Cultivating Environmental Justice: An Examination of the Potential for Community Gardens to be used as an Organizing Tool

Caitlin Fritz

MAY 2009

A FINAL MA RESEARCH PROJECT

Submitted to the faculty of Clark University, Worcester, Massachusetts, in partial fulfillment of the requirements for the degree of Master of Arts in the department of International Development, Community, and the Environment

And accepted on the recommendation of

Laurie Ross Ph.D., Chief Instructor

ABSTRACT

CULTIVATING ENVIRONMENTAL JUSTICE: AN EXAMINATION OF THE POTENTIAL FOR COMMUNITY GARDENS TO BE USED AS AN ORGANIZING TOOL

CAITLIN FRITZ

Examining community gardens through an "everyday environmental justice" lens, this paper looked at community gardens' potential to be an organizing tool for systemic change towards more environmentally just urban communities. Surveys were distributed to 43 garden coordinators in Philadelphia, and from this pool four gardens were chosen to develop case studies, based on interviews with garden coordinators and supplemental print and online sources. Specific characteristics of the gardens were explored in the case studies, such as structure and history, as well as important issues and actions taken by the gardeners, to determine if those actions most aligned with community organizing, community building, or garden improvement. The results indicated that the actions taken by community gardeners tend to be for the purpose of community building, and that when organizing does take place there is an outside driving force. While further research can determine what factors act as a catalyst to foster community organizing through a garden, the implications of this study reinforce the need for cities to protect existing gardens and expand opportunities for the creation of new gardens.

Laurie Ross, Ph.D.
Chief Instructor

Dianne Rocheleau, Ph.D.
Assistant Professor

ACADEMIC HISTORY

Name (in Full): **Caitlin Elizabeth Fritz** **Date: May 2009**

Place of Birth: **Poughkeepsie, NY Date: July 25, 1984**

Baccalaureate Degree: **Bachelors of Science in Environmental Science**

Source: Saint Joseph's University, Philadelphia, PA **Date: May 2006**

<u>Occupation and Academic Connection</u> since date of baccalaureate degree:

2006 - 2007 Environmental Educator, The Wildlife Center of Virginia
2007 - 2009 Community Organizer, Family Heath Center of Worcester

DEDICATION

This paper is dedicated to the Beetle Juice Club, a group of youth gardeners at Sullivan Middle School, who were my inspiration to research community gardens.

ACKNOWLEDGEMENTS

I would like to thank Professor Laurie Ross, Matthew Jurkiewicz, Erin Driesbach, my family, and friends, who have supported me through this paper so that I could finish in time to watch the NCAA basketball tournament.

TABLE OF CONTENTS

LIST OF FIGURES AND PHOTOGRAPHS

DIAGRAMS

MAPS

PHOTOGRAPHS

DUFFIELD FARMS

MERION GARDENS

INTRODUCTION

Community gardens have exploded in popularity in American cities due in large part to their multi-dimensional benefits to improving urban livability, specifically in low-to-moderate income neighborhoods. This paper discusses community gardens within a broader theoretical framework of environmental justice, specifically in the context of the everyday environmental stressors experienced by residents living in a low-to-moderate income urban neighborhood. The question driving this paper is to examine *what is the potential for community gardens to be used as an organizing tool for engaging in systemic change towards achieving more environmentally just urban communities?* In addition, this paper will attempt to shed light on some of the variables, which propel a garden towards community organizing or community building, and identify areas where elements of community organizing can take place, but have yet to be developed.

Rationale

The environmental justice movement has opened up a pathway for active citizen political engagement. In *From the Ground Up*, by Luke Cole and Shelia Foster, the transformative politics of the environmental justice movement is discussed as moving from a "bystander to being a participant in a struggle" (Cole & Foster, 2001, p. 151). This transformation happens through spaces created where people can take control over their

own destinies, which Harry Boyte and Sara Evans call 'free spaces' (as cited in Cole & Foster, 2001, p. 152). These created spaces allow people to share in a common struggle and move from being victims to developing civic and leadership skills, building confidence, and the realization that instead of tolerating a situation, power can be challenged and change can happen. When people come together through environmental justice struggles, a sense of empowerment as a collective is developed, as the individual feels less isolated with the new consciousness in recognizing others who are living the same realities (Cole & Foster, 2001).

