groups benefit from the food system more than others. The United States’ food system “rests on a racial construct that has historically had, and continues to have, severe adverse impacts upon its producers, consumers, and workers of color” (“Race/Ethnicity”, 2010). Not only are minority communities underserved in food deserts, they are also under-represented in the production and distribution of foods. The food system has a historical track record of denying land and resource

rights to certain racial groups in effort to maintain the status quo. Consequently, many minority groups put forth hard effort into the food system only to be disadvantaged in the end (“Race and the food system”, 2010).

When the populace thinks about the progress that this nation has made, they cite the Constitution and our nation’s Founding Fathers as primary causes. But the Constitution initially excluded Blacks from benefiting from full constitutional rights and our Founding Fathers supported the enslavement of Africans - a severely crippling factor for their future success that still resonates today. Even after the abolishment of slavery and the inclusion of all racial groups within the Constitution, the struggle for minority groups to be fully represented in American institutions still continues, especially in the food system. The ongoing struggle with food insecurity in cities is being partially addressed by returning to traditional practices of urban agriculture.

Urban Agriculture: Historical Context and Significance

When the general public thinks about urban agriculture, they simply imagine farming in and around cities. However, urban agriculture is an intricate phenomenon which is best described as:

a complex system encompassing a spectrum of interests from a traditional core of activities associated with the production, processing, marketing, distribution, and consumption, to a multiplicity of other benefits and services that are less widely acknowledged and documented, (Butler, L ., DM. Maronek, 2002)

such as individual and community health, entrepreneurship and environmental restoration.

Many people view urban agriculture through a historical European context which depicts agriculture and the city as two separate entities; however, such a firm distinction has never been the case (Redwood, M., 2009). Urban agriculture has existed since the formation of cities and can be identified at virtually every point in history. A particularly well known case of early urban agriculture dates back to 16th century Machu Picchu, Peru, which was a self-reliant mountain site that practiced terracing, irrigation, waste management and food storage (Smit, Jac, 2002). Another noteworthy case is that of 19th century, post-Industrial Revolution Paris where urban agriculture was used to feed the massive city population without depending heavily on food supplies from the rural areas.

In the United States specifically, urban farming became very popular during the World War I and World War II eras when ‘victory gardens’ were created to relieve the strains on the food system which were caused by the war. Today, urban agriculture exists in different forms ranging from rooftop gardens, to roadside gardens, and on vacant plots throughout the city on both small and large scales. While urban agriculture provides use for vacant city land, it also provides a framework that contributes to food security and better nutrition for city residents.

The contribution of urban agriculture to food security and better nutrition is arguably its most important asset. Producing food in the city is a response of the urban dwellers to the inadequate and unreliable food access from which they suffer. On a nutritional level, urban agriculture provides urban communities with food that is fresher and higher in nutritional value compared to the foods available at grocery stores. In the United States, food travels between 1,500 and 2,500 miles from farm to plate and much of it is lost to spoilage during transit hence, most foods in grocery stores are chosen for their ability to withstand long periods of storage rather than for nutritional quality or taste (Halweil, 2002).

Urban agriculture improves access to fresh food in two ways. First, it makes nutritious food available at close proximity, especially in food deserts, allowing consumers to reap the benefits of the food's nutritional value. Second, urban agriculture reduces the overall costs of food because locally grown food requires less transport and fewer intermediaries from field to store (Dubbeling, M., Veenhuizen, R., & Zeeuw, H., 2010). Consequently, urban agriculture has an advantage over rural farming due to its nearness to urban consumers and low transport costs.

Urban agriculture also benefits the urban poor by allowing them to save on overall food expenditure. Community and backyard gardens enable people to grow their own produce and spend less on store bought food. Poor urban households spend as much as 60-70% of income on food expenses, therefore, saving on produce enables funds to be used elsewhere in the household (Dubbeling, M., Veenhuizen, R., & Zeeuw, H., 2010).

