Pathways to Engagement

Regenerating a Resilient Connecticut Foodshed



Volunteers at Reservoir Community Farm; Photo Green Village Iniative



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Welcome

This report is a living document written for anyone interested in learning about and contributing to a resilient foodshed in Connecticut. It is written by two white women on our path toward anti-racism and committed to an equitable food system. We hope this report will become a community-built catalyst for change. Further, we hope to inspire conversation and create pathways for people to come together, build trusted relationships, and take steps together toward regenerating our foodshed.



Hungry Reaper Farm; Photo Will O'Meara

Executive Summary

Background and Scope

Based on a shared belief in farming as a conduit for social and environmental transformation, this report was catalyzed by a conversation between Rachel and Jaideep Khanna, and Cristina Sandolo and Ellie Angerame, the leadership team at Green Village Initiative (GVI), a nonprofit organization that grows food, knowledge, leadership and community through urban gardening and farming, to create a more just food system in Bridgeport. After a conversation regarding land access as one of the largest barriers for new farmers and farmers of color, an initial research question was selected:

• Is there a pathway for residents in Greenwich, CT with farmable land on their property, to offer that land to farmers in GVI's network, for agricultural use?

Exploration of the question led GVI to convene a working Committee of experts, and to invite Ali Robinson as Project Manager and Facilitator and Ali Ghiorse as Research and Stakeholder Engagement Manager. As the discussion about land access evolved, it became apparent that the challenge is broad and systemic. Supporting new farmers and farmers of color is at the center of the question, and therefore it was necessary to approach and explore this inquiry in a comprehensive manner, prompting many other questions, such as:

- How has land ownership in Connecticut been influenced by race and socio-economic barriers?
- What do new farmers need to thrive in this state? Why are they leaving?
- What is the status of Connecticut's regional food system infrastructure?
- How does policy influence the regional food system?
- What is the role of education in fostering a resilient foodshed?
- What are funding pathways for a regional food system?

FOODSHED & RESILIENCY

We use the term 'foodshed' as it correlates to place; to the geographic bioregion in which food is grown and distributed. The term food system offers broader context; extends outside of Connecticut and therefore we use the terms interchangeably throughout the paper. We use the word 'resilient' because implicit in resiliency is diversity, flexibility, and strength; all the critical components of a healthy and established foodshed that is meant to provide for generations to come.

Over the course of 8 weeks, the project management team prepared discussion themes and prompts to facilitate weekly committee meetings. The outcomes of the discussions influenced the direction of research and stakeholder interviews, which then informed the following week's agenda. Several weeks into this project, after much discussion and extensive research, the central research question was updated to:

• What are viable pathways of engagement for individuals interested in regenerating a resilient foodshed in Connecticut?

Discussion of this updated research question prompted additional questions such as:

- What are the needs?
- What solutions are currently in place?
- Are there opportunities to engage by investing with meaningful impact?
- What are the barriers to engagement?

We now refer to these first eight weeks of this project as "Phase I"; culminating in the development of this report, "Pathways to Engagement: Regenerating a Resilient Connecticut Foodshed", intended as a concise manual for informing the general public about food system solutions currently in place, opportunities for innovation and impact, and the underlying context and challenges.

Content Summary

Part I of this report provides a contextual overview of the wide variety of forces shaping our food system; we believe it is



Reservoir Community Farm Tomato; Photo Stacey Davis

essential to understand the issues to ensure actions are effective and aligned with intention. We begin by examining food security, race, poverty, equity, and health, and the economic and environmental impacts of a highly industrialized system; highlighting the ways in which our predominant industrial food system is extractive and destructive; how it drives racism, exploitation, diet-related disease, hunger, and ecological degradation; and how issues of an imbalance of power that lead to resource inequity are central in the industrial food system. We then explore Connecticut's foodshed, including the state's agricultural history, and barriers to production in the state, such as land access, training and leadership resources, infrastructure, and funding. We acknowledge that the issues are vast, and that we do not adequately address them all, as we focus on the issues identified as highly influential within the scope of this project. We hope Part I provides foundational grounding to facilitate your inquiry on your path to action.

Part II of this report provides an overview of our recommended next steps toward engagement with deliberate impact in regenerating a resilient Connecticut foodshed. We begin by proposing the following guiding principles to guide our proposals; followed by a summary of strategic considerations. We then define priority investment areas and provide some funding project examples. We conclude with a reminder of the importance of equitable relationships as a precursor for meaningful work.

Conclusion

Through the course of our inquiry, we found example after example of existing and effective collaborative leadership, innovative programs and products, and components of a healthy foodshed; we conclude that engagement and investment should be focused on supporting solutions currently in place while exploring further opportunities for impact.

"Diversity is the foundation of resilience." Rowen White, Sierra Seeds

PART I: Global



Okra blossom Reservoir Community Farm; Photo Ali Ghiorse

Our Globalized Food System

Introduction

A food system is made up of systems within systems: farming, agricultural ecosystems, economic and social systems all live within a subset of systems including water, energy, financing, marketing, policy, waste, and others. A food system includes not only the means by which food is transported from farmer to consumer, but includes the processes and infrastructure involved in feeding a nation.

Our global and national food system has been shaped by generations of industry concentration, government and corporate interventions, along with a large-scale culture shift away from household subsistence and local sustainable food production. The result of these factors is a globalized food system which has fundamentally shifted the operational model for agricultural production, as well as the relationship between the grower and consumer. Decisions about food production, what food is produced, how it is produced, and who gets to eat that food have been increasingly outsourced from households and communities into the hands of governments and corporate boardrooms. This approach is fundamentally unjust, results in a lack of investment in a resilient regional foodshed and poses risks to local communities in an era of unprecedented poverty, racial and economic disparity and climate change.

"As the COVID-19 crisis unfolds, the challenge is to turn the existing seeds of change into the foundations of a new food system ..." Communique by IPES-Food, April 2020

The current COVID-19 pandemic is exposing components of the brittle and inequitable underpinnings of our industrial food system. Our current framework is the result of the history of colonization in the United States which relied on the acquisition of stolen land from Indigenous Peoples, and the enslavement and oppression of black people. Through the centuries, this model has turned food into a commodity, removing the means of production so far from the consumer that the very farmers who grow that food cannot afford it. Extractive mono-crop production harms the soil, resulting in declining health outcomes and natural resources, as well as loss of critical habitat required to buffer and protect humans from diseases, such as Covid-19 and Lyme disease³. Our current conventional food system also divorces us from the seasonal rhythms, tastes and flavors of food; it erodes our connection to place, our ancestral diets, and traditional foodways.

Oxford Martin School University of Oxford, "The Oxford Martin Programme on The Future of Food" 2020

² John Hopkins Center for a Livable Future, "Industrialization of Agriculture"

³ Ferris Jabr, "How Humanity Unleashed a Flood of New Diseases. What do Covid-19, Ebola, Lyme and AIDS Have in Common?" They Jumped To Humans from Animals After We Started Destroying Habitats And Ruining Ecosystems" NYT Magazine January 17, 2020

Internationally, thought leaders recognize that if we are to survive as a species, we must leverage this unprecedented time, convene diverse coalitions within our respective bioregions, and define a resilient, decolonized and decentralized food system. We can then begin to take steps towards co-creating a thriving, inclusive foodshed that supports a common food culture - a culture that is dependent on interpersonal relationships, reflects the land and the people who steward and/or live on that land, and recognizes food sovereignty as a human right, a culture where all people have access to the food they need to nourish their communities and families.

Food Security

The sole purpose of the industrialization of food and agriculture is to produce food efficiently, with a focus on quantity. The authors of this report assume that economic inequity has in part been exacerbated by impacts of technological changes, public policy, globalized trade, and an industrialized agricultural system which leaves millions of people food insecure. Food security, access to nutritious food, and clean water are fundamental human rights, yet globally, 265 million low and median-income individuals will face acute food insecurity by the end of 2020.4 While some of these individuals may be able to grow, forage, hunt, and source their own food, their ability to do so is increasingly threatened by the encroachment of development and habitat loss. Evidence shows that one strategy for mitigating this issue is small-holder farming; there are approximately 500 million smallholder farms globally, and these small farms feed 70% of the population using only 30% of the resources and 12% of the agricultural land."