Community gardens are a place where residents can engage in place-based social movements (Baker, 2004), and therefore, through this paper, I am hypothesizing that community gardens can function as these 'free spaces' where organizing for environmental justice can take place. Unlike many of the well-known environmental justice issues of the past, such as Love Canal, the environmental conditions in our urban communities today are a result of decades of environmental degradation and polices of discrimination and disinvestment. These conditions range from heavy metal contaminating urban soils, to neighborhoods isolated from access to fresh foods or safe areas for recreation, all leading to a series of public health concerns. Most of the environmental injustices of today have no single chemical corporation or industry to blame, but instead many parties that share the responsibility. How do you organize when there is no single entity to blame? How do you mobilize communities against conditions, which people have 'just become used to' and accepted as the 'way it is?' It is my view

that community gardens, being a community created space, so intricately connected with the environment, can be the tool for which to engage in this new genre of environmental justice organizing.

Community Gardens in Philadelphia

The city of Philadelphia in particular has had a rich tradition of community gardening. As many as 500 community gardens existed in the city in 1998, and despite the threat of redevelopment, around 300 gardens are still in existence today (Wang, 2008). Philadelphia also has a strong presence of citywide organizations supporting community gardening. Beginning in 1974, Philadelphia Green as part of the Pennsylvania Horticultural Society (PHS), has grown to become the nation's most comprehensive urban greening program, supporting community gardens, and public green spaces throughout the city. Philadelphia Green collaborates with neighborhood residents, community groups and city agencies to use horticulture as a community building tool (The Pennsylvania Horticultural Society [PHS], 2009). The Neighborhood Gardens Association and the Urban Gardening Program of the Pennsylvania State Cooperative Extension in Philadelphia have also played significant roles in assisting community gardens, through providing logistical and technical support.

Philadelphia is also a city that is plagued with environmental injustices. With almost a quarter of its population living below the poverty level (U.S. Census

Bureau, 2000b), and a majority minority racial breakdown (U.S. Census Bureau, 2000a), the marginalized communities in the North and West sections of the city bear the burden of decades of disinvestment and environmental degradation. The combination of a strong history of community gardening, and the legacy of environmental injustice, are the grounds for which community gardens in the city of Philadelphia were chosen for this study.

This study used interviews and secondary information sources of four gardens in Philadelphia: Duffield Farms, Merion Gardens, Ashwood Gardens, and Sourin Street Community Garden[1]. The findings of these cases highlighted the community characteristics, history, structure, networks, ownership, and funding of each garden, as well as what environmental justice issues are important to these organizations and what actions each are taking to counteract these concerns. The actions for each garden were analyzed to determine if the approaches reflected community building or community organizing. Lastly it was determined that while the trend for the gardens is towards a community building approach, there is still the potential for community organizing, however, the garden itself is not the sole driving agent in the process.

[1] The names of the gardens in this study have been changed for the purpose of confidentiality

BACKGROUND

History of Community Gardening

Community Gardens are not a new concept, but have been present in American cities since the birth of the nation. The idea for green space to be used as a common place for gardening was evident as early as the planning of the city of Philadelphia. William Penn, the founding father of the design of the city, drew up plans for Green Countrie Townes, in which one acre out of every five acres developed would be left open for green space to be used for gardening (Hynes, 1996).

During the late 1800's gardens began to take on a more philanthropic purpose in the form of Charity Gardens. Detroit, Michigan used large community gardens on the outskirts of town to help feed the city's population as it struggled through economic hardships. The same concept was used for Relief Gardens, during the Great Depression (Hynes, 1996), and "Victory Gardens" during World War II (Brown & Jameton, 2000). During the 1940's and 1950's, community gardens began to disappear as the development of the suburbs took precedence in American society. Few of these original Charity, Victory, or Relief Gardens made it through this period, with Fenway Gardens in Boston being one of the few exceptions (Hynes, 1996).

