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Urban Farm and Community Garden Hybrid Models: A Case Study of the Huerta del Valle Community Garden

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**URBAN FARM AND COMMUNITY GARDEN HYBRID MODELS: A
CASE STUDY OF THE HUERTA DEL VALLE COMMUNITY
GARDEN**

by

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**SUBMITTED TO SCRIPPS COLLEGE IN PARTIAL FULFILLMENT OF
THE DEGREE OF BACHELOR OF ARTS IN ENVIRONMENTAL
ANALYSIS**

**PROFESSOR HERROLD-MENZIES
PROFESSOR JAQUEZ**

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Introduction

Hypothesis

Community gardens and urban farms have been an integral component of United States' history for more than 100 years, providing a number of social and economic benefits to communities that suffer from low access to fresh, healthy foods. While both models work to increase food access, they operate using distinct strategies. Community gardens have evolved over time to satisfy a wide variety of community needs, including community building, economic stimulation, and stress relief. Urban farms have a larger scope than community gardens, and they function as business models. While some scholars view community gardens and urban farms as facets of one entity, this thesis defines them separately. Community gardens are defined as spaces where healthy food production is not the main focus, but rather it is one part of a larger goal to improve a community through safe community bonding, food production education, and community empowerment and sovereignty. Urban farms are defined as business models that operate to maintain the business while providing healthy food for a community. Urban farms often offer fringe benefits like improving public image of an underprivileged area or converting food waste into compost and fertilizer, but their main goal is to sustain the farm.

This thesis explores the benefits and drawbacks of community garden and urban farm models and aims to identify a successful hybrid model. I define a successful hybrid model as a model that works to increase food access in a community through 1) a functioning business model with production and sales systems, 2) a community garden, and 3) multifaceted community engagement programs that provide social benefits to the

community, encouraging community building and hands-on education. To identify a potentially successful hybrid model, I conducted a case study of the Huerta del Valle Community Garden in Ontario, California. Huerta del Valle is a community garden attempting to integrate urban farm components into its model. The urban farm model that Huerta del Valle is using for reference is that of Growing Power, a successful urban farm based in Milwaukee. Huerta del Valle is using Growing Power as a model because one of the Garden staff members worked for a Growing Power affiliate and is a proponent of that urban farm model. My research came from scholarly articles and personal interviews with the Huerta del Valle staff, representatives from Growing Power, and staff from urban farms throughout the United States and in Southern California. I used primary contacts and a snowballing technique to secure interviews. I conducted two interviews with a member of the Huerta del Valle staff in person and communicated via email to answer interview questions afterward. I also interviewed staff members at The Growing Experience, Growing Power, Feed Denver, and Truly Living Well on the phone and through email correspondence.

Chapter One explores detailed histories of community gardens and urban farms in the United States. Chapter Two provides a review of relevant literature to frame the case study conducted in this thesis. Chapter Three includes a background of Growing Power and explains its advanced urban farm model, and it considers strengths and weaknesses of that model. The fourth chapter provides a brief history of The Growing Experience, a community garden/urban farm hybrid in Long Beach, California. The chapter explores The Growing Experience's model and advocates for a hybrid model. Chapter Five details Huerta del Valle's history as a community garden and explains the staff's plans for

expansion into a hybrid model. This chapter explains the benefits and drawbacks of a community garden model and potential benefits of Huerta del Valle's hybridization. In the final chapter, I will provide my recommendations for Huerta del Valle's future hybrid model and make recommendations for future studies.

Determining comparative effectiveness of community gardens, urban farms, and hybrid models has been difficult because many contain features of the others. Also, most hybrids define themselves exclusively as an urban farm or a community garden when they actually contain aspects of both models. Because so many hybrid models are improperly named, there is no literature on the range and effectiveness of different hybrid models. This thesis contributes to the literature on the social and economic effectiveness of community gardens and urban farms at addressing food access in low access communities. It does this by separating community gardens and urban farms into individual entities for the first time and analyzing the benefits and drawbacks of each model. I then analyze the potential social and economic benefits of hybridizing the models. Through this case study of Huerta del Valle and future research on its hybridization, it will become clear which elements of a hybrid model are the most effective for maximizing social and economic growth.

In the course of my research I experienced a number of setbacks that limited my ability to gain access to information or fully understand the case studies. The first setback is that there is much conflicting literature around the definitions of urban farms and community gardens. Each model has a vague definition, but scholars and activists disagree about the social benefits and drawbacks. To overcome this limitation, I created my own definitions of community gardens and urban farms based on the models I

researched and used those definitions throughout my thesis. Another limitation is that many of the urban farm and community garden staff members were hesitant to disclose information about their organization's struggles. Although I understood the need for privacy when discussing high profile organizations and confidential information, this limited my ability to understand the drawbacks of each model. My understanding stems mostly from outside research of the case studies and theoretical research of the models. The last limitation was that I could not find any literature on hybrid models. The community gardens and urban farms I researched all identified by one model or the other, even if they incorporated aspects of them both. To determine whether a case study was a hybrid model by my definition, I needed to first learn about how the case study functioned and which functional components it included.

Chapter 1: Historical Background

History of Community Gardens

The history of community gardens can be divided into four periods. According to Pierre Walter, Environmental Education professor at the University of British Columbia, the first period lasted from 1890 until the First World War; community gardens were used as a way to socialize the poor and immigrants into the hygienic and productive behavioral norms in the United States (Pierre 525). With an influx of immigrants and too few jobs to support them, poverty and hunger were rampant. To address the widespread hunger and diffuse social stigmas toward immigrants, urban reform organizations introduced ‘self help charity’ programs, teaching low-income citizens and immigrants skills in food production and the idea of self-reliant citizenship. Similar programs were introduced in schools, where schoolyard gardens were established to familiarize children with food production and to give low-income children a productive hobby. Cities contributed to the movement as well, encouraging construction of community gardens to beautify areas that were otherwise inundated with crowded tenements. Some leaders hoped that the immigrants living in the tenements would become attracted to the idea of gardening and pursue it in more rural areas (525). This first period of national interest in community gardens lacked focus on sustainable food production, concentrating instead on assimilation to social norms. Specifically, community gardens represented social productivity and cleanliness.

During the next historical period, from 1917-1945, community gardens boomed as the Great Depression drove up grocery prices and limited availability, forcing many jobless Americans to grow their own food. As people became more desperate and many

moved into makeshift community housing, relief gardens were created, allowing people to grow and barter the goods they produced so their families could eat a wider range of foods. Community gardens were a product of necessity in the midst of great national poverty and two resource-intensive World Wars, but community gardening also became a point of patriotic pride for American citizens. Since the country needed a high yield of resources, including food, to send overseas to soldiers, Americans were encouraged to use as few resources as possible as a way to support the troops. The Liberty Gardens of the First World War and the Victory Gardens of the Second World War provided places for Americans to grow their own food and to come together in a collective effort to sustain both their communities and their nation. Federal government agencies, non-profit organizations, universities, and private companies provided educational materials and training on how to garden, and the propaganda successfully introduced the idea that community gardening was an effective form of patriotism. By 1944, more than 20 million Victory Gardens were producing 40 percent of the produce consumed in the country (Pierre 525). In this period, community gardens were used to further the national resource agenda, to improve the economic standing of the poor, and to provide an outlet for Americans who felt helpless during times of national strife. The themes of community gardens serving as economic boosters and as emotional outlets continued to be prevalent in the following periods.

After a brief waning in community garden interest during the 1950s, gardens regained popularity in the 1960s and 1970s as the Alternative Food Movement (AFM) emerged in the United States as a response to a lack of consumer trust in the conventional food system. As consumers learned about the environmental and health implications of

mass-produced food, pesticide and herbicide use, and the power of large grocery chains, many decided that conventional agriculture did not present the best or only model for producing, processing, and distributing food (Doherty iii, Hassanein 8-9). The AFM demanded a food system that was localized, just, and ecologically sustainable (Doherty iii). The movement, which started in the late 1960s, grew steadily through the 1970s and gained even more support in the early 1980s as the Reagan Administration made deep cuts to many federal social programs. The Food Stamp Program sustained the largest cut in the \$44 billion budget reduction, experiencing reductions of up to \$2.7 billion by 1987 (Danziger & Haveman 5-13). For many low-income and elderly people, this meant more than a 75 percent reduction in monthly food stamp allotments, making most grocery stores unaffordable (Winne 23).