Worldwide case studies have shown that urban agriculture is a significant component of the food system and enables vulnerable groups to minimize food insecurity. In Accra, Ghana, 90% of all vegetables are produced through urban agriculture while in Dakar, Senegal, 70%-80% of all vegetables are provided by urban agriculture (Dubbeling, M., Veenhuizen, R., & Zeeuw, H., 2010). Urban agriculture in Havana, Cuba has also been widely recognized for its contribution to food security where urban farms provide the city's population with 8,500 tons of agricultural produce (Altieri et al., 1999). The urban agriculture movement in Detroit has also been widely noticed.

Case Studies of Urban Farms in Detroit

Detroit was once known for revolutionizing the automotive industry and is now at the forefront of urban agriculture. As many large cities nationwide such as Los Angeles, New York

City, and San Francisco look into using urban farming to fill vacant city land, Detroit stands as an example of urban farming's potential. The city has great prospects for urban farming due to large amounts of vacant land as a result of decades of population decline. There are numerous established urban agriculture organizations in Detroit and more than 800 gardens (Colasanti, K., Litjens, C., & Hamm, M., 2010). These sites are making good use of vacant land while making a bold statement about urban agriculture's potential. This article will examine two of these sites in more detail.

Earthworks Urban Farm

Earthworks Urban Farm is a project sponsored by the Capuchin Soup Kitchen, a human service organization which serves the poor who lack basic needs such as food, clothing, and household goods in addition to catering to the demographics' social and psychological needs (Earthworks Urban Farm, 2008). The farm was established in the 1990s and aims to contribute to a just food system through "education, inspiration, and community development"; it is the oldest Certified Organic farm in Detroit (Earthworks Urban Farm, 2008). Most of the produce grown at Earthworks is used in soup kitchen meals while some is sold at farmers' markets; both methods make organic produce available to city residents who often struggle to obtain nutrient-rich food. The farm grows a wide variety of crops, adding diversity and nutrients to the diets of urban residents. Earthworks is not limited to growing vegetables as it also grows small fruits, culinary and medicinal herbs, and keeps bees. Earthworks strongly believes that food is a natural remedy and in accordance with this philosophy, produce is left unprocessed to retain nutritional value. High-nutrient foods can benefit the farm patrons' diet immensely compared to the food that is otherwise easily accessible throughout the city: fast food.

About 85% of the farm's patrons are Black, which is representative of the surrounding community (Earthworks Urban Farm, personal communication, November 17, 2011). These patrons come to Earthworks and the Capuchin Soup Kitchen for a variety of reasons. While some may come for access to food due to poverty, most come to the site due to the foods' nutritional values. Both of these reasons can be traced to the disparities of the food system. On one hand, minorities in cities struggle with less purchasing power and on the other hand, they suffer in regards to access to healthy food, even if they have adequate funds. In this case, Earthworks is addressing both concerns through urban agriculture.

Earthworks is comprised of numerous lots, each designated for a specific purpose. Currently, the farm uses 22 lots and acquires more land for projects as needed. Interestingly, Earthworks does not own all of the land it utilizes; only four plots are owned and the remainder is used with prior arrangements and/or agreements with land owners. This is advantageous because owners who have no use for their vacant land are able to see it flourish under Earthworks' care. In turn, the farm benefits from more land and less financial strain. This type of arrangement could serve as a model for urban gardening sites as it can benefit both the current owner and the farm site.

While Earthworks is heavily involved in the urban agriculture movement, it is also teaching and enabling youth and community members to join this phenomenon. Earthworks provides garden plots to community members who wish to partake in gardening yet are unable to do so at their homes. In such cases, people are given a space to begin their garden and can upgrade when they need more space. Additionally, Earthworks hosts youth programs which focus on educating youth about gardening basics, nutrition, and cultural awareness (Earthworks Urban Farm, 2008). Thus, Earthworks is involving the community in sustainable urban

agricultural efforts which further spread its effects through training and education of future generations.

In addition to providing nutritious food and educating the community about urban agriculture, Earthworks also addresses food insecurity through established meetings. The discussions of these meetings focus on food justice in an effort to inform the greater community of the effects of food insecurity and create solutions for this problem. Earthworks also incorporates the suggestions from their meetings into their organizational structure when suitable. This organization hosts the Earthworks Agricultural Training (EAT) project which teaches community members the skills they need to create their own food enterprises, including knowledge of the food system from producing, processing, and marketing, to distribution. Through urban farming, Earthworks provides the Detroit community with fresh, organic produce and through education, it teaches the community the importance of urban farming in an effort to spread the movement.