Today many community gardens have now become more of a social movement, owing their roots to the civil rights struggles of the 1960's (Warner, 1987). Helped along by more political backing, such as the Massachusetts Gardening and Farm Act of 1974, which allowed communities to grow rent free on urban public land (Hynes, 1996), gardens have since flourished in urban centers throughout the country. New gardeners were motivated by high food prices driven up by inflation and the need to raise awareness about environmental stewardship (Brown & Jameton, 2000). As of 1996, according to records kept by the American Community Gardening Association (ACGA) 250 cities and towns had operating community gardening programs, and the ACGA admitted that with no comprehensive inventory at the time, the number could be much higher. In 1993 the ACGA received 800 new requests for information on new gardens (Hynes, 1996).

In the same context as the charity and relief gardens, more recent gardens have primarily been driven in response to social issues. Today many community gardens in particular are more about self-help and empowerment than the gardens of the early 20th century that were focused on charity (Warner, 1987). Community gardens have transformed into a method of community development aimed to combat the struggles that face our declining inner cities (Brown & Jameton, 2000).

Community Gardens: Engaging Communities in Social Change

A majority of the literature and written materials about community gardens have focused on the specific characteristics that enable gardens to be a driving force for social change. Community gardens can facilitate a sense of community, problem-solving skills, and democratic values.

Creating a sense of community

Community gardens offer a safe non-threatening place for people from diverse backgrounds to come together (Payne & Fryman, 2001), and build neighborhood social ties, the sense of community and support that connects unrelated residents of a neighborhood together. Communities with strong neighborhood social ties are more likely to form local organizations and mobilize for political reasons (Kuo, Sullivan, Coley, & Brunson, 1998). A study performed in a housing project in Chicago by Kuo, Sullivan, Coley, & Brunson (1998), demonstrated how environmental factors could influence informal social contact, which is the most significant contributing element in creating neighborhood social ties. Environmental factors, such as crowded living, high crime, and increased noise, experience by living in urban communities, inhibits residents likelihood to engage in any informal contact. The study found, however, that those residents living near common areas with the more vegetation, reported more social activities, visitors, support and a sense of community, thus creating strong

neighborhood social ties, compared to residents living near barren areas covered in concrete or asphalt. The research demonstrated that the level of 'greenness' affected the use of the area for informal social interaction. The study concluded that community greening projects have the potential for community organizing effects because creating and maintaining a greener common area not only brings together community members, but also requires their participation (Kuo et at., 1998).

In many cases it is this social aspect, which drives people to engage in community gardening in the first place (Glover, Parry, & Shinew, 2005a). In her book, *Patch of Eden*, Hynes (1996) highlights many of the social benefits of community gardening including hope, friendship, decreasing stress, and providing a safe community gathering space. Gardens also foster community pride through developing a sense of belonging to a place and a people, what Hynes calls "place attachment" (Hynes, 1996). The collective action of community gardening helps to develop a sense of shared responsibility (Payne & Fryman, 2001). Gardens have also show potential to bring together people of diverse backgrounds, improving race relations and bridging cultural, generational, and class differences (PHS, 2001).

The most widely emphasized aspect in the literature of the social contribution of community gardens is the development of social capital. Social capital is a measure of the value of relationships that can be with neighbors, other gardeners, institutions, government, business, organizations, and so on. Gardens, because of the potential to

bring people together and engage people in healthy interactions and dialogue, can act as a stimulant for social capital development (Payne & Fryman, 2001). Social capital plays an important role in community gardens, as for the case of many low-income and minority communities, the use of social capital is the only way to acquire the resources to create these gardens. These resources can be the actual materials needed for the garden, but can also be the knowledge and skills needed to grow a successful garden. Glover's study of St. Louis gardens (Glover, Parry, & Shinew,, 2005b), detailed the ways in which community members engaged in using social capital to acquire the resources needed for their gardens. Gardeners used friends and familiar networks, know as strong ties, but also branched outwards to utilize weak social ties to other social networks. These relationships were used not only to gain materials but also to recruit new members to the garden. Friends were in a sense told to bring other friends (Glover et al., 2005b). The most significant finding from Glover's study in St. Louis was the impact beyond the garden. In many contexts, the socializing between gardeners moved beyond the physical boundaries of the garden and spilled over into the everydayness of neighborhood life. The community built upon the relationships within the garden to gain resources for other non-related projects (Glover et al., 2005b).