Race, Poverty and Health

Global Considerations

The industrial food system impacts communities all over the world, disrupting the ability for communities to be self-reliant. According to the Global Panel on Agriculture and Food Systems for Nutrition, the world is facing a nutrition crisis. Approximately three billion people from every one of the world's 193 countries have low-quality diets. As supply chains get longer and the connection between the grower and consumer is removed, it becomes difficult to eat foods that reflect bioregion and heritage. The health consequences of a food system that is divorced from the fertility of the soil, leads to a 'double burden' of both undernutrition and obesity. The 'low cost' of processed food, which correlates to over consumption, contributes to the crisis. The Global Panel urges policy makers to take significant measures to curb obesity and diet-related disease, and should they dismiss this critical fact, the cost could include disease, death, economic losses, and degradation of the environment. The Global Panel calls on policy makers to shift their mindset, to take a different approach, and address the crisis by going beyond agriculture, and considering food production, processing, storage, transportation, trade and retail. Unless food is re-localized and traditional nutrient rich foods are within reach of all people, poor quality diets will continue and exacerbate this crisis.

⁴ Oxford Martin School University of Oxford, "The Oxford Martin Programme on The Future of Food" 2020

⁵ Ellen MacArthur Foundation, "Cities and the Circular Economy for Food" Report 2019

⁶ Global Panel on Agriculture and Food Systems for Nutrition <u>www.glopan.org</u>

⁷ Global Panel on Agriculture and Food Systems for Nutrition <u>www.glopan.org</u>

Federal Considerations (United States)

"We have to rebuild the US. These inequities have been present for 500 years, they began with white supremacy and its effect on Indigenous People; the stage was set then, and 100 years later, with the arrival of the first African-American slaves, the conditions proceeded to pace. Unless we come face to face with the impact of white supremacy, I don't think we are going to succeed." Dr. William Dietz⁸, Milken Institute School of Public Health at The George Washington University

Redlining was a common practice beginning with the National Housing Act of 1934, by which banks, insurance companies and other lending agencies refused or limited loans, mortgages, and insurance within specific geographic areas, specifically black and brown neighborhoods. In addition to excluding communities of color from access to building wealth by owning property, this practice also designed neighborhoods without supermarkets, forcing communities to be reliant on the highly processed, high sugar, fat and sodium food found in corner stores.

Colonization, entrenched in white supremacy, started with stolen land, moved its way through slavery and Jim Crow laws, and is evidenced in the countless contemporary examples of overt racism and predation. We acknowledge its pervasiveness in American culture today. This history of systemic racism has resulted in a structural deficiency which effectively limits access to capital for people of color. This leads to limited economic means or poverty, which manifests in health deficiencies, as individuals face economic barriers to stable housing, healthcare, and nutrition.

The industrialization of food and agriculture produces cheap and empty calories. Fast food with high sodium and sugar as well as poor quality fat and preservatives causes many Americans to be undernourished, obese, and suffer from chronic illness. Due to the histories of colonization and the systems of structural racism against Black, Indigenous, People of Color (BIPOC) such as redlining, black and brown communities are most critically impacted by hunger and diet-related diseases. There is a direct correlation between disease and poverty, which disproportionately affects people of color. Nationally, food insecure black families outnumber white families by a ratio of 2:1.10 Native Americans are sixty percent more likely to be obese than whites, the rate of diagnosed diabetes is seventy seven percent higher among blacks. 11

Obesity is an epidemic. In the 1970s its prevalence was 5% in the population, and now 42% in the US. It affects 2 billion around the world, causing 150 million deaths per year and 3% world GDP. 12

⁸ Food Talk with Dani Nierenberg "Dr. William Dietz on the Epidemic of Obesity", July 17, 2020

⁹ FoodPrint "What is Food Justice and Why is it Necessary" *Grace Communications Foundation* 2020 <u>wwwfoodprint.org</u>

¹⁰ FoodPrint "What is Food Justice and Why is it Necessary" Grace Communications Foundation 2020 www.foodprint.org

¹¹ FoodPrint "What is Food Justice and Why is it Necessary" Grace Communications Foundation 2020 www.foodprint.org

¹² Food Talk with Dani Nierenberg "Dr. William Dietz on the Epidemic of Obesity", July 17, 2020



Okra beds Reservoir Community Farm Photo Ali Ghiorse

Karen Washington, a food justice activist and co-owner of Rise and Root Farm in Chester, New York refers to these statistics and the system they root in as food apartheid,

"'Food apartheid' looks at the whole system, along with race, geography, faith, and economics. When we say 'food apartheid' the real conversation can begin."

Recognizing that cities have been deliberately designed to uphold structural racism by depriving communities of color food choices¹⁴, it is important to understand that this lack of choice is imposed on communities of color, creating the conditions for food apartheid. There are an estimated 18,000 urban community gardens in the United States, most in neighborhoods that were once redlined¹⁵ as communities of color impacted by the statistics above reshape their narrative of food, culture, and health.

The food justice movement looks at the root causes of these disparities and can be defined as communities exercising their right to grow, sell and eat healthy food, including through ownership of processes and resources. A closely correlated concept is food sovereignty, defined as:

"people's right to healthy and culturally appropriate food produced through ecologically sound and sustainable methods, and their right to define their own food and agriculture systems." 16 The United

States with its long history of inequitable policies, has created barriers for communities of color to access wealth, property and opportunities. Additionally, the food system itself is built on centuries of exploitation. ¹⁷ Understanding our food system through a food justice lens means seeing access to healthy, nutritious, culturally appropriate food as a human right. It also means questioning ownership and control of land, credit, knowledge, and technology, as well as what kind of food traditions are valued, and most importantly how the history of colonization has affected and continues to impact the evolution of our food system.

¹³ Anna Brones, "Karen Washington It's Not a Food Desert, It's A Food Apartheid" Guernica May 7, 2018

¹⁴ Food Talk with Dani Nierenberg "Dr.William Dietz on the Epidemic of Obesity" July 17, 2020

¹⁵ Leah Penniman Farming While Black: Soul Fire Farm's Practical Guide to Liberation on the Land,, Chelsea Green Publishing, 2018

¹⁶ FoodPrint, "What is Food Justice and Why is it Necessary" *Grace Communications Foundation* 2020 <u>www.foodprint.org</u>

¹⁷ FoodPrint "What is Food Justice and Why is it Necessary" Grace Communications Foundation 2020 www.foodprint.org

Race and Equity

"Despite strident efforts to dispossess our ancestors of their seeds and their hope, our forebears held on. Through enslavement, convict leasing, sharecropping, Jim Crow, farmworker exploitation, and racial terror, they endured. They passed their seeds to us." Leah Penniman, Soul Fire Farm Annual Report, 2019



Winter squash Reservoir Community Farm; Photo Ali Ghiorse

The intersection of land and food, race and equity begins with colonization. Between 1776 and 1887, 1.5 billion acres of land were stolen from North American Indigenous Nations, either by executive order or treaty signed under coercion. 18 The Northeast was settled prior to 1776, and is primarily unheeded (lack of treaty) territory stolen from Indigenous Peoples and settled without consent. 19 We see how our legacy of colonization continues when we recognize that, today, white people own 98% of the rural land in the United States. 20 Land ownership is a critical asset-building strategy which has effectively been largely inaccessible to people of color.

By the turn of the 20th century, in the United States, former enslaved people and their descendants had amassed 14 million acres of land. Black agriculture excelled; with more black farmers per capita than white farmers. Black farmers were empowered with applied agricultural knowledge; knowledge of seeds and soil, and with the cultivation of ancestral wisdom. By the turn of the 21st century ninety percent of that land was lost. Some of this land loss was in part due to black individuals and families moving to northern urban hubs in search of post-war employment and distance from the condoned racial violence and systemic discrimination in the American South. However, many black farmers who stayed in rural areas to hold onto their land were entrapped in a racist legal system that was designed to shift the land, and the generational wealth it represented, to white farmers and landowners.