In this third period, community gardens were more successful in affluent areas, partially because the customers could afford to pay higher prices and had transportation to the gardens. In low-income areas struggling with food access issues, though, the gardens often failed due to long work hours, lack of education, and land use discrepancies. Community members who had to work long hours at poorly paid jobs often did not have the time or energy to contribute to garden work. Many of those who did contribute were uneducated about gardening practices and were unsuccessful at growing large yields. Maybe the most pervasive problem was the lack of available land. In low-income areas, most residents could not afford large plots of land, and in many cases the city had zoned plots for other uses like industrial space (Winne 38). As nonprofit organizations and activists attempted to remedy these issues, often cultural, racial, and socioeconomic disparities between activists and communities led to miscommunications and failures (38-

41). Still, this period is characterized by resistance to the conventional food movement and returned value to local food. Although often unsuccessful in implementation, community gardens provided means during this time for community members to educate themselves about the food system and to choose whether to support big agricultural producers.

The final period began in the 1990s and continues today. A product of the past periods, today's community gardens are supported by a variety of groups with wholly distinct concerns, including food borne illness, obesity, locally produced food, and climate change (Walter 525). Similar to past periods, the community garden movement today focuses on something more than just food. Its proponents strive to create community, identity, pleasure, and a new social and economic space removed from big corporations' influence (525).

History of Urban Farms

Unlike community gardens, which have existed in the United States for more than 100 years, urban farms have only existed in the nation for about 20 years. Although the earliest documented urban farm business models date back to the late 1970s, the urban farmers did not have any literature or experts to consult, so the models are varied and difficult to categorize (Bailkey & Kaufman 6). More urban farm models appeared in the early 1990s to provide for people who wanted higher access to local food but did not have the time or education to grow their own food. To support these people, urban farms began growing sets of crops onsite to sell to communities through farm stands, farmers' markets, Community Supported Agriculture baskets, and home delivery. Growing in the

city was particularly effective because it reduced transportation costs for both farmers and customers. Urban farms' success in the late 1990s was also partially due to government support in the form of the USDA's Competitive Food Project competitive grant program. Established in 1996, the Program awarded \$8.3 million to 69 various urban farm projects in the first four years of its existence. Further support came from national conferences of organizations like the Community Food Security Coalition, and the Agriculture, Food and Human Values Society; in these groups, emerging urban farmers shared strategies and anecdotes with experts and worked together to troubleshoot individual issues (10). With established support systems and shared public knowledge, urban farms have become much more widespread in the past decade, and they are now prevalent across the United States.

Chapter 2: Literature Review

Framing the Community Garden vs. Urban Farm Debate

Due to their distinct histories and structural and ideological differences, community gardens and urban farms experience different levels of effectiveness, leaving proponents and critics to dispute which model is more successful. Before discussing these arguments, it is important to understand the structural differences between community gardens and urban farms.

Today's urban farm models vary widely, but there are several components that the farms I researched strive to attain. Most of the urban farms have a large section portioned off to use for intensive agriculture, which means that the soil is especially fertile so plants can be grown close together to efficiently utilize space. In addition, more advanced urban farms have several compost piles, livestock, bee hives to harvest honey, hoopouses to grow food in the winter, an aquaponics system, and vermiculture. The systems work together to promote quick production of high yields so goods can be sold in high quantities year-round (Levine, Ng, Bailkey, Rogers & Jones).

A community garden model is much simpler, counting on gardeners to produce their choice and quantity of crops at their leisure. The community gardens I researched are usually comprised of several plots that gardeners can rent for a small investment. Some advanced community gardens produce compost onsite to be used for the plots. Gardeners then grow their crops and are free to take them home for consumption.

A key difference between the two models is that community gardens produce a lesser yield than urban farms, but the gardeners are allowed the freedom to plant as many and whichever kinds of crops they want. Also, community gardens allow more

community decision-making than urban farms. At urban farms the staff often decides which crops and livestock the farm will produce, and then sell it to the community. This structural understanding helps to contextualize the following critiques.

Author Mark Winne argues in favor of community gardens in his book *Closing the Food Gap*, where he illustrates the power of a cohesive community and strong leadership. Winne describes his experiences with the South Central Los Angeles Community garden and the Watkinson Community Garden in Hartford, Connecticut, specifically focusing on the relationships he built with the gardeners in both locations (58-66). In Hartford, he remembers the most rewarding part of gardening as the conversations he shared with the Jamaican gardeners about different planting techniques and seed distribution. Winne believes that the shared gardening knowledge strengthened both the crop yields and the community bond. He says that through these experiences he learned “the most important word in community garden is not garden” (62). In South Central Los Angeles, he noticed the benefit of a strong leader in the community, a woman in charge of the South Central Farm whose passion and dedication to her work encouraged the community to participate at the farm. He argues that with strong leadership, a community that struggles together can form powerful bonds that empower them to advocate for their rights (66). In his argument, it is apparent that Winne’s idea of a successful community garden is focused more on community empowerment and bonding than on food production. Since this thesis defines urban farms as business models that do not focus strongly on community building, Winne would likely consider the urban farm model ineffective.

University of California at Santa Cruz professor Julie Guthman counters Winne's argument as she discusses the problems associated with both urban farms and community gardens. In one article, Guthman analyzes her predominantly Caucasian, affluent students as they complete projects to bring fresh food to low access areas. She argues that although the students have good intentions, they often discover that their ideas to bring food to a community are different from the communities' ideas of what they need (439-40). For example, students wanted to implement community gardens in places where many community members worked fulltime and did not have the time to work in the garden. Guthman hypothesizes that the students' privileged backgrounds prevent them from understanding the needs of low access communities and cause a lack of communication between the community organizers and the community members. As discussed in the history of community gardens, this problem has been prevalent for several decades as activists decide their own methods to help a community rather than working with the community to create a system that benefits both the communities and the activists. Guthman believes that all local food systems are plagued to some extent with miscommunication, stunting the success of both community gardens and urban farms (443-44). According to Guthman, neither today's community garden model nor urban farm model can be successful until their organizers are better educated about white privilege.

Finally, authors Kate Brown and Andrew Jameton disagree with both Winne and Guthman: they take an economic approach, advocating for the urban farm model as a successful form of economic growth and food production. They acknowledge that community gardens can provide a significant nutritional yield for a family, but argue that

urban farms' intensive crop method is more effective and produces 13 times more food per acre than traditional gardening practices (Brown & Jameton 25-26). Financially, urban farming is a more viable model because along with food sales, the farms can produce value-added products like flowers and specialty crops to sell for increased profits. The profits can then be used to employ more local residents and grow more food for the community. The farm and community feed off each other – as a community's health improves, those who were sick or malnourished can become more productive, they can take employment opportunities, and then they can become more affluent so they can buy more fresh food (26). This symbiotic relationship supports the farm and improves the community. The authors also discuss the initial cost of starting an urban farm or community garden. While a community garden needs a significant investment to buy the land and cultivate it, urban farms receive income as soon as they begin sales, decreasing the necessary investment (26). While Brown and Jameton support community gardens, they believe an urban farm is a more financially sustainable model.

Relevance of “Food Deserts”

When discussing the successes and failures of community gardens and urban farms, one must consider their locations. As the previous authors pointed out, urban farms and community gardens are both constructed in places where communities have low access to fresh, healthy foods. These places are termed “food deserts” by the public, yet there is no single definition for a “food desert”. One commonly used definition is from the United States Department of Agriculture (USDA), which reads: “Food deserts” are defined as urban neighborhoods and rural towns without ready access to fresh,

healthy, and affordable food. Instead of supermarkets and grocery stores, these communities may have no food access or are served only by fast food restaurants and convenience stores that offer few healthy, affordable food options” (“Food Deserts” n.p.). However, definitions vary depending on authors’ interpretations and different communities’ circumstances, and since the term only came into existence in the early 1990s to describe physical and economic barriers to food in Scottish communities, it is still a fairly young idea (Shaw 231-47).