Detroit Black Community Food Security Network (DBCFSN): D-Town Farm

D-Town Farm is an initiative of the DBCFSN which aims to build food security in Detroit by influencing public policies, encouraging cooperative buying, and promoting healthy eating habits. It also facilitates support amongst members, encourages youth to pursue careers in urban agriculture, and promotes urban agriculture in the community (DBCFSN, 2010). D-Town Farm initially began on two acres and expanded to seven acres, making it one of the largest urban farms in Detroit.

Like Earthworks, D-Town Farm practices sustainable, chemical-free agricultural initiatives and provides a wide crop variety to accommodate the cultural and dietary needs of consumers. The farm grows vegetables and herbs, practices beekeeping, and is beginning to

grow fruit as well. The produce from the farm is sold in various farmers' markets, the Eastern Market, and to the overall community. The DBCFSN clearly recognizes that Detroit's majority Black population is under-represented in the food system; hence, they strive to involve members of the Black community in active leadership roles within the food security movement.

Aside from addressing food security through urban agriculture, DBCFSN is also at the forefront of influencing Detroit policy making. As a result of advocating for the Detroit food security issue before the City Council in 2006, DBCFSN was appointed the task of drafting a food security policy for the city of Detroit. The final version of the policy was unanimously adopted in March 2008. This policy was made to include crucial factors such as food access, hunger and malnutrition, and economic injustice in the food system. DBCFSN also worked to establish a Food Policy Council in Detroit in an effort to create a more food secure city; a resolution supporting the creation of the Food Policy Council was passed in 2008.

DBCFSN at D-Town also takes part in educating the community about urban agriculture initiatives, much like Earthworks Urban Farm. D-Town hosts a Food Warriors Youth Development Program teaching children ages two to eight years old the basics of gardening and healthy eating, and giving them an early start to becoming active in the food system. Furthermore, the DBCFSN organizes a lecture series called "What's For Lunch?" which is co-sponsored by the Detroit Public Library.

In addition to urban farming and educating the community about its benefits, DBCFSN initiated a cooperative buying project called the Ujama Food Co-Op Buying Club in 2008. This club offers members the chance to purchase organic and healthy food products at discount prices. Members place orders through a vendor once a month to receive bulk quantities of healthy foods

and household goods. This has the benefit of reducing overhead costs and making organic food products more affordable.

The benefits of urban agriculture sites such as D-Town Farm and Earthwork's Urban Farm are tremendous. The sites make healthy food options available to Detroit residents who suffer from food insecurity and overall food access. They also educate the greater community on the importance of agriculture as well as its methods and sustainability. Each site advocates for food security in the city either in the front line of policy making or by tirelessly working to achieve food security for community members in a food system that privileges some people at the expense of others. Thus far, this article has examined the complex issue of food insecurity on global, national, and local scales and described the overall importance of food security. It then delved into the concept of race and its significance in the food system, an undeniable link which is perpetuated by historical ills against minorities. Furthermore, this article gave a historical context of urban agriculture and suggested that urban farming can be a strong asset in the fight for food security, especially when seeing how urban farms in Detroit such as Earthworks and D-Town are addressing the issue. With insight into the magnitude of the food security problem, one may wonder what the future of this issue is and what must to be done to fix it.

Future Steps Towards Food Security

Knowing that the disparities in the food system are systematic rather than coincidental, multiple steps need to be taken to address this long-standing issue. In Detroit, specifically, there must be a substantial increase in the number of food outlets that sell healthy foods within practical distance in Detroit neighborhoods. These outlets must carry a wide variety of foods such as diverse fruits, vegetables, legumes, and grains as opposed to the limited variety currently

stocked in stores for their shelf-life. Such a variety increases exposure to nutrients and also paves the way for a more culturally sensitive food system. One key aspect to consider when bringing grocery stores into the city is purchasing power. Recently, there has been much speculation about the addition of a Whole Foods grocery store in Midtown Detroit. While this chain is well known for its healthy food options, it is also known for its fairly high prices. Detroit is a city where many residents have limited purchasing power and thus, while Whole Foods may be beneficial for its food offerings, it may not be accessible by all in terms of pricing. Grocery stores that enter the city must consider the purchasing power of its potential consumers, otherwise, the addition of such a store would be of little benefit to the Detroit population.