^{18 &}quot;New England Farmers of Color Land Trust" www.nefoclandtrust.org

^{19 &}quot;New England Farmers of Color Land Trust" www.nefoclandtrust.org

²⁰ Tom Philpott, "White People Own 98 Percent of the Rural Land Young Black Farmers Want to Reclaim Their Share" Mother Jones June 27, 2020

²¹ Brian Barth, "How Did African-American Farmers Lose 90 Percent of Their Land" *Modern Farmer* August 19, 2019

²² Brian Barth, "How Did African-American Farmers Lose 90 Percent of Their Land" *Modern Farmer* August 19, 2019

There were 949,889 black farmers in 1920. Today, of the country's 3.4 million total farmers, 45,508 are black. The black farmers who have managed to hold onto their farms make less than \$40,000 annually; while white farmers due to higher acreage, earn over \$190,000 annually.²³

Pigford vs Glickman

"Land is the only real wealth in this country and if we don't own any, then we are out of the picture." Ralph Paige, Federation of Southern Cooperatives.

Within the context of rampant racial and economic discrimination, there is a long history of exclusion of black farmers by lending institutions, including the USDA. The *Pigford vs Glickman* case awarded damages to historically discriminated-against farmers of color. The case proved that the loans and credit withheld by the USDA resulted in catastrophic loss of black farms and land ownership. Though media outlets portrayed the *Pigford* settlement payments as lavish handouts, the USDA failed to adequately compensate black farmers, and many lost their farms, with some farmers and their descendants still fighting today to regain land.

In 1982 black farmers received **just one percent** of farm-ownership loans. In 1980 USDA allotted 398 farm-ownership loans to black farmers, totaling \$15.9 million.²⁴ By 1983, the agency administered 109 loans, vaulted at \$4.3 million.²⁵ The stunning discrepancy, along with many stories including John Boyd's, a fourth-generation black farmer from Baskerville, Virginia, drew attention to discriminatory practices.

"John Boyd remembers watching a USDA official toss his loan application in the trash. It was the late '80s, and Boyd was counting on a \$5,000 loan to keep his family farm in business. Boyd was told to come back the next week to re-file his paperwork, but a white farmer walked out of the office with a \$157,000 check."²⁶

To fight systemic discrimination, John Boyd and others founded the National Black Farmers Association in 1995, a nonprofit that led the legal action against the USDA's record of denying black farmers loans.²⁷

According to the Grist report "What Happened to America's Black Farmer's?", John Boyd's work helped spark a landmark legal case in 1997. In the class-action lawsuit Pigford v. Glickman, 400 black farmers alleged that the United States Department of Agriculture had denied them loans based on racial discrimination. The decision eventually awarded thousands of black farmers payments up to \$50,000 for discrimination claims. In 2010, President Obama announced an additional \$1.25 billion settlement, known as Pigford II, to fund any additional unfiled claims. Native American, female, and Latino farmers were also eventually awarded similar settlements.²⁸

²³ Summer Sewll, "There Were Nearly A Million Black Farmers in 1920. Why Have They Disappeared?" The Guardian April 29, 2019

²⁴ Madeleine Thomas, "What Happened to Black Farmers" Grist April 15, 2015

 $^{^{25}}$ Madeleine Thomas, "What Happened to Black Farmers" Grist April 15, 2015

²⁶ Madeleine Thomas, "What Happened to Black Farmers" *Grist* April 15, 2015

²⁷Madeleine Thomas, "What Happened to Black Farmers" *Grist* April 15, 2015

²⁸ Madeleine Thomas, "What Happened to Black Farmers" *Grist* April 15, 2015

Discriminatory practices to move black farmers off of their land continue today. Nikole Hannah-Jones profiles the story of June and Angie Provost, sugarcane farmers in Louisiana, in her groundbreaking New York Times Magazine series 1619, The Land of Our Fathers, part 1 and 2. After many years of underfunded loans, preventing June Provost from being able to buy and repair equipment and hire workers, he lost his family's farm in 2014. Four years later, he and his wife Angie foreclosed on their home.²⁹

"If you take care of the land, the land takes care of you," said Wenceslaus 'June' Provost Jr., a fourth-generation sugarcane farmer from Louisiana. "For me, farming is everything. It's my life. It was never a job." 30

Based on our research, discussions, and interviews, we see that a viable pathway towards land ownership for farmers of color and beginning farmers is needed and must be woven into the landscape of a new and emerging food system. This new system must be developed with the voices, wisdom, knowledge and history of farmers of color; and with farmers of color at the forefront of the vision, processes, and terms.

Economic Impacts of a Globalized Food Economy

"True Cost Accounting is the practice that accounts for all external costs - including environmental, social and economic - generated by the creation of a product." The Lexicon of Sustainability

Direct-to-consumer sales is preferable for some small-medium scale farmers due to the benefits of reduced expenses. It is also preferable for most consumers, who benefit from healthy fresh food and a connection with the farmers, despite the fact that food from the farmers market or a CSA is often more costly than food purchased in a supermarket. This discrepancy causes questions such as:

- Why is locally and sustainably produced food so expensive?
- How can we make fresh, healthy, locally grown food affordable and accessible to all?

Food purchased directly from a farmer is likely not propped up by government subsidies. The subsidies awarded to large scale commercial, predominantly white, farmers creates the illusion that food is inexpensive. When 'true cost accounting' is taken into consideration, the industrialized food system is by no means inexpensive. For example, Dr. William Dietz, an expert on obesity, states that what makes food so 'cheap' and widely available, are the federal subsidies for commodity crops. Beef is a good example, what sustains beef consumption and beef prices are crop subsidies that keep fodder cost low.³¹

In the United States, subsidies and insurance for farmers cost taxpayers \$20 billion each year.³² According to the Ellen Mac-Arthur Foundation's report, "Cities and the Circular Economy for Food", for every dollar spent on food, society pays two dollars in health, environmental, and economic costs. Half of these costs, 5.7 trillion dollars each year globally, are due to the way food is produced. Although consumers do not pay for the hidden costs of food

²⁹ Angelina Vorpal, "The Legacy of Black Land Ownership A Conversation with June and Angie Provost" Posted March 2020

³⁰ Angelina Vorpal, "The Legacy of Black Land Ownership A Conversation with June and Angie Provost" Posted March 2020

³¹ Food Talk with Dani Nierenberg, "Dr. William Dietz on the Epidemic of Obesity", July 17, 2020

³² Danielle Nierenberg, "True Cost Accounting Report" The Real Cost of Food, Examining The Social, Environmental and Health Impacts of Producing Food 2015



Photo Kathy Ziccardi

at the supermarket, they do pay for them through taxes for social and health programs, farm subsidies for commodity crops, pollution from pesticides and fertilizers, antibiotic resistance in humans and animals, and contamination of natural resources and loss of biodiversity. These indirect costs might be 'hidden', but they are still paid for in tangible ways and often distributed unfairly.³³

"What we need is an entirely new system. A system that is rooted in justice and equity and puts the land and all people before profits." Jennifer O'Connor, Guidelight Strategies

During the COVID-19 pandemic we have come to realize just how dependent our food system is on front line workers risking their own health to assure that food makes its way through the supply chain and onto our tables. And yet, paying workers a living wage continues to be controversial. Lauren Baker, the director of Global Alliance for the Future of Food, "At the heart of paying people inadequately for the important work they do is the idea that profits can be privatized and the costs are the public systems' responsibility. We are paying for poor wages one way or the other, whether by shortening emergency food distribution or paying for poor health outcomes for those workers because they are vulnerable."³⁴

A recent morbidity and mortality report by the Center for Disease Control indicated that on average, across 200,000 workers between 230 food processing plants (pork, chicken, beef) 10% had contracted Covid-19 and in some places up to 25% and 87% of the workers were people of color.³⁵ It is important to understand when considering the true cost of food, that front line workers, despite being deemed 'essential', are frequently not paid a living wage, and are not permitted sick leave. Not infrequently migrant laborers who feed our food system are provided substandard living conditions by employers.³⁶ In order to achieve resilience across the system, policy adjustments are needed to ensure equity and ensure that employers are held accountable for upholding workers' rights and dignity.