Because of the subjectivity of the definition, there have been several debates around the existence and characteristics of “food deserts”. Suburbanization and spatiality are two important factors to consider when defining “food deserts”. With the rise of suburbs and car use in the 1950s, affluent families moved out of city centers and into nearby suburbs, leaving the low-income, and often minority, communities in the cities (Mead 335). Supermarkets followed the affluent populations in a phenomenon called *supermarket redlining*, which is the process of supermarkets leaving city centers and moving to the suburbs because the suburbs have more land to create larger stores and more potential profits from affluent suburban customers (Shaftel 14). The supermarkets are incentivized to settle in affluent areas where the markets will earn additional revenue, and once the markets have been established in the suburbs, more affluent people move to the suburbs to be near the markets. After the supermarkets left the cities, fast food restaurants filled the open city land, effectively transforming the eating habits of marginalized communities in the city centers. Rural populations experienced a similar effect when affluent families moved into the suburbs and left low-income farmers in the country. Since the farmers sold most of their crops and did not have much left for

subsistence, they became dependent on the food outlets that remained, which were mostly fast food establishments. Over the course of several years, rural and urban communities found that they no longer had access to fresh produce.

Spatiality is also an important factor within low access communities. While cars are common among suburban populations due to general affluence and as a necessary means to travel to work, they are much less common among low-income communities who generally commute to work through public transportation or on foot. Thus, a ten-minute drive to the grocery store for a suburban community is a much longer commute for communities that have to navigate complicated public transportation systems or walk to the store (Winne 24). Without a car, low access community members must carry their groceries home with them, greatly limiting the amount they can purchase (24). In a study in New Haven, Connecticut, C. Heidkamp found that *supermarket redlining* affects the psychological perception of food as well as its actual availability. In his study, urban city residents perceived the cost of fresh foods to be higher than the actual price because supermarkets that sell them were only available in more affluent, suburban areas (1197-209). Since they were no longer able to shop at supermarkets, many study participants reported eating fast food frequently.

Regardless of the characteristics of “food deserts”, some people take issue with the term itself. Some authors, like Joseph Sbicca, do not use the term “food desert” because, he argues, it further marginalizes those areas, promoting charity from outside sources rather than encouraging analysis of the underlying roots of the problem (461). Sbicca prefers the term “food apartheid”, hoping to promote a more academic discussion of food access issues to change the system rather than address its symptoms. Another

argument against the term “food desert” is that it oversimplifies the problem, connoting an absence of food instead of capturing the reality of the abundance of fast food restaurants, liquor stores, and gas stations that provide health-diminishing foods. Although people living in low access areas sometimes receive enough calories, many are malnourished from the high-fat, high-sodium food they consume and suffer from obesity and obesity-related diseases (Fine 9). Still, there are proponents of the term “food desert”. The USDA, as shown in its definition above, uses “food desert” as an umbrella term to define low access communities. The 2008 Farm Bill used the term “food desert” as well, defining it as an “area in the United States with limited access to affordable and nutritious food, particularly such an area composed of predominantly lower income neighborhoods and communities” (Shaftel 14). Although some believe the use of this term is problematic, in these cases it is used to promote policy changes to improve the structure of low access communities and ensure equal food access.

Conclusion

While there is debate over the use of the term “food desert”, it is clear that there are a number of areas in the United States where food insecurity is prevalent. This thesis chooses to use the term “low access areas” rather than “food deserts” to avoid the stigma attached to the term and focus on the areas themselves. Low access areas are defined in this thesis as places where it is technically possible to attain fresh produce but it is difficult to attain due to local economics, transportation, or social norms. Within low access areas, I argue that a hybrid community garden/urban farm model is the most successful at addressing all aspects of food insecurity.

Chapter 3: The Growing Power Urban Farm Model

Introduction

This chapter will explore Growing Power’s background, including its history, the components of its model, and some of its successes and shortcomings. Growing Power is the most complete urban farm model in the nation. Through its advanced production and distribution strategies, the organization has successfully become a standalone business. It also productively addresses food insecurity in its hub cities of Milwaukee and Chicago by consistently providing fresh produce to a wide range of communities. However, although Growing Power has very complete production and distribution systems, the model does not focus effectively on hands-on education programs or community building, making the model incomplete.

History

Growing Power Inc. is a Milwaukee-based national nonprofit organization and land trust founded in 1993. Its founder and CEO, Will Allen, created the organization with a vision to provide equal access to healthy, high quality, safe, and affordable food for all. Growing Power aims to “inspire communities to build sustainable food systems that are equitable and ecologically sound; creating a just world, one food-secure community at a time” (“About” 1). Allen’s passion for food began at his family farm in Maryland, and by his early 40s he decided to follow in his family’s footsteps by growing and selling his own produce in Milwaukee. He bought a three-acre plot of land that was the last tract in the city zoned for agricultural use and began teaching low-income youths to farm. Through his lessons the idea of Growing Power was born (Miner 1). Twenty

years later, Growing Power has matured into an internationally acclaimed model for sustainable urban farming. In addition to its headquarters, Growing Power has satellite offices in Chicago, Illinois and Madison, Wisconsin and 65 staff members dedicated to more than 70 projects and Regional Outreach Training Centers worldwide. Allen has now taught more than 1,000 students to farm and produce food, and he has helped launch more than 25 gardens across the United States (“Growing” 1).

Food Production

One of the most important contributors to the urban farm’s success is its strategy to produce the highest yield of crops as quickly as possible for consumers. This production strategy is applicable to a hybrid model as well. Growing Power has been incredibly successful in producing large yields, so I detail its production system below for reference for my hybrid recommendation, which I will present in the following chapters. The organization’s main site in Milwaukee produces more than 100,000 pounds of vegetables annually, in addition to fruit, dairy, and meat (Doherty iii). The keys to the immense production rate are compost and chemical-free intensive agriculture. Each year, twenty million pounds of food waste are delivered to Growing Power – 400,000 pounds each week – and are converted into compost onsite over six to eight months (“Together” 1). The compost serves as a nutrient-rich fodder for plant growth and it also is used as a natural heater inside the greenhouses during the winter to keep energy use to a minimum (“Growing Power.mov”). After the compost is made, it is transferred to one of 50 worm bins, where thousands of pounds of Red Wigglers and Red Earthworms consume the compost, filter it, and enrich it with beneficial bacteria (“Growing Soil”). Vermicompost

is richer in nutrients than any other composting method, making the soil incredibly fertile for intensive crop growth. Intensive crop growth is an agricultural strategy where farmers plant crops very closely together in nutrient-rich soil, saving space and providing sufficient nutrients to each plant. This is especially important in an urban setting, where there is minimal space and the soil is often dry and devoid of nutrients. The enriched compost is used to grow a variety of fruits, vegetables, and herbs throughout the entire year, which are then sold cheaply to the community. While compost, vermiculture, and intensive agriculture are standard components of the urban farm model, Growing Power's model includes several other uncommon components like livestock, an aquaponics system, and apiaries.

Most of the animals raised onsite are worms and fish, but Growing Power also raises 500 laying hens, a dairy goatherd, ducks, and turkeys. The animals provide fertilizer for the crops with their waste and they are also a reliable protein source for the community ("Livestock" 1). Consistent with Growing Power's chemical-free policies, the animals are fed grass, vegetables, and commercial vegetable feed, and they are never exposed to growth hormones or antibiotics ("Together" 1). The fish live in an aquaponics system, which supports more than 100,000 tilapia and yellow perch while also producing edible vegetables. Each setup has an 85-foot long pond that is home to 10,000 fish underneath a layer of edible vegetables in shallow water. A single pump brings water up to the vegetable layer, where the roots absorb the nutrient-rich fish waste and simultaneously filter the water, which is then returned via gravity to the pond ("Growing Power's Aquaponics") (Figure 1). This sustainable system produces healthy, chemical-free fish to sell to the community, local restaurants, and markets ("Aquaponics" 1).



Figure 1: Growing Power's aquaponics system, courtesy of Ryan Griffis, 6/9/2008

The apiary, home to Growing Power's vast bee population, is crucial to Growing Power's operation and to the community because the bees pollinate the crops, trees, and flowers on Growing Power's site and throughout the surrounding neighborhoods. The apiary has 14 hives in Milwaukee and six in Chicago, and each hive is home to 60,000 bees producing 150 pounds of honey per year. Growing Power benefits from the crop pollination and the honey sales, and the organization gives the wax to one of its partners, the Chicago Youth Corps, to make beauty products like lip balm and soap ("Bees" 1).

One of the challenges of running such a large operation is the amount of energy it demands. Many urban farms have low budgets and cannot afford large electric systems, so the potential for growth is limited. Growing Power has addressed its energy needs through low-energy strategies and by investing in renewable energy. The staff has built much of the farm by hand, and the farming techniques, while complex, are not energy

intensive. To meet its small energy use, the Milwaukee site has 30 solar panels in a 10.8 kW solar electric system and solar water heating system (“Together” 1). Growing Power also has an anaerobic digester, which breaks down waste and produces renewable energy that it can filter back into farm uses (“Energy Initiatives” 1). Through smart planning, Growing Power has created a strong production strategy that supports its business and provides fresh, healthy food for the community.

Distribution

Growing Power’s complex production system couples with its unique distribution system to ensure food security in the surrounding communities. I recommend the multifaceted distribution system for a hybrid model as well, so it is detailed below. Typically, urban farms sell their products at farmers’ markets and sometimes through Community Supported Agriculture boxes, but Growing Power’s distribution system has a much larger scope. The system works through several channels to ensure that all people near its sites in Milwaukee, Chicago, and Madison have access to fresh, locally grown food. After the food is produced, it is sold to the community through a variety of programs including the Rainbow Farmer’s Cooperative, the Market Basket Program, and local farmers’ markets. These programs support local farmers, neutralizing any competition between Growing Power and local producers and providing additional income for the farmers. They also greatly increase the amount of local, fresh food that is available in urban areas.

Established in 1993, Will Allen created the Rainbow Farmer’s Cooperative to provide small-scale United States farmers with support and training, as well as

connecting them with market opportunities. The cooperative welcomes both urban and rural farmers, and it currently represents more than 300 family farmers from nine states (“Rainbow Farmers” 1). The farmers produce fruit, vegetables, dairy products, and meats, in addition to non-edible items like compost, vermicompost videos, and worm castings. Growing Power combines the Cooperative’s food with food from its urban farm and then finds markets to sell both sets of crops. As a member of the Cooperative, farmers are supported in multiple ways, including being connected with markets, gaining access to small-scale wholesalers, and getting free transportation of the goods to the storage warehouse. The farmers are paid for their crops, and the money can then be invested back into improving their farms (“Rainbow Farmers” 1). While most urban farms work to end food insecurity in one community, through this program Growing Power is fighting both urban and rural food insecurity by providing additional markets for small farmers to support their incomes.

The Market Basket Program is one of the markets for Rainbow Farmer’s Cooperative crops. One part mobile grocery store and one part community supported agriculture, the program uses produce from Growing Power’s urban farms and from Rainbow Farmer’s Cooperative to create wholesome produce packages for local families. The program offers three different packages: The Regular Market Basket, The Junior/Senior Market Basket, and The Sustainable Market Basket, in addition to extra items like meats and fruits (“Market Basket Program” 1). The baskets range from \$9-28, and are comprised of 10-25 pounds of food (Cun 1). These packages can be ordered by community members and are delivered weekly to their homes. They are specially created to support families of two to four people for a week (“Market Basket Program” 1).

Available year-round, the Market Basket Program effectively ensures that those who cannot farm or are not mobile can still eat healthfully at an affordable price.

The Rainbow Farmers Cooperative also sells crops at the Milwaukee and Chicago farmers' markets. The organization attends five farmers' markets in Milwaukee and four in Chicago daily, offering a location for mobile customers to pick out a tailored package of produce and vegetables. The farmers' markets are easily accessible by foot, bike, bus, or car, addressing issues of mobility among consumers (Doherty iii). Because of the scope of Growing Power's distribution model, it is able to increase its customer base, providing food for several communities as well as increasing its profit. I do not recommend programs like the Rainbow Farmers Cooperative to an emerging hybrid model, but the program provides a good role model for established hybrids.

Community Engagement and Education

Strengths

After researching Growing Power's community education programs, I have assessed its strengths and weaknesses according to my ideal hybrid model and I have outlined them below. As an advanced urban farm model, Growing Power has been able to implement several community education programs, which is not a component of all urban farms. One of the stronger programs is a local youth education program called the Youth Corp program. Started in 2006, the Milwaukee program partners with the Silver Springs Neighborhood Center to teach 10-18 year olds about urban farming. After school, students join Growing Power and the Center to learn how to build sustainable urban food systems like aquaponics and vermiculture systems. Growing Power also works with the

Browning Elementary School to install community gardens, teach cooking classes, and educate students about food sovereignty (Milwaukee Youth Programs” 1). In addition to educational programs, the Chicago program works with After School Matters and the Chicago Housing Authority to employ students during the summer, teaching them about urban agriculture and giving them skills like work ethic and appropriate work place socialization so they can succeed in higher education (“Chicago Youth Programs” 1). Growing Power’s youth programs both follow Will Allen’s vision to teach children about farming while they are young and to prepare them for a successful future.

Other projects that Growing Power offers on its Milwaukee site include three Community Outreach Projects and two School Garden Projects. Through the Community Outreach Projects, Growing Power donated 50 Cherry and Roma tomato plants to Milwaukee child care centers this year so children and teachers can eat chemical-free food and learn about sustainable agriculture. The organization also donated to seniors at the Oakton Manor, installing microbial raised garden beds for the residents to use. Growing Power supported plans to build two small community gardens at the Sixteenth Street Community Health Center, and an aquaponics system at the San Rafael Middle School and the United Community Center (“Outreach Projects” 1).

The School Garden Projects have included collaboration between the University School of Milwaukee and Growing Power in 2006 to create a school-wide composting system and raised beds. Schoolteachers and students were also trained at a Growing Power Workshop, and in return, they have volunteered at the Growing Power site frequently since. At the Urban Day School, Growing Power implemented raised beds and trained students and teachers to maintain them. The teachers then designed their curricula

around the garden to enhance the students' education (1). Will Allen's vision to teach children about farming through these programs is similar to the community garden model where children learn about food when they are young. However, his vision is accomplished through organized programs rather than through unsupervised experiential learning.

Weaknesses

Although Growing Power has successful youth programs, some of its other programs have several limitations that I believe make them inaccessible to low-income community members or those who work fulltime. One of the programs consists of a series of workshops ranging from the two-day "From the Ground Up" workshop to the six-week Intensive Farmer Training Program. These intensive programs offer a thorough education on different aspects of urban farming, but each one costs between \$400 and \$6000, which makes them unavailable for low-income community members. Growing Power also offers internships and volunteer opportunities, but both programs operate mainly during the week, so working class people must choose between volunteering and going to work. One of the most commonly used education programs is the daily Public Tours, which run every day and show visitors how each aspect of the farm runs. However, this does not effectively train the visitors to grow their own crops since the tours are only 1.5 hours long. Because of these limitations, I believe that Growing Power is neglecting a demographic that wants to learn to grow their own crops to supplement their diets. The organization only allows these people to buy crops already produced at the Growing Power farm. As a business model, this is a strong strategy to ensure continued patronage

and revenue, but as an organization addressing food insecurity, Growing Power is stunted by this oversight.

The community garden model caters to this demographic through its community education component, where the lessons are usually taught experientially through hands-on work with the crops in individual plots. Some families teach themselves or each other to work with the crops; in other cases education is passed between community members who share knowledge on how to grow crops effectively. Community farming education helps low-income community members produce food for very little economic investment, but also contributes to individual empowerment from the ability to grow one's own food. Community gardeners often also experience community building from working together with their neighbors to create a joint food source and improve the wellbeing of the community (Winne 62). While Growing Power has a very effective model for those who do not have the time or motivation to grow their own crops, it fails to provide programs or spaces for those who want to grow for themselves or cannot afford to buy produce weekly. To fully address low food access, it is necessary that an organization utilize components of both the urban farm and the community garden models.

Chapter 4: The Growing Experience Hybrid Model

Introduction

In this chapter, I will introduce a successful hybrid community garden/urban farm model in Long Beach, California called The Growing Experience. I will provide a brief history of the hybrid, explain how it functions today, and argue why it is successful at addressing low access areas. Similar to Growing Power, The Growing Experience has succeeded in creating an operating business model in addition to addressing low food access in Long Beach, but the hybrid model better addresses community engagement and education, and it incorporates a community garden onsite.

History

The Growing Experience is a seven-acre hybrid model created in 1996 in the Carmelitos Housing Development in Long Beach. The Housing Authority of the County of Los Angeles (HACOLA) and the University of California Cooperative Extension (UCCE) first started it as a two and a half acre community garden in the Carmelitos Housing Development, a low-income housing development where the residents struggle with food insecurity (“About Us” 1). The Growing Experience was placed there to give residents and surrounding community members a place to learn more about fresh food and grow their own food. The land also hosted a job-training program for low-income residents in the landscape maintenance industry. Throughout 1996 and 1997, the job-training program focused on designing and implementing the community garden and a wholesale ornamental nursery that would sell plants to county departments for public works projects. The community garden plans were successfully implemented and the

garden gained community support over the next several years. In 2008, in response to high rates of diabetes and obesity in the community, The Growing Experience expanded, adding a four and a half acre urban farm to the community garden (Pezanoski-Browne 1).

In addition to the urban farm, The Growing Experience has expanded significantly in the last four years. In 2009, the hybrid developed and implemented a Community Supported Agriculture program that continues to grow each year. By 2010, The Growing Experience began research and development for an aquaponics system based on Growing Power's aquaponics, and the system is now fully functional. Finally, in 2012 the staff implemented a certified farmers' market and farm stand in addition to developing a community kitchen to create value-added products from the site's produce sales. These programs continue to grow and to complement the urban farm and community garden, successfully increasing food access in the community.

The Hybrid Model

The Growing Experience's hybrid model is comprised of three components: production, distribution, and community engagement and education. All three components contain aspects of both urban farms and community gardens, making the model a true hybrid.

Production

Food is produced in two ways at The Growing Experience. Two and a half acres of the seven-acre plot are dedicated to 60 raised plots where community members cultivate their own food for private use. The other four and a half acres are an urban farm where the organization grows food for sale to the community through intensive

agriculture. The urban farm produces food year-round with the assistance of a 40-foot greenhouse that is used to start and propagate seeds. The Growing Experience also produces tilapia through an aquaponics system similar to Growing Power's design, but the fish are not yet for sale. Finally, the hybrid owns a flock of 20 laying hens that produce eggs for sale but are not sold for meat (Ng). Although the production model is not as thorough as the model at Growing Power, The Growing Experience's production model importantly includes year-round food sales as well as year-round community garden participation. This two-pronged model supports a number of different lifestyles, including those who prefer to cultivate their own crops and those who do not want to or cannot grow food themselves, preferring instead to purchase produce from the site.

Distribution

The distribution system is closely tied with the urban farm rather than the community garden because the gardeners do not require outside transportation to take their crops home. Even so, some parts of the distribution system encourage community building similar to that experienced in community gardens. The most common distribution method is Community Supported Agriculture, which is a program where local farmers create boxes of seasonal produce to deliver weekly to customers. The Growing Experience creates 35 Community Supported Agriculture boxes each week that subscribers collect directly from the site. This system encourages community members to spend time at The Growing Experience every week, promoting socialization between subscribers. Another means of distribution, The Growing Experience's weekly farmers' market, contributes to community building more directly. Started in 2012, the market allows customers to socialize at the market and learn about food together. In addition to

the social benefits of the distribution system, the system has increased The Growing Experience's scope, which in turn increases its profits and bolsters its reputation. For example, some of the produce is distributed to local restaurants where the chefs use it in their dishes. The restaurants pay the hybrid for its produce, and the partnership boosts the hybrid's credibility and encourages community members who eat at the restaurants to offer patronage to The Growing Experience (Ng). The farmers' market and Community Supported Agriculture program are examples of increased scope too. Since the varied distribution approach caters to a number of lifestyles, The Growing Experience's customer base increases so it earns more revenue to support itself. The distribution system embraces both social and economic sales strategies, and as a result The Growing Experience has become an integral part of the community, increasing the hybrid's popularity and revenue and improving food access.

Community Engagement and Education

The Growing Experience's community engagement and education programs employ effective strategies that provide valuable education to the community while simultaneously placing the hybrid at the center of Long Beach's community engagement work. The hybrid partners with the City of Long Beach Pacific Gateway Workforce Investment Network to run the Summer Youth Employment Program. Participants are paid by the Network to do hands-on fieldwork at The Growing Experience, ranging from planting to harvesting to maintenance. The program employs youth to give them a productive summer activity and train them with necessary skills for future employment. The hybrid also works with college students, partnering with California State University to provide volunteer opportunities to service learning students in various areas of interest,

including aquaponics, community outreach, and crop production (Ng). Both programs provide tangible benefits and education opportunities for the community, and they also create a means for voluntary labor onsite. The programs also further The Growing Experience's goal of increasing food access by teaching local youths how to grow crops so they can grow produce at home and teach other community members.

The Growing Experience also hosts seasonal events for the community and local schools, and community members are encouraged to host events at the farm. The farm also hosts dinners with local chefs who cook gourmet meals for the community using the hybrid's produce (Ng). These community engagement programs make the hybrid more accessible for the community by making it a welcoming space for gardeners and non-gardeners alike. They also provide a safe space for community events where residents can socialize with each other. The education and community engagement programs promote The Growing Experience, create community proponents, and encourage community building through events. Unlike at Growing Power where the farming lessons are expensive, community members can volunteer at the hybrid and learn about farm work free of charge, which makes the hybrid much more accessible to the community. Also, many of Growing Power's events and opportunities are during the week, but since community members can host their own events onsite at The Growing Experience, they fulltime workers and other busy community members can still participate in events when it is convenient. The Growing Experience's large scope and varied programs cater to a wide variety of socioeconomic, age, and social groups in Long Beach.

Reasons for Success

The Growing Experience's hybrid model is successful at improving food access, engaging a wide range of community members, and operating a sustainable business model because it embraces the social aspects of community gardens and the economic and functional aspects of urban farms. Importantly, the aspects of both models are apparent throughout the hybrid. For example, The Growing Experience promotes social aspects of the community garden model on its urban farm through hosting community events. The economic aspects of the urban farm model are also evident in the community garden, where gardeners must pay \$100 per plot per year or offer two hours of volunteer farm work every month. By blurring the lines between the two models, The Growing Experience has ensured that the community will feel welcome at all parts of the site while the hybrid can still host a sustainable business model. I believe this model is scalable and applicable at the Huerta del Valle Community Garden.

Chapter 5: Huerta del Valle

Introduction

This chapter offers a brief history of Ontario, California and explores the history of its community garden Huerta del Valle, discussing the people who created the garden and the challenges they have faced in the process. I explain the benefits of Huerta del Valle's current community garden model and the ways the garden staff is planning to implement Growing Power's model to become a hybrid community garden/urban farm. Finally, this chapter discusses the benefits and drawbacks of a community garden model and the potential benefits of hybridizing the Huerta del Valle model.

Ontario Background

The Huerta del Valle Community Garden was opened in April in Ontario, California. Ontario is a 50 square mile city in the Inland Empire, home to 166,134 people. The population is predominantly Spanish speakers, with 71 percent of Hispanic or Latino origin. Only 14 percent of the population holds any kind of college degree, and 46 percent of families earn less than \$50,000 annually. Ontario's unemployment rate is four percent above the national average at 11.4 percent ("Ontario QuickFacts" 1, "Profile of" 1). Although much of the city is employed and can afford basic amenities, most residents do not have disposable income to spend on fresh foods.

Ontario was founded in the 1880s as an agriburb, which is a city with a balance of agriculture and suburbs (McCoy 5). As a result, for more than 100 years the southern part of Ontario was lush with farms and orange groves. However, as the nearby city of Long Beach emerged as an international import and export hub, more cargo was sent through

Ontario International Airport, making it the 15th busiest cargo airport in the United States. As the city's focus shifted from agriculture to industry, farms and orange groves gave way to warehouses and trucks ("Ontario: Inland" 1). With the depletion of farms and the introduction of large, nonresidential warehouses, there was very little space for large grocery stores to move into the area. Also, Ontario's urban population spread out so there was not a large enough customer base in any one area to incentivize a grocery store to purchase land. As a result, Ontario residents are now faced with food insecurity and lack of access to organic, local food.