Building Community Problem-Solving Skills

Because of the resources needed to run a garden, community gardens connect residents to non-profits, government officials, funders, and public

resources, while building the skills and knowledge to navigate these relationships (Brown & Jameton, 2000). A garden is also something that once established, can be continued by the community instead of an outside organization, thus fostering residential ownership, and is always changing, creating new and challenging opportunities to enhance and engage problem-solving skills. The results of a garden are more visible and realized sooner than the impacts of traditional community development strategies such as new housing or economic development, and can lead to community empowerment as participants see the fruits of their work (Payne & Fryman, 2001).

Fostering Political and Democratic Values

In case studies of community gardens in Philadelphia, Patricia Hynes demonstrated that community gardening can foster political and democratic values including increasing public involvement, self-governance, and altruistic behavior (Hynes, 1996). In his studies of community gardens in St. Louis, Glover (2005a), examined the democratic effects of gardening and has found that gardens can create a space for leadership development and political empowerment (Glover et al., 2005a). Glover says community gardens can promote local control and serve as pathways for active citizen participation (Glover, Parry, & Shinew, 2005b). According to a report featured in a Philadelphia Green periodical, Urban Impact (2001), gardens help communities “regain a

sense of purpose, empowering residents to engage municipal agencies in local concerns" (PHS, 2001, para. 9).

This political transformation can be seen through the Riverside Community Garden in Toronto, Canada. The garden was built on land adjacent to the Riverside Apartments that were owned by a large building-management company. The garden has been a pathway for the residents to engage in the transformation of the space surrounding their apartments. The gardeners have since become part of a strong and vocal residents committee, and have used the garden as a way to advocate for their community and challenge the traditional social and economic power relationships within the property management's structure (Baker, 2004). Lauren Baker, who studied these gardens in Toronto, said that as a result of engaging in the gardening process "their role as citizens is transformed" (Baker, 2004).

History of the Environmental Justice Movement

Similar to the community garden movement of today, the Environmental Justice movement also owes its roots in the civil rights struggle. The movement started in the 1980's and advocates the right to a safe, healthy, and productive living environment, regardless of race, ethnicity or socioeconomic level. This movement arose because of the evidence of unequal concentration of environmental degradation in poor and minority communities, unequal distribution of benefits and wastes from polluting industries, and the poor or biased decision

making on environmental issues, which excludes the voice of those most affected. The effects of these environmental inequalities has led to serious health risks, in areas which are already heavily burdened with economic instability, crime, poor education, and little or no access to health care. The Environmental Justice movement, in contrast to traditional American environmental movement, is more focused on the protection of public health, and organizing a grassroots movement at the state and local levels rather than winning legislative battles (Gibbs, 2002).

Launched onto the national stage in 1983, the Environmental Justice Movement began when the residents of the predominantly African-American rural county of Warren, North Carolina protested the siting of a PCB (Poly-Chlorinated Bi-phenyl) landfill in the already heavily environmentally burdened community. The 500 arrests that followed the protests sparked a series of national studies including a study by the U.S. General Accounting Office and the Commission on Racial Justice. Both studies found that commercial hazardous waste landfills were predominately located in African-American communities (Bullard, 2000).

The single most influential event in the Environmental Justice Movement's history occurred in 1991 during a four day summit in Washington D.C. The First National People of Color Environmental Leadership Summit brought together leaders from across North and South America and pushed the Environmental Justice movement beyond its anti-toxics focus. The grassroots movement became multiracial and broadened its scope to include public health, occupational safety,

transportation access, land-use practices, resource allocation, housing, and community empowerment. Delegates at the summit adopted 17 “Principles of Environmental Justice” as a guide to grassroots organizations. The announcement of these principles and the growing concerns of the public and scientist pushed President Clinton to sign Executive Order 12898, “Federal Actions to Address Environmental Justice in Minority Populations and Low-income Populations.” This order became more commonly known as NIMBY (Not in My Backyard) and reinforced the Civil Rights Act of 1964 and the National Environmental Policy Act (NEPA) (Bullard, 2000). Other major accomplishments of the Environmental Justice movement include Superfund Legislation, recycling as a household norm, Right to Know Legislation that gives communities and workers the right to know what chemicals are being used, and closure of over 1,000 hazardous waste landfills (Gibbs, 2002).