Environmental Impacts of a Globalized Food Economy

"The industrialization of agriculture began after World War II, as a way of addressing global hunger and making the food supply more efficient and safe." 37

³³ Danielle Nierenberg, "True Cost Accounting Report" The Real Cost of Food, Examining The Social, Environmental and Health Impacts of Producing Food 2015

³⁴ Food Talk with Dani Nierenberg, "Lauren Baker on Turning Big Ideas into Food Systems Realities" July 14, 2020

³⁵ Food Talk with Dani Nierenberg, "Dr. William Dietz on the Epidemic of Obesity,", July 17, 2020

³⁶ Food Talk with Dani Nierenberg,," Dr. William Dietz on the Epidemic of Obesity", July 17, 2020

³⁷ FoodPrint "Sustainable Agriculture vs. Industrial Agriculture" Grace Communication Foundation 2020 www.foodprint.org

There is no question that the interconnectedness between the problems and solutions of climate change are complex. Paul Hawken, author of Project Drawdown, states that industrial agriculture 'turned our soil into dirt' and as a result, our food is one third as nutritious as it was thirty years ago. Additionally, our current food system, to include the extreme waste that accompanies it and the deforestation of rainforests for meat production, is a leading cause of climate change.³⁸ In tandem with this leading cause, is the idea that rebuilding and regenerating the soil of grassland and farmland can be one of the fastest solutions. Rebuilding soil through regenerative farming practices can serve as an 'early intervention' that will buy us time as we address the bigger challenges such as energy.³⁹

With the efficiency of our food system comes extreme environmental impact. When considering all sectors of the food system, from energy consumption, to transportation, to food waste, agriculture is a leading cause of climate change. Extractive, linear, and monolithic, the industrialization of our food, by design, oppresses the inherent natural systems of the Earth. Large-scale mechanization degrades the living ecosystems on which we depend, and globalization deprives us of a fundamental connection to where our food is grown; how and by whom, and the ability to adapt to local conditions and cultures. The more removed we are from the context of our food, and its interconnections to all ecosystems, the easier it is for us to forget that we are only as healthy as the Earth. Some key environmental impacts include:

- **Greenhouse Gas Emissions**: Annual agricultural production in the United States releases an estimated 8.2 MMT(Million Metric Tons) CO2, 248.7 MMT methane and 285.2 MMT nitrous oxide, contributing to 9% of total U.S. GHG emissions.⁴¹ And the agri-food industry is responsible for almost a quarter of greenhouse gas emissions globally.⁴²
- **Topsoil Erosion**: Industrial agriculture causes a loss of up to 3 billion tons of topsoil from cropland every year, most windswept and washed away 10 times faster than it is replenished. **The US Farmers and Ranchers Alliance estimates that American farmers have thirty harvests left before 2050⁴³**
- **Pesticides and Fertilizers:** As a direct result of chemical infiltration in our crops, drinking water is contaminated by pesticides and other agricultural chemicals, causes acute poisoning, and is associated with illnesses such as cancer, and affects neurologic, respiratory, and reproductive systems.⁴⁴
- **Biodiversity Loss**: The Food and Agriculture Organization's <u>State of the World's Biodiversity for Food and Agriculture</u> report, suggests that the biodiversity under-ping our food system is disappearing, putting the future of our food, livelihoods, health and environment under threat. The leading causes: changes in land and water use and management, followed by pollution, over-exploitation and over-harvesting, climate change and population growth and urbanization. 45

³⁸ Real Organic Project, "Dave Chapman Interviews Paul Hawken" 2020

³⁹ Michael Dimock, Executive Director of Roots of Change 2020

⁴⁰ Real Organic Project, "Dave Chapman Interviews Paul Hawken" 2020

⁴¹ Jennifer O'Connor, "Barriers for Farmers and Ranchers To Adopt Regenerative Ag Practices in the US" Report 2020

⁴² Ellen MacArthur Foundation, "Cities and the Circular Economy for Food" Report 2019

⁴³ U.S. Farmers and Ranchers In Action '30 Harvests'

 $^{^{44}}$ Jennifer O'Connor, "Barriers for Farmers and Ranchers To Adopt Regenerative Ag Practices in the US" Report 2020

⁴⁵ Food and Agriculture Organization of the United Nations, "The Biodiversity that is Crucial for our Food and Agriculture is Disappearing by the Day" February 22, 2019

Food Loss and Waste

"Waste occurs throughout the supply chain, with nearly 85% occurring downstream at consumer-facing businesses and homes." ReFED

The general distinction between food loss and food waste is that food loss tends to be lost along the food chain, starting on the farm and ending with the consumer. Food waste refers to waste that occurs after it is in the hands of the consumer; expires or otherwise does not get eaten.

According to Dana Gunders, the Executive Director of ReFED, a leading food waste prevention organization with a mission to end food waste by advancing data-driven solutions across the U.S. food system⁴⁶, the most significant amount of food waste comes out of our refrigerators. Households are the number one source of food waste which stems from over-buying, portion size and confusing expiration dates.

ReFED's data finds that: American consumers, businesses, and farms spend \$218 billion a year, 1.3% of GDP, growing, processing, transporting, and disposing food that is never consumed - this translates to 52 million tons of food sent to landfill annually, plus another 10 million tons that is discarded or left unharvested on farms. Co-existing with this exorbitant amount of waste: one in seven Americans is food insecure.⁴⁷

ReFED's data also concludes that food waste consumes 21% of all freshwater, 19% of all fertilizer, 18% of cropland and 21% of landfill volume. These are alarming statistics, especially when you consider that the leading cause of food waste is behavioral and that most food is recoverable.

Edible food is lost at every point throughout the food system. The Covid-19 pandemic heightened the gravity of this issue by exposing the system's vulnerability. With the collapse in the institutional market an unconscionable amount of food was either dumped or turned back into the ground because the large-scale farms and dairies did not have the capacity to pivot and cross into the retail market. Meanwhile, retail saw empty shelves and overwhelmed food pantries.

Small to medium size farms tend to be nimble, and we saw many farms across the country and particularly here in New England, pivot during the early days of the pandemic, by increasing their direct sales. However, food loss happens, especially when there is a lack of adequate infrastructure. Access to food hubs, flash freezers, cold storage, commercial kitchens and adequate processing facilities would help prevent food loss on farms. These infrastructure investments would add revenue for the average farmer and create more ways for local food to make it to people's tables. The distribution, aggregation and added value infrastructure that is in place is typically centralized out of the state of Connecticut, and not suitable for small to medium size farmers.

When food is not recovered or composted, it is destined for the incinerator or landfill; at this point, it typically becomes an environmental justice issue. Julie DesChamps, founder of Waste Free Greenwich, states in her article, *Environmental Justice and Greenwich's Waste Management System*, "Polluting facilities, like incinerators, have been historically sited in communities of color resulting in detrimental health consequences. In fact, a 2019 New School study found that 79% of incinerators are located in low-income communities of color. Burning trash emits toxins, such as mercury, lead nitrous oxide and particulate matter." DesChamps continues to explain that

⁴⁶ ReFED <u>www.refed.com</u>

⁴⁷ ReFED <u>www.refed.com</u>

Peekskill, NY, predominately a community of color, and where the majority of Greenwich, CT's trash is burned, suffers a disproportionate public health burden. In this very direct way, we can see how the excess of waste produced in a predominantly wealthy white community, severely impacts another community.



Hungry Reaper Farm; Will O'Meara

Contextual Issues

Connecticut's Foodshed

Introduction

New farmers and farmers of color struggle to acquire land, there is a lack of opportunity for holistic farming incubator or mentorship programs. Connecticut's foodshed infrastructure has also been centralized out of state with few local options for farmers to add value to their products. We also see a gap in resources as Connecticut lacks a foodshed funding roadmap to help guide funders interested in investing.