The main sources of groceries in Ontario are gas stations, liquor stores, and fast food restaurants and the groceries that do exist contain only a limited, bruised selection of produce. The grocery-less pockets of Ontario are consistent with the census data for the lowest education rates, the lowest average family incomes, and highest percentages of Hispanic minorities. This correlation has caused the USDA to recognize Ontario as a "food desert". There is debate over whether Ontario should be categorized as a "food desert" because parts of its agricultural infrastructure remain. Some argue that because there is potential for growth because, they argue, Ontario is not a "food desert", but is underutilized. In a 2013 interview, Huerta del Valle blogger Marcy Jones ascertained community members' views on the debate. Some community members responded that Ontario is not a "food desert" because there is some level of produce in the stores, regardless of whether the selection is fresh or organic. Others asserted that because the produce is of such low quality, it is unusable, akin to table scraps (Jones 3). Consistent among the debate is that before Huerta del Valle, there was no place within reasonable walking distance to purchase fresh, organic fruits and vegetables. Although some

community members consider Ontario to be a “food desert”, this thesis defines it as a low access area.

Huerta del Valle Community Garden History

I learned about Huerta del Valle’s history through interviews with a member of the Huerta del Valle garden staff and extensive research of student papers from garden volunteers in Pitzer College’s Pitzer in Ontario program. The Pitzer in Ontario program is a “justice-oriented, interdisciplinary program in urban studies and community-based research” that includes an internship component where students have volunteered at the Huerta del Valle Community Garden (“Pitzer in Ontario” 1). The Huerta del Valle Community Garden was first started as the Linda Vista Garden in the fall of 2010. The Garden staff and volunteers are listed below along with their roles. Their names have been replaced by pseudonyms to protect the identities of those who had controversial roles in this history.

L.M. has been the Garden Manager since spring 2011. She is a member of the Ontario community and also serves as a connection between Pitzer and the community.

K.P. is a faculty member at Pitzer College and the head of the Pitzer in Ontario program. She worked early on to connect Pitzer students, the Ontario community, and a local nonprofit after witnessing shared interests among these three groups. Now she directs student interns who work at the Garden through the Pitzer in Ontario program.

C.V. was a Pitzer student in the Pitzer in Ontario program. He worked with a local nonprofit to initiate the garden in 2010. He applied for and was granted a Kaiser city

grant allotting \$67,000 to the Garden over the course of three years.

S.M. is a student at Pitzer and the current Urban Fellow for the Pitzer in Ontario program. He began his involvement with the Garden in 2011, initiating a large-scale compost project for the Garden. He now provides technical support to the garden using his experience with urban farms and community gardens.

E.O. is the past Urban Fellow for the Pitzer in Ontario program. Starting in the summer of 2011, she served as a liaison between Pitzer students and the Garden. She also translated for L.M. She now lives and works in New York.

Ontario Ministries is a local nonprofit that won the Kaiser grant in conjunction with the Garden. Because of a difficult relationship between Garden workers and Ontario Ministries, they are no longer involved with the Garden.

The Pitzer in Ontario program is a Pitzer program that offers a semester-long intensive academic immersion in Ontario. Participating students take three classes at the program center and intern 15 hours each week with Ontario community members or organizations working to fight injustice in the Inland Empire. Huerta del Valle is one of the internship options (Apt & Engles 4-6).

In the fall of 2010, Pitzer student C.V. became interested in starting a community garden in Ontario through the Pitzer in Ontario program. After witnessing the food access issues in Ontario, he worked with his professor, K.P., and Ontario Ministries to initiate the project. The project started slowly and failed to gain much community interest until L.M. stepped up and volunteered to be the Garden Manager. As a member of the Ontario

community, her involvement sparked community interest and created a tie between the project and the community. Ontario Ministries offered the use of a garden site conditional upon permission from the land's owner, the Ontario-Montclair School District. The site was located between the Linda Vista Community Garden and the Ontario Ministries office and the garden staff created 20 family plots in addition to communal gardening space. They chose to name the garden Linda Vista Community Garden.

Although the garden was initially successful with 20 families working in their plots, problems arose between Ontario Ministries and L.M. Often, the representative from Ontario Ministries spoke in English in meetings with L.M. even though she speaks mostly Spanish; she also believed that her hard work was ignored by Ontario Ministries, the school district, and Pitzer students. Although there were problems between the two groups, L.M., Ontario Ministries, the Pitzer student C.V., and the City of Ontario collaborated on a grant proposal for the Garden. The proposal was for a portion of the \$1,000,000 grant offered by Kaiser Permanente to promote Healthy Eating Active Lifestyles (HEAL) in California cities (Apt & Engels 4-6, "Community Health" n.p.). The City of Ontario won the grant, and it awarded Linda Vista Garden and Ontario Ministries \$67,000 of the grant in the fall of 2012 to create a community garden. The money was allocated for the purchase of two greenhouses, a workshop coordinator salary, and garden supplies, but Ontario Ministries preferred the money to be allocated differently, heightening the problems between the groups.

In the meantime, J.E. increased his time at the garden and spearheaded a large composting operation, based on that of Growing Power. He had returned from a semester working at one of Growing Power's affiliate farms, and his input and expertise shifted the

Garden design from a community garden model to a Growing Power model. The compost project enlivened the community and brought people together from Pitzer and Ontario to create more than ten tons of compost throughout the spring. However, the Garden staff and volunteers hit a roadblock when the school district, which owned the land, received complaints about the compost and flies and required that the compost be removed from the site in two days time. The staff managed, with much help and tool donations, to relocate the compost to a lot at the Church of New Beginnings, but a number of Pitzer volunteers were discouraged by what they felt to be a lack of support, and many ended their commitment to the Garden shortly after.

The Huerta del Valle staff had considered moving to a new site for several months because they were frustrated that they needed to approve events and garden decisions through both Ontario Ministries and the school district before finalizing them, which often took several weeks. Also, there was no bathroom access at the site. After realizing that they could no longer have compost at the garden site, the staff members decided they needed to find a more suitable location for the garden and sought a viable space. Striving for change, they also changed the garden's name from Linda Vista Garden to Huerta del Valle Community Garden, meaning garden of the valley. Fortunately, the City of Ontario Planning Department approached the staff and offered to let them use city land for the Garden. The City decided to take Ontario Ministries off the grant, instead awarding the full \$67,000 and a three-year land use agreement to Huerta del Valle.

Huerta del Valle's new four-acre site is located next to Bon View Park in the heart of the city, several blocks west of the Ontario International Airport. Before they could begin constructing the garden, they needed to get city approval for their plans and

obtain a land use agreement since the land belongs to the City of Ontario. The staff wasted no time while they waited for approval. Between September 2012 and December 2012 they designed their land use plan, hired a team of lawyers to learn how to become a 501(c)(3) nonprofit organization, tested the Garden's soil for contaminants, and hosted their first monthly community meeting ("Huerta del Valle" 1). During the first few months of 2013, the Huerta del Valle staff strengthened their relationships with the Ontario community through community meetings and HEAL events. They also created their official logo, produced a promotional video of the Garden, and received a donated electric truck. On April 5, 2013 the City of Ontario approved the land use agreement and Huerta del Valle broke ground on the new site (1).

Huerta del Valle Structure

Huerta del Valle operates today predominantly as a community garden. The Garden has 35 garden plots in use by individual families, and the staff is planning to create more. In addition to the community garden, the staff has implemented some components of the Growing Power model at the Garden. The Garden has four rotating compost piles providing fertile soil year-round, and there is a hoophouse with six large boxes ready to become vermiculture boxes in the spring. A large plot of the garden has been set aside for intensive agriculture, and the staff is preparing it for use in the spring. The Garden also has a small area with chairs and a blackboard dedicated to future educational programs for the community. Due to permitting issues and potential noise complaints, Huerta del Valle cannot yet purchase goats or chickens for the garden. City permits also prevent them from having beehives, an aquaponics system, solar panels, or a

water catchment system (Levine). However, the staff hopes that over time and through relationship building with the City, they will be able to implement all of these systems.

The preliminary design plan for the hybrid model includes six compost piles, an intensive

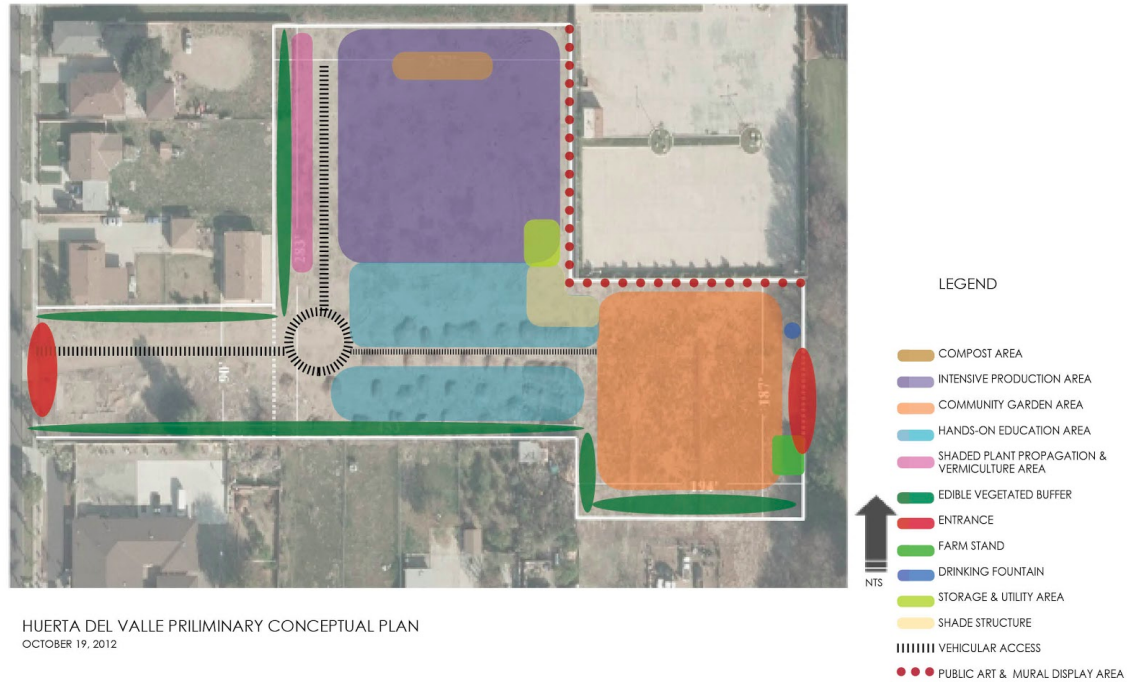


Figure 2: Huerta del Valle’s hybrid plan, courtesy of Huerta del Valle, 12/8/2012

farming area, an expanded community garden, a hands-on education program, a shaded plant propagation with vermiculture boxes, an edible vegetative buffer, a farm stand, access to a farmers’ market, a water fountain, onsite storage, and vehicular access through the Garden (Levine) (Figure 2). The staff members hope to have the entire Garden framework operating successfully in five years.

As a community garden, Huerta del Valle supports Ontario residents by providing a place to grow food and a safe space for community building. The family plots increase food access for the 35 – soon to be more – families that rent them and grow food year-round. At the same time, the Garden has become a space for the community, similar to a park, where community members are comfortable spending time. The gardeners are able

to be independent from the unhealthy food options in Ontario, which gives them a sense of autonomy, and they can develop pride from growing their own food. Gardening also provides exercise for the gardeners, making their lifestyles healthier. However, Huerta del Valle's community garden model has several drawbacks as well. Since there are only 35 family plots, Huerta del Valle's scope is very small, so most of the city cannot benefit from the Garden. Also, the Garden does not produce any revenue so it is dependent on grants and donations.

Once the community garden is restructured to include urban farm components, it will be able to increase its scope and accrue revenue, providing food for a much larger demographic and sustaining its model. The intensive agriculture area will produce high yields that can be sold at the farm stand and potentially at a farmers' market, so families who cannot or do not want to garden can still access fresh produce. Also, the education area will likely bring to the site a new demographic of people who want to learn how to garden at their own homes. The increased flow of community members at Huerta del Valle will make the space more inclusive and increase community building. Finally, year-round revenue will allow Huerta del Valle to expand to its full potential, adding more garden plots and ensuring that the hybrid model has constant access to seeds, building materials, and other necessary tools. In the next chapter, I will offer recommendations to further enhance these benefits and optimize Huerta del Valle's hybrid model.

Chapter 6: Recommendations

Introduction

In this chapter, I offer my recommendations for Huerta del Valle to become a successful hybrid model that addresses all aspects of food insecurity in Ontario. I support Huerta del Valle's proposed hybrid model (referenced in the previous chapter) and encourage the staff to develop and expand the community garden so more community members can participate. In addition, I propose the following considerations for the Garden's future model in hopes of enhancing the social and economic benefits of hybridization.

Storefront and Cooking Lessons

One of the issues that Ontario residents face is a lack of local restaurants that serve cheap, healthy options. While providing fresh produce will improve community access to fresh foods, many people still do not know how to cook the foods they buy. A storefront restaurant could solve this problem; it could sell meals prepared with the produce from the Garden as a cheap alternative to fast food for community members who work fulltime and do not have the time to cook for themselves. For community members who want to learn to cook their own food, a storefront could also host cooking lessons. This would also improve community knowledge of seasonal foods and recipes.

Alternatively, Huerta del Valle could host cooking demonstrations at the farm stand at the Garden to avoid the expenses of leasing a storefront. If the staff chooses this option, it would be more difficult to find a space to make prepared meals for sale because they will need to use a commercial kitchen to ensure sanitary preparation methods.

Including some form of cooking lessons is an important aspect of the hybrid model because it provides food to people like an urban farm does but it also engages the community and empowers them with the ability to make their own healthy meals like a community garden. Including cooking lessons or premade meals will help Huerta del Valle reach a demographic of community members that the Garden is not reaching with the community garden model. This will increase the social benefits in the community and could create additional support for Huerta del Valle so it can continue to thrive in Ontario.

Value-Added Products

In addition to producing food for the community, Huerta del Valle should consider adding value-added products to its list of items for sale. These products include flowers, jams, homemade granola, and other items that are not raw edibles grown onsite but are items that will increase sales while providing the community with valuable products. If Huerta del Valle decides to lease a storefront or work in a commercial kitchen, the staff could produce some of the edible items there. If not, Huerta del Valle can partner with other local producers and allow them to sell their goods at the site. From an urban farm economic perspective, this is an important strategy to increase sales at the Garden and draw new demographics of customers to the site. From a community garden perspective, this is a way to support the local community through working with local businesses and creating an uplifting sense of community among business owners and community members.

Community Supported Agriculture – Delivery

On most urban agriculture sites, community members come to the site to either grow or buy their food. In a Community Supported Agriculture program, the food is instead delivered to the customer's home. I recommend this program to Huerta del Valle because it will make the organization more inclusive of community members who do not have reliable modes of transportation or are immobile. It also ensures weekly sales for the Garden so there will be a constant source of funds and it allows busy working class families to get their food more easily without worrying about getting to Huerta del Valle every week. One of the limitations of this suggestion is that if several families have their Community Supported Agriculture boxes delivered to their homes, they are less likely to come to the Garden to socialize. This may reduce the level of community building that occurs at the Garden. However, my suggestion is focused toward families that cannot get to the Garden under most normal circumstances and need assistance.

Themed Gardening Classes

One of the reasons that many people prefer to buy food rather than grow it themselves is because gardening seems like an overwhelming task and they do not know where to begin. Gardening classes often consist of broad lessons, leaving students with numerous specific questions about the basics. To increase community knowledge of gardening so people can grow food at their homes and at the Garden, I recommend that Huerta del Valle host specific seasonal classes on making compost, growing tomatoes, plant placement, and other gardening basics. The staff can bring in specialists or teach the classes themselves depending on the level of staff expertise. It is also important to allow

community members to teach classes if they specialize in a specific part of gardening. This will make the classes more accessible and increase the level of community engagement. It will also neutralize the power dynamic between the staff and the community members so Huerta del Valle can be a comfortable place for the community.

Conclusion

My recommendations aim to enhance the social and economic benefits of hybridization through specific programs. The programs will support Huerta del Valle economically while also making the Garden a safe, comfortable place for the community. Paired with Huerta del Valle's proposed design, these recommendations aim to make Huerta del Valle a complete hybrid model. I believe that with these additions, the Garden has potential to become a permanent economic and social presence in Ontario.

Chapter 7: Conclusion

This study examined models of community gardens and urban farms and determined a successful hybrid model for future implementation at the Huerta del Valle Community Garden. This was accomplished through analyzing the unique benefits and drawbacks of community gardens and urban farms as defined by the author, and then determining the components of each model that would maximize Huerta del Valle's social and economic potential. Community gardens are defined in this thesis as places where community members can grow their own food in individual plots, and these spaces often contribute to community building, hands-on gardening education, and improved food access. Urban farms are defined as business models that produce food to sell to the community both to support the business and to improve community food access. This thesis adds to the literature on the social and economic effectiveness of community gardens and urban farms at increasing food access in low access communities. It does this by separating community gardens and urban farms into individual entities for the first time and analyzing the benefits and drawbacks of each model.

Through research of existing community garden, urban farm, and hybrid models, I determined that the most effective hybrid model includes intensive crop production, crop sales onsite as well as in farmers' markets and delivery methods, a large community garden, and education programs for the community. I then offered Huerta del Valle a potential model that includes these components as well as a store front, cooking lessons, value-added products, a Community Supported Agriculture program, and specific themed gardening classes. This complete model will potentially increase Huerta del Valle's scope

so it is able to improve healthy food access throughout Ontario while creating an enduring economic model.

Recommendations for Future Studies

For future studies, I recommend that researchers contact as many urban farms and community gardens as possible to learn about the broad range of functional and ideological differences between the models. I learned more about their range of differences as my project progressed, but this information would have been useful at the beginning of my research. I also recommend that future researchers conduct interviews with the gardeners or farmers at different hybrids to gain an understanding of the social effects of a hybrid. My research was mainly theoretical or came from authoritative testimonies, but it would be interesting to conduct an in-depth research project into the benefits of different models on the community members who work there.

Works Cited

- "About Us." *Growing Power*. N.p., n.d. Web. 3 Oct. 2013.
- Apt, Ru; Engles, Zavi. "Pitzer in Ontario Final Research Paper Trials, Tribulations, and Transitions: A Case Study of the Huerta Del Valle Community Garden." Thesis. Pitzer College, 2012. Web. 25 Oct. 2013.
- "Aquaponics." *Growing Power*. N.p., n.d. Web. 4 Oct. 2013.
- Bailkey, Martin. "Growing Power Interview." Telephone interview. 16 Oct. 2013.
- Bailkey, Martin, and Kaufman, Jerry. Publication. Lincoln Institute, 6-10, 2000. Web.
- "Bees." *Growing Power*. N.p., n.d. Web. 4 Oct. 2013.
- Brown, Kate, and Andrew Jameton. "Public Health Implications of Urban Agriculture." *Journal of Public Health Policy* 21.1 (2000): 20-39. Web.
- "Chicago Youth Programs." *Growing Power*. N.p., n.d. Web. 4 Oct. 2013.
- "Community Health Initiatives." *Kaiser Permanente Share*. N.p., n.d. Web. 25 Oct. 2013.
- Cun, Crystal. "Farm & Garden." *Growing Power Market Baskets*. N.p., 2 Aug. 2012. Web. 7 Oct. 2013.
- Danziger, Sheldon, Haveman, Robert. "The Reagan Budget: A Sharp Break with the Past," *Challenge*, 24 (May-June 1981), 5-13 (IRP Re-Print 434).
- Doherty, Kathleen. "MEDIATING THE CRITIQUES OF THE ALTERNATIVE AGRIFOOD MOVEMENT: GROWING POWER IN MILWAUKEE." (2006): iii.
- "Energy Initiatives." *Growing Power*. N.p., n.d. Web. 4 Oct. 2013.
- Fine, Simone. *Change as a Process: A Case Study of the Pronto Market in Ontario, California*. Thesis. Pitzer College, 2012. 7-9, 2012. Print.
- "Food Deserts." United States Department of Agriculture, n.d. Web.
- "Food Policy Initiatives." *Growing Power*. N.p., n.d. Web. 7 Oct. 2013.
- Growing Power.mov*. 2008. Film.
- Growing Power's Aquaponics System*. 2009. Film.
- "Growing Power & Rainbow Farmer's Coop." *FamilyFarmed.org*. Family Farmed, n.d.

Web. 4 Oct. 2013.

Growing Soil @ Growing Power. 2010. Film.

Guthman, Julie. "Bringing Good Food to Others: Investigating the Subjects of Alternative Food Practice." *Cultural Geographies*. SAGE Publications, 439-44, 2008. Web.

Hassanein, Neva. *Changing the Way America Farms: Knowledge and Community in the Sustainable Agriculture Movement*. U of Nebraska Press, 8-9, 1999. Print.

Heidkamp, C. "Food Desertification: The Loss of a Major Supermarket in New Haven, Connecticut." *Applied Geography* 34.4. 1197-209, 2011. Web.

Huerta Del Valle. N.p., n.d. Web. 21 Oct. 2013.

Jones, Marcela. "Sowing Hope to Harvest Change: Exploring the Development of Ontario's First Community Garden." Thesis. Pitzer College, 2013. Web. 25 Oct. 2013.

Levine, Arthur. "Huerta Del Valle Interview." Personal interview. 15 Oct. 2013.

"Livestock." *Growing Power*. N.p., n.d. Web. 4 Oct. 2013.

"Market Basket Program." *Growing Power*. N.p., n.d. Web. 6 Oct. 2013.

McCoy, Ashley. "Food Deserts in the Inland Empire." Thesis. Pomona College, 2010. Web. 24 Oct. 2013.

Mead, Nathaniel M. "Urban Issues: The Sprawl of Food Deserts." *Environmental Health Perspectives* 116.8. A335, 2008. Web.

"Milwaukee Youth Programs." *Growing Power*. N.p., n.d. Web. 4 Oct. 2013.

Miner, Barbara. "An Urban Farmer Is Rewarded for His Dream." *The New York Times*. N.p., 25 Sept. 2008. Web. 3 Oct. 2013.

"Ontario: Inland Empire Urban Center". Inlandempireoutlook.org. 26 Nov. 2009.

Ontario QuickFacts from the US Census Bureau. United States Census Bureau, n.d. Web. 24 Oct. 2013.

"Outreach Projects." *Growing Power*. N.p., n.d. Web. 6 Oct. 2013.

"Pitzer in Ontario." Pitzer College, 2013. Web.

"Profile of the City of Ontario." Southern California Association of Governments, May

2013. Web. 24 Oct. 2013.
- "Regional Outreach Training Centers." *Growing Power*. N.p., n.d. Web. 4 Oct. 2013.
- Sbicca, Joseph. "Growing Food Justice by Planting an Anti-oppression Foundation: Opportunities and Obstacles for a Budding Social Movement." *Springer Science+Business Media B.V* (2012): 461-64. Web.
- Schaftel, Sage. *Regional Landscapes of Food Access in Ontario*. Thesis. Pitzer College, 2012. 9, 2012. Print.
- Shaw, Hillary J. "Food Deserts: Towards the Development of a Classification." *Geografiska Annaler, Series B: Human Geography* 88.2. 231-47, 2006. Web.
- "Together We Are Growing Power." *Growing Power*. N.p., n.d. Web. 3 Oct. 2013.
- Walter, Pierre. "Theorizing Community Gardens as Pedagogical Sites in the Food Movement." *Environmental Education Research*. 524-527, 3 July 2012. Web.
- Winne, Mark. *Closing the Food Gap: Resetting the Table in the Land of Plenty*. Boston: Beacon, 2008. 23-66. Print.