A Shift Towards Addressing Everyday Environmental Justice

Today environmental justice more broadly concerns the lack of resources allocated to low-income and minority communities to confront urban environmental risks such as lead in household paint and drinking water, poor air quality, environmental induced asthma, deteriorating housing, limited access to health services, lack of safe and attractive open space (Kass 1999), crime, and food security. For example, lack of safe and accessible green space has been

demonstrated as a direct issue of justice. Reasons for inequitable distribution of parks and recreation in urban areas include racially discriminatory zoning laws, urban renewal, and the relocation of communities because of redevelopment (Schukoske, 2000). This shift is strengthened by the roots of the environmental justice movement in community-based activism, which has traditionally worked on social and economic justice issues such as fair housing, access to jobs, schools, and so on. Although this has not been thought of as being environmental per se, because of the intricacies of our environment and society, these community activism groups have shifted some of their focus to Environmental Justice issues such as Brownfield clean up, lead poisoning, clean air, and childhood asthma (Montague, 2003).

An example of this multi-dimensional environmental injustice can be see in the planning of New York City's park system, where out of 255 playgrounds built by master city planner Robert Moses during the 1930's, only one was built in the pre-dominantly African-American neighborhood of Harlem. Because of this the majority of the children in Harlem were forced to play in the streets and vacant lots, which are filled with broken glass, rusty cans, and other forms of trash. According to a biography by Robert Carro (as cited in Hynes, 1996), Moses deliberately located new parks away from low-income and minority neighborhoods and provided little accessible transportation to these parks. Moses also intentionally drew the line for improvements to the Riverside Park, along Manhattan's west side, at 125th Street, the southern border of Harlem, which has since been dubbed the "Mason-Dixon" line of New York City. Examining more recent history of

New York City parkland, a study revealed that as median income decreases and the percent minority increases, and the amount of parkland decreases. Of the new parkland created during the 1980's, 95% of 530 acres went to wealthier white communities (Hynes, 1996). Since then the New York City Parks Department has spent a significant amount of money towards restoring parks such as Fort Tyron in Northern Manhattan and Central Park but has ignored Marcus Garvey Park in Harlem. The conditions around the neighborhood and the park deteriorated so much that the police refused to patrol it (Hynes, 1996). The legacy of planning practices has thus isolated the largely low-income and minority populations of Harlem in an unhealthy and unsafe living environment.

Working today to redress this legacy in Harlem is a collaborative initiative Go Green East Harlem! Partners in the collaboration include community organizations such as WE ACT (West Harlem Environmental Action, Inc.), hospitals, and public officials. The coalition is addressing six environmental justice issues, one of which is parks and open space. A working group focused on parks and open space is working to obtain city funding to plant more trees in the community (West Harlem Environmental Action, Inc [WE ACT], 2008).

Community Gardens: Addressing Food Justice

One particular way in which community gardens can address everyday environmental justice is through the issue of food security. A recent study in the American Journal of Health Education demonstrates a link between poverty, fruit and

vegetable intake, and childhood obesity. The study surveyed households in multiple metropolitan areas, ranging from low to high poverty rates and found that 78% of the children studied ate less than the daily minimum fruit and vegetable recommended servings, and out of these children 37% were or at risk of being overweight. The study also revealed that those children who were in high poverty areas ate fewer servings of fruit and vegetables a day than those children in higher income areas as a result of having less accessibility to grocery stores and markets (Mushi-Brunt, Haire-Joshu, Eilliott, & Brownson, 2007).

Community gardens, by establishing a place where fruits and vegetables can be collectively grown