This section of the paper focuses on Connecticut's foodshed with a focal point in Fairfield County, though we recognize that Connecticut receives most of its food products from a highly globalized food system. According to the WestCOG Regional Plan of Conservation and Development 2020 report, only two percent of all the food consumed in Connecticut is produced in the state.

Connecticut faces a risk in its inability to feed itself, particularly during an era of increasing volatility in weather patterns, supply chain stability, natural resources, political leadership, and strained international ties. Connecticut is home to farmland, as well as a large consumer base in the region, with Bridgeport, the state's most populated city, being the 5th most populous city in New England.

The globalized deficiencies of our prevailing food system manifest as personal barriers and inequities in our local communities, and particularly in Fairfield

County, which is home to some of the most severe economic inequity in the country. Just twenty-eight miles apart, the racial and economic disparity between Bridgeport and Greenwich is one of the largest in the country. A Connecticut Patch article reported in 2018 that the town with the highest median income is Weston at \$219,868 and the lowest is Hartford at \$33,841.48 The median income in Greenwich averages at \$138,180, compared to Bridgeport at \$44,841.49

⁴⁸ Rich Scinto, "How Much Connecticut Households Make Per Year: Census" CT Patch December 17, 2018

⁴⁹ Rick Scinto "How Much Connecticut Households Make Per Year: Census" *CT Patch* December 17, 2018

According to "End Hunger Connecticut!", I 18,809 children live in poverty and 56,083 are eligible working poor in Connecticut and participating in food assistance programs. According to Feeding America's "Map the Meal Gap", the food insecure rate is 9.9% in Fairfield County.⁵⁰

Connecticut's Agricultural History

The word Connecticut is adapted from the Mohegan word *quinetucket* which means "beside the long, tidal river." The Connecticut River, flowing southward through the state, is the longest in New England stretching for 406 miles as it makes its way to the Long Island Sound. Due to its unique geology and glacial origins, the Connecticut River Valley has some of the northeast's most fertile soils and unique microclimate.

Connecticut was stewarded by many different Native American tribes. The Siwanoy, a subgroup of the Munsee, stewarded southern Fairfield County and the Paugussett tribe stewarded the north. The southern region of the Connecticut River Valley was stewarded by Mohegan and Pequot tribes. The land was mostly forested, and food was hunted and foraged. The Long Island Sound provided fish, the rivers, eel and wild salmon and the forest berries, acorns, chestnuts, and mushrooms. They cultivated crops using clam shells, bones and horns; grew Jerusalem artichoke, corn, beans and squash, also known as the 'three sisters'. Cattails, amaranth and cranberries were also part of their diets. Early British and Dutch colonists initially relied on the skills and knowledge of the Indigenous people for survival. However, colonizers also introduced their own food production systems, starting with clear cutting the forest and pulling rocks, and making way for plows to till the soil.

"Ours is a land culture. In fact, the land is the culture." Aurelius Piper (Chief Big Eagle), Paugussett Golden Hill chief, 1989

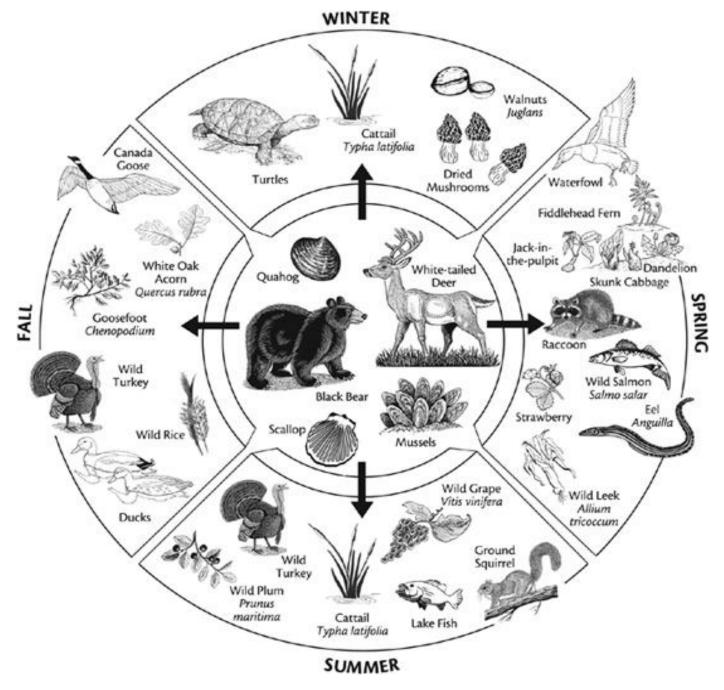
As European settlers colonized and oppressed Indigenous Peoples, they also replaced Indigenous growing practices. European land-use practices such as ground-clearing, mono-cropping, and cattle grazing took root and have evolved the farming landscape we know today in the United States. Increasingly, agriculture transitioned from subsistence-farming, becoming fully industrialized by the middle of the 19th century. Through the 19th century, Connecticut's agriculture consisted of different vegetables, apple and peach orchards, cattle, dairy and 'cash crops' such as corn and shade tobacco. ⁵³ By the late 19th century and into the 20th century, cheese production boomed and Litchfield and Fairfield Counties, with their robust dairy industry, became the 'milk-shed' for New York. During this same timeframe, total farmland acreage and number of farms declined precipitously; a trend which continues to today.

⁵⁰ Feed America, Map the Meal Gap 2018 <u>www.mapfeedingamerica.org</u>

⁵¹ Wikipedia,: "History of the Connecticut River Valley"

⁵² Lucianne Lavin, "Connecticut's Indigenous Peoples" What Archaeology, History, and Oral Traditions Teach Us About Their Communities and Cultures Yale University Press 2013

⁵³ Wikipedia:, "History of the Connecticut River Valley"



Seasonal Food Wheel: sited Connecticut's Indigenous Peoples By Lucianne Lavin

Effectively honoring Connecticut's rich agricultural history goes beyond the scope of this paper. We also skim the surface in describing the stories of the farmers and organizations that work extensively to protect and preserve what is left of Connecticut's farming culture. We do however hope that this report will spark interest in further exploration of these farms and organizations, and that we see Connecticut's farms grow.



Photo Ali Ghiorse

Agriculture in Fairfield County

Fairfield County has never had the concentrations of prime agricultural land as are found in the deep rich soil of the Connecticut River Valley. With its sloping, stony, but productive soils, the history of Fairfield County agriculture relied on grazing, dairy, apple orchards, maple syrup, and vegetables such as corn, potatoes and some grain. Despite relatively poor soil however, a University of Connecticut study found that Fairfield County's agricultural sector has a greater economic impact on Connecticut's economy than any other county because the agricultural industry purchases goods and services from other industries and hires local labor:'54

Fairfield County's agriculture is concentrated in the nursery/greenhouse sector, aquaculture, equine and Christmas tree production. Combined, these sectors account for nearly ninety percent of the market value of its agricultural products. A University of Connecticut study estimated that in 2010 Fairfield County agricultural activities generated \$1.1 billion in economic benefits, 1) through direct sales 2) employment benefits within the county and 3) added value services induced by the existence of agriculture and the support service it requires.

Bridgeport, a Fairfield County city and the largest city in the state, is a home to urban agriculture in the county. Green Village Initiative provides opportunities for growers to launch new farm businesses, through skill-building programs and linking new farmers to farmers markets. Green Village Initiative manages Reservoir Community Farm, community gardens, a youth leadership program and supports school gardens for education. Reservoir Community Farm grows, sells and donates 4,000 pounds of produce per year on ½ of acre of productive land. GVI's 12 community gardens provide opportunities for 150 families to grow food for their tables that may not otherwise be accessible or affordable in Bridgeport neighborhoods. Through their School Garden program, over 1,000 students and future consumers are directly engaged in growing produce and learning about the importance of healthy food and urban agriculture.

⁵⁴ WestCOG, "Regional Plan of Conservation and Development," *UCONN study, Economic Impacts of Connecticut's Agricultural History,* Report 2020

⁵⁵ WestCOG, "Regional Plan of Conservation and Development", UNCONN study, Economic Impacts of Connecticut's Agriculture History, Report 2020

Barriers to Connecticut Food Production

Land Access

"Revolution is based on land. Land is the basis of all independence. Land is the basis of freedom, justice, and equality." Malcolm X, Message to the Grassroots, November 10, 1963

Agricultural land is typically valued and categorized based on its history and state soil health assessments, which make it prime for growing nutritious food more easily and effectively. This farmland is frequently located near adjacent green-space, cleared of most forest and located along roads which also makes it appeasing for developers. Though extensive work is being done to preserve farmland, land is still susceptible to development, especially land near urban areas. A recent study by American Farmland Trust states that between 2001 - 2016 Connecticut lost 23,000 acres of agricultural land, one of the highest percentages lost in the U.S. 56 Access to land is the top barrier for farmers, and subsequently, this prevents young farmers and farmers of color, from continuing to farm.

Robert Chang, farmer and owner of Echo Farm in Woodstock, CT writes in his letter to the Environmental Committee General Assembly of Connecticut in March 2019:

"While issues facing young farmers share many commonalities across the country, there are unique barriers to entry facing us in Connecticut. According to the USDA, the average price per acre of farmland in Connecticut is \$11,200, over double the price of farmland in the Northeast as a whole at \$5,050. Development pressure continues to force young farmers to compete with more profitable land use ventures – despite efforts to slow down development by local nonprofits and state officials." Chang continues, by noting, "Agriculture in Connecticut produces up to \$4.0 billion, creates 21,696 jobs, and generates more jobs per million dollars of sales than nearly any other sector in the rest of the state economy."

Furthermore, Will O'Meara a young farmer and owner of Hungry Reaper Farm in Litchfield County, sees an influx of wealth in Litchfield and surrounding counties by people who purchase land for a second home, driving up the price of real estate, only to leave the home vacant for most of the year. This results in a general increase in regional land value, making farmland very difficult, if not impossible for farmers to afford. The housing rental market in high wealth areas within Litchfield and Fairfield counties can also be prohibitive, making it difficult for new farmers working or leasing land to find adequate housing nearby. Kip Kolesinskas, a Consulting Conservation Scientist, shared;

"There is basically not sufficient resources and assistance to grow or sustain agriculture in Connecticut. Agencies such as UCONN are underfunded and understaffed. Probably, additional focus needs to be given to supporting distribution, processing/production of added value, marketing." Kip Kolesinskas

While resources are available at the federal and state levels to help get some farmers into production, farmers reported to our working Committee that there is a vacuum in resources that are required to sustain a farm. The farmers we spoke to would like to see the local, state and federal government find ways to rebalance the food system by reallocating resources to support local production and markets.

⁵⁶ American Farmland Trust, "Farmers Under Threat" 2016 <u>www.farmland.org</u>

⁵⁷ Robert Chang, "A letter to the Members of the Environmental Committee General Assembly" March 2019

 $^{^{58}}$ Robert Chang, "A letter to the Members of the Environmental Committee General Assembly March 2019

EDUCATION

Individual behavioral change is at the root of a food culture shift. The role of education is central in influencing behavior, and fostering the next generation to value fresh food is a critical place to start. Encouraging children to get their hands dirty and curiously explore elements such as the soil, pollinators and seeds is essential. In the garden, is where children learn life cycles and the tastes of each season. Gardens provide a place to develop keen sensory knowledge on the flavors, fragrances and textures of food. It is the place to learn that produce at the height of ripeness, just out of the soil, is where eating begins.

Mentorship and Training Programs for New Farmers

Extended training and mentorship programs are a critical part of a farmer's success and provide essential learning, relationship-building, and opportunities to establish market channels for new farmers. Green Village Initiative recently conducted an informal survey with the graduates of their Urban Farmer Training Program about their readiness to start their own farming organization. They found that 5 out of the 13 farmers who were interviewed said they would only pursue their own farm if the venture was coupled with a hands-on training program. GVI found that there is not sufficient, convenient, in-depth training, mentorship or apprenticeship programming in Connecticut. Some organizations offer small scale programming or a workshops and training series, for example, UConn Extension's Solid Ground Training, New Haven Land Trust, KNOX and Gifts of Love all offer farmer training programs. That said, there is still a need for a holistic, full season mentorship program available to growers in Bridgeport.

Due to the cost of land, many beginning farmers can not afford their own land, and in addition to mentorship and apprenticeship models, frequently need shared resource models to launch their own businesses. Incubator programs are necessary in these instances to strengthen a farmer's confidence and knowledge. They provide larger plots for growing, space for skill or resource sharing, and time for farmers to build capital and expertise in the fields and their markets before they strike out on larger plots of land. Incubator farm programs are a convenient option for urban farmers seeking a path in farming.

Incubator programs are also necessary to strengthen a farmer's confidence and knowledge. They provide larger plots for growing, and help launch a new business, allowing them to grow food for market, build skills and capital. However, due to the cost of land many beginning farmers can not afford their own land. These programs should be convenient for GVI and other urban farmers seeking a path in farming.

"We need to cultivate mentors just as much as we cultivate apprentices. It is hard to teach, and the mentors need help and support; they need compensation. Mentorship is a career move and a way to become a leader in the farming community. There is very little upward mobility for farmers, aside from the responsibility that goes along with growing a business, there should also be opportunity to cultivate leadership training for some of our best farmers." Dina Brewster, owner of The Hickories Farm and Executive Director of CT NOFA

Farmers are at the center of a resilient food system. 'No Farms. No Food⁵⁹', a powerful land preservation campaign, of American Farmland Trust, reminds us that if it were not for hardworking committed farmers, and the land on which they grow, we would not have food. Often beginning farmers work a second job to supplement their income as they have student debt and other financial pressures. It takes time, skill and resources to cultivate beginning farmers. Intergenerational knowledge transfer is an essential element in fostering beginning farmers, and especially young beginning farmers, towards a successful substantive business and Connecticut lacks sufficient opportunities for this intergenerational knowledge transfer to transpire effectively, and successfully. Additionally, credible mentorship programs could incentivize participation among seasoned farmers and boost their recognition in the state.

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⁵⁹ American Farmland Trust, "No Farms, No Food" <u>www.farmland.org</u>

Infrastructure

Our national food system infrastructure is designed to process and distribute food for large to industrial size farms. It is not



Processed garlic Reservoir Community Farm; Photo Ali Ghiorse

built or equipped for small to medium size diversified farms. Over the last century most states, Connecticut included, dismantled its food system infrastructure, sending significant portions of its food production out of state, leaving its local agricultural economy fragmented and consolidated around the county and the world.

"With the onset of Covid-19, it was noted that for all the food systems work that has been done in Connecticut, the real gaps were exposed, gaps such as seed supply and infrastructure to preserve our food." Dina Brewster, owner of The Hickories Farm and Executive Director of CT NOFA

Kip Kolesinskas, shared that Connecticut was once referenced as the 'Provision state' and for the most was able to feed itself. That changed with prevailing food policies and nationally aggregating the food system. With the price of land and housing, and its zoning regulations favoring development, and the higher cost of doing business, it became very difficult to farm. This, along with other factors, eventually led to the state giving up its agricultural foundation.

"We can still produce a lot of food, we just lack local canners, slaughter houses, and other processing facilities. Sometimes we sit on a lot of products, not being able to move them to people's tables because we lack the right infrastructure. And let's not look at just one side of the equation, we need to take a holistic approach. We can still figure out how to make this work." Robert Chang, Echo Farm, Woodstock, CT

A local livestock farmer shared with us that there is incredibly high demand in Fairfield County for her hotdogs, sausages, and charcuterie, especially when featuring local meat, but that she believes that Connecticut does not have sufficient regional infrastructure for value-added production. It is imperative to preserve food the farmer produces during their growing season as useful financial leverage during their non-growing season. Bridging this meaningful gap for farmer's financial stability - between the livestock in the field and consumer plates - is made difficult or impossible with a weak infrastructure for turning farm products into value added products. According to experienced small vegetable and livestock farmers, the infrastructure gap is startling:



Hickories Farm; Photo Dina Brewster

- •There is potentially only one emulsifier in the state that is licensed to make hotdogs, and there are no licensed charcuterie processing facilities open for farmers.
- •There is potentially only one bottling company in the state willing to work with small farms.
- •Slaughterhouses are limited, with potentially only one facility utilizing true humane practices.
- •We did not identify well-known licensed dedicated poultry or rabbit slaughter facilities.
- •Seafood processing is sparse. (This is important to note because Connecticut is not necessarily conducive to large scale beef production but it can handle livestock with a lighter footprint and land based needs such as rabbit, quail, sheep and goats.)

With more adequate infrastructure in place, including but not limited to the options above, more adequate markets for direct-to-consumer, and more food hubs and distribution systems, opportunities would open up exponentially for farmers looking to expand or for those looking to start farming.

The issue with production gaps is mirrored even in the state's top-producing agricultural commodities, such as seafood. Connecticut is a top grossing agriculture state, as all shellfish grounds run through its waters. However, once the seafood hits the land it moves north, bypassing Connecticut to take the interstate into Massachusetts or south to New York City. This story is similar to dairy:

Connecticut's remaining dairies are struggling, and yet, The Hickories Farm in Ridgefield has a hard time sourcing dairy products such as yogurt, ice cream and butter for their farmstand. If there were adequate aggregators and food hubs available to help small farmers aggregating produce for sale, they would be able to make institutional quotas required for programs such as Farm to School, Farm to Chef, and Farm to Institution connections.

"Up until the last century, Connecticut did feed itself. Before we started consolidating the production chain out of state, people in Connecticut ate Connecticut food. Connecticut is still a place that has the natural resources for farmers to succeed." Robert Chang, Echo Farm, Woodstock, CT

Funding

We also see a gap in resources as Connecticut lacks a foodshed funding roadmap to help guide funders interested in investing Connecticut's foodshed lacks funding pathways. Unlike other sustainability initiatives, such as renewable energy, **Connecticut lacks a foodshed funding roadmap** to guide funders interested in investing, through impact investment, patient capital, or philanthropy, in mitigating farmers' top barriers: land access for all farmers, especially farmers of color, training, mentorship and incubator programs for young farmers, food system infrastructure and funding pathways.

PART II: Proposed Approach

Introduction

We propose that engagement and investment should be shaped by guiding principles and strategic considerations to guide the work toward meaningful impact.

We further propose that to regenerate a resilient Connecticut foodshed, the investment of land, infrastructure, small business, and leadership should be prioritized.

Guiding Principles

The following guiding principles and strategic considerations are derived from a collaboration of various stakeholders as well as extensive research. These principles serve as the overarching lens through which our recommended priorities are predicated:

- 1. **Unlearn:** Identify your assumptions and bias, and integrate anti-racism training, resources and objectives into efforts to ensure equitable growth. De-intellectualize. Take time to understand the realities on the ground.
- 2. **Equalize:** Advocate for people of color led entities, farmers, business owners and activists. Organize for food systems policy reform.
- 3. **Engage:** Catalyze conversation in meaningful ways through community gatherings and forums that honor intentional dialogue and build meaningful relationships.
- 4. **Inspire:** Support educational resources; reading materials, web presence and community events to educate Connecticut consumers about their foodshed.
- 5. **Fund:** Mobilize capital for strategic impact investment; reallocate resources into an equitable and resilient Connecticut foodshed.
- 6. **Lead:** Foster pathways for knowledge exchange between emergent young and Black, Indigenous, People of Color leaders and elders.

Strategic Considerations

This pivotal time in history provides us with the opportunity to be wise in strategy, and values-aligned in action. We propose the following strategic approaches:

- 1. **Culture and Spirit**: A resilient regional foodshed must honor Indigenous, reparative, regenerative, circular, democratized, and ecologically centric approaches. We believe it is possible to create a foodshed that once again has room to hold the value of relationships of culture and spiritual connection; a foodshed that aligns with ecological principles, and serves all people, specifically people of color, and those who have been historically oppressed, for today and for generations to come.
- 2. **Participatory Collaboration:** Black and brown voices should be amplified by embedding principles of participatory collaboration into purposefully cultivated, meaningful, and equitable relationships between investors and practitioners and by creating opportunities for leadership and influence in these spaces. This participatory collaboration will be of most impact if it includes a power analysis that centers race, class, and lived intersectional experiences within the participatory collaboration model.
- 3. **Self-Awareness:** Solutions should be predicated upon understanding of one's own self as well as alignment with personal values and action.
 - a. What bias do we bring to this work? How does privilege influence this work? How does that impact my awareness of self?
 - b. How can one enact meaningful change and influence practice, culture, and policy?
 - c. How do we amplify values-aligned innovation and success?
 - d. What do our own patterns and habits tell us about our relationship to food and the character of our engagement in our local foodshed?
- 4. **Contextual Awareness:** Effective work should be predicated upon knowledge of broader context, starting with one's own community. Grass-roots models are evidenced in history to have an ability to drive meaningful cultural and economic change; current examples include the rising occurrence of our urban farms, school and community gardens, farm stands and markets, and increasing consumer demand for sustainable and local food. It is also important to understand the broader systemic forces influencing local conditions. As we explore potential pathways for transformation, we propose integration of the following questions:
 - a. What is the historic context?
 - b. What are influencing forces? What is the power dynamic?
 - c. What are the systemic challenges? What solutions are already in place?
- 5. **Multi-sectoral collaboration:** Effective solutions should be collaborative and cultivate multi-sectoral partnerships. Food system transformation is taking place within private, public, and non-profit organizations around the world.⁶⁰ Recent analysis found that particularly during the global pandemic, the most effective 'beacons of hope' are those **who cut across silos, prioritize being intersectoral, and where inclusive participatory processes are at the foundation of their work.⁶¹**

⁶⁰ Global Alliance for the Future of Food, "Beacons of Hope Transforming Food Systems" 2020

⁶¹ Food Talk with Dani Nierenberg "Lauren Baker on Turning Big Ideas into Food Systems Realities" July 14, 2020

Recommended Investment Priorities

A regeneration of a resilient foodshed requires deliberate investment to support shared community values and objectives. We recommend the prioritization of the following areas of investment for maximizing impact:

- 1. **Invest in Land:** Facilitate land acquisition for new farmers and farmers of color by integrating terms defined by Black Farmer Fund; considering Land Trust models, and working with farmers of color to create new models and opportunities of their design.
- 2. **Invest in Leadership:** Facilitate leadership cultivation, engage communities, influence policy, and ensure effective knowledge transfer. Invest in programs such as incubators, workshops, apprenticeships, fellowships, and mentorships.
- 3. **Invest in Infrastructure:** Facilitate the development of food-system infrastructure components, such as food hubs, commercial kitchens, and processing facilities that center farmer and food producer input in their design.
- 4. **Invest in Businesses:** Facilitate access to capital for farmers of color and other food system entrepreneurs and artisans by highlighting investment opportunities and facilitating project engagement discussions.

Black Farmer Fund's recommendations for funders and investors:

- Support the transition to a socially just, regional food system
- Strengthen the economic infrastructure of black food businesses
- Increase opportunities for shared ownership, and food sovereignty
- Build community power and community wealth building

Funding Projects

We believe the following funding project examples represent viable projects aligned with our above investment priorities:

Funding Projects: Impact Investment and Philanthropy

Incubator Land: Work with landowners, or acquire land, to lease at subsidized rates to early-stage farmers. Structure as micro-size plots (.25 - 3 acres) for short term rent to entry-level farmers. Provide training, classroom space and shared equipment and infrastructure.

Transplant Land: Acquire land and lease at equity-building structure to mid-stage farmers. Structure as various-size plots (.25 - 25 acres) for longer-term rental. Provide farmer-equity-building contractual arrangements.

Farmland: Acquire land for the purposes of making it affordable for ownership among farmers of color. Convert land to agricultural production, conserve farmland, and protect regional food productivity.

Small business loans: Provide direct financing to food system businesses including supply chain and markets. Support black and brown owned businesses and artisanal entrepreneurship.

Certified processing facilities with design influenced by farmers' needs.

Regional 4-season farmers' markets.

Aggregation/ food hubs off of main transport routes / in proximity to productive land.

Commercial kitchens in proximity to productive land.

Affordable housing in proximity to productive land.

Sustain existing efforts: CT is home to dozens of community-based urban agriculture organizations that are cultivating leaders, making hyper-local food accessible and relevant to communities, and seeding future farmers. Sustain these efforts, especially those that are black- and brown-led.

Education and leadership programs (School and Community Gardens, Apprenticeships, Business management).

Advocacy (Land Use, Immigration Policy, BuyCTGrown, Farm to School, SNAP, Healthy Corner Store Initiative).

Proposed Next Steps

Phase I of this project has focused on engaging with key stakeholders, deepening and distilling knowledge, and providing the public with resources to facilitate engagement and investment to regenerate a resilient Connecticut foodshed.

We now propose a six-month Phase II of this project to focus on the following three overarching objectives:

- Bring together values-aligned investors.
- Further develop investment ideas.
- Identify impact investment projects as a case study and model for further replication.

In order to accomplish these objectives, we propose that Project funders work with project leads and stakeholders to develop a project plan, timeline, and fiscal sponsor support to drive Phase II. To facilitate values-aligned engagement and investment in a resilient foodshed, we propose that a Phase II project plan include the following components:

- Clearly defined milestones and timelines.
- Distribution of "Pathways to Engagement" report, and tracking interested stakeholder and input.
- Identification and refinement of potential investment and funding opportunities.
- Exploration of foodshed funding vehicles.
- Recruiting stakeholders, practitioners, and thought-leaders for committee engagement.
- Ensuring collaborative decision making, centering the needs of new farmers and farmers of color as well as the community-based organizations supporting them.
- Facilitating the establishment of an incubator site as well as long-term community-ownership of Reservoir Community Farm, including exploration of community-acquisition; consider either project as a case study for further replication.
- Facilitating farmer training, apprenticeship, and incubator programming.

Land acquisition

An investment approach with significant potential for impact is the acquisition of land in urban areas, for the purposes of dedicating it to community gardening, farmer incubation, leadership cultivation for farmers of color, and food justice.

One example is the Green Village Initiative's **incubator program**. Key partners have begun convening to determine a plan to establish a new incubator site on land managed by a local land trust; the project is essentially shovel ready. Support of this initiative would support new farmers and farmers of color as well as protect agriculturally productive land.

Another example is **Reservoir Community Farm**, managed by Green Village Initiative. The land is currently leased and under threat of development. Facilitating community and cooperative ownership to acquire and manage this land would ensure continuity of a vital community resource and an inspiring replicable model.

CALL TO ACTION

Explore your foodshed.

Invest in new farmers and farmers of color, mentors and foodshed infrastructure.

Practice an anti-racist framework; seek to listen, learn and act.

Build alliances; convene diverse coalitions and educate one another.

Support emergent young leaders and leaders of color; adhere to their call to action.

Establish connections with the people who work throughout your foodshed.

Purchase food at the farmer's market, join a CSA or urban community garden.

Support Black Farmer Fund, Soul Fire Farm, Northeast Farmers of Color Land Trust, Southern New England Farmers of Color Coalition, New Connecticut Farmers Alliance.

Advocate for and work towards policy reform; support or start initiatives such as SNAP, Farm-to-Pantry, Buy CT Grown, Farm-to-School; Put Local On Your Tray, Healthy Corner Store Initiative.

Learn what grows in your bioregion; eat with the season.

Compost.

Celebrate terroir.



Hickories Farm; Photo Dina Brewster

Conclusion

We understand our current framework to be the result of the history of colonization, which relied on the acquisition of stolen land from of Indigenous Peoples, the enslavement and oppression of black people, and that a framework of white supremacy continues today, as the majority of farmable land is owned by white farmers. We also understand that unjust labor practices and commodity crops propped up by federal subsidies do not account for the true cost of food. The lack of "true cost accounting" leads to health, economic and social consequences such as poverty, obesity, environmental degradation, and transactional purchasing void of connection to one's foodshed.

The problems in our food system are largely the consequence of a lack of community stakeholder influence and awareness. When we track the arch of the industrial food system, we see how structural racism produces poverty, contributes to poor diets, sponsors diet-related disease, and reduces choice. This trajectory leaves vulnerable populations even more susceptible to impacts of major societal disruptions such as climate change and the current Covid-19 pandemic. Our current food system has also been ecologically extractive, leading to mismanagement of land and other natural resources, and a general imbalance in the natural systems upon which we rely. In our own communities we also see the lack of pathways to ownership especially for farmers of color, a lack of training and leadership opportunities, a lack of regional infrastructure, and a lack of an organized funding strategy. Consumers are marketed a national "cheap food policy", that hides the true cost of food, and prevents the mechanisms to make high quality food affordable and accessible to all. There is a pathway toward true resiliency however, and we have much to learn from each other. There is an enormous opportunity before us, to align ourselves with our shared values, while empowering communities to co-create a regenerative and resilient Connecticut foodshed.

"Money is like water, when it flows it purifies, it makes things grow." Lynne Twist

Our fundamental finding is that trusted relationships are the foundation for transformative change. By building bridges where race and class divides currently exist, we rely on relationships as the most powerful and effective means of growth. Curiosity in each other's stories fosters action from a place of compassion and connection. With awareness and knowledge of who holds power and how that power is upheld; we can create consciousness shifts and pathways for healing to emerge. Healing pathways lead to solutions predicated on multi-stakeholder alliances that begin with how we relate and come to understand ourselves and one another.

We believe there is a desire among key stakeholders to align and realize a resilient foodshed that honors Indigenous, reparative, regenerative, circular, democratized, and ecologically centric approaches. We believe that deliberate engagement and impact investment can and should cultivate a regenerative foodshed, and that together we can re-envision our common food culture. We propose the alignment of intention, relationships, and resources to regenerate a resilient Connecticut foodshed.

Acknowledgements

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Green Village Initiative Leadership Team

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Pippa Bell Adler, GVI Board Member, Sustainable Westport Zero Waste Challenge Team Leader, Valeria Bisceglia, GVI Board; CT Small Business Development Center, Raven Blake, CTCORE-Organize Now, Co-founder Love Fed, Dina Brewster, Owner of Hickories Farm; CT NOFA, Penny Cook, GVI board member; strategic planning, Robert Chang, Owner Echo Farm; Southern New England Farmers of Color Collaborative, Kip Kolesinskas, Consulting Conservation Scientist, Will O'Meara, Farmer Hungry Reaper Farm; Land for Good, Eileen O'Reilly, GVI board member; strategic planning

Stakeholder Interviewees

Margarita Alban, Greenwich Planning and Zoning Commission, Laura di Bonaventura, Director of Sustainability at GCDS, Fred Camillo, First Selectman of Greenwich, Chelsea Gazillo, Working Lands Alliance, Meg Hourigan, Connecticut Food Systems Alliance, Will Keis, Greenwich Land Trust, Geoff Lazlo, Geoff Lazlo Food, Jiff Martin, UConn Extension Educator in Sustainable Food Systems, Michelle McCabe, Center for Food Equity and Economic, Development, Ian McSweeney, Agrarian Trust, Elizabeth Moore, Connecticut Farmland Trust, Alyssa Norwood, Sustainable Connecticut, Martha Page, Hartford Food System, Pat Sesto, Greenwich Environmental Affairs Department, Susan Witt, Schumacher Center for New Economics

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