After the establishment of additional food outlets in the city, transportation issues must be addressed. Knowing that a large portion of the Detroit population is without a car, these stores would have to be strategically placed so as to be easily accessible by walking and bus. As a citywide initiative, bus routes would need to be reviewed to ensure that these new stores are easy to reach within a single bus ride as opposed to multiple transfers.

The most important step that the city needs to take is the promotion of urban agriculture. Sites like Earthworks Urban Farm and DBCFSN at D-Town Farm have taken the initiative to promote urban agriculture, but such efforts need more support from the city level. Funding support for local businesses selling healthy produce and other incentives that would promote locally grown food options would be of benefit to all community members regardless of race. A good place to implement this change would be in schools around the city where locally grown produce is served in school lunches. The city should also invest in local food banks to aid those with low purchasing power in effort to uphold dietary needs. These food banks could aid a large

portion of the community in preventing hunger and malnutrition while simultaneously supporting the urban agriculture movement.

Another citywide initiative against food insecurity would be to eliminate the various barriers that prevent minorities from being represented in the food system. This would require employing Blacks and Hispanics in the food business at all levels. Establishing incentives, either financial or otherwise, that would promote the food businesses owned by minorities could help increase representation of minorities in the food system. In conjunction, job training programs hosted by the city should also offer training for careers in agriculture as opposed to simply service jobs.

In regards to policy making, the city of Detroit must realize the importance and the potential of urban agriculture for not only the health of its citizens, but also for its future development. Currently, city codes limit the use of land for farming initiatives. The revision of these codes to allow greater potential for farming could help spread the effects of the urban agriculture movement. Making changes to the city's school curriculum to accommodate education about urban agriculture, diet, and nutrition could provide strong leadership for future farming initiatives through the city's youth. Detroit is also home to Wayne State University, one of the top-ranked research universities in the nation. The city could make use of this institution in promoting urban agriculture through various departments such as urban planning, sociology, and anthropology. Promoting funded research on urban agriculture practices that would benefit the city would not only educate students about this subject, but it would also provide helpful information for urban agriculture sites and encourage city revitalization.

A great example of policy change in support of urban agriculture can be seen in Beijing where the city government is actively promoting urban agriculture as part of its national “Reconstruction of the Countryside” policy (Dubbeling, M., Veenhuizen, R., & Zeeuw, H., 2010). This policy promotes the strengthening of agricultural production as well as the diversification of grains and crops. Additionally, this policy also addresses the need for social inclusion of migrant farmers through various employment positions. The implementation of this policy has led to increased growth of urban agriculture development while more than doubling the average farmer’s income (Dubbeling, M., Veenhuizen, R., & Zeeuw, H., 2010). The case study of Beijing’s success with policy change can serve as an example of the possibilities of urban agricultural promotion in Detroit.

Concluding Thoughts

This document has provided an in-depth look at the problems of food insecurity worldwide and in Detroit, specifically. Food insecurity is more prevalent in urban areas and even more common amongst minority groups such as Blacks and Hispanics. This is not a coincidence. This article examined the relations of race and food security which are structural in nature and have existed throughout history, especially in Detroit. Discriminatory policies of the past have left residual effects on present day minority communities such that these groups have remained structurally disadvantaged by various institutions, including the food system. This document suggests that change can occur with the help of urban agriculture. The potential of urban agriculture as a movement for change has been realized worldwide. Detroit is at the forefront of this movement with hundreds of urban gardens and various established urban farms. However, more needs to be done. Detroit must realize its potential for urban agriculture and support this

movement on the ground level, through education, diversification of the food system, and especially through policy changes. Only after such critical changes have been made can the city regain its past glory, not as an automobile city, but as a food-secure, green city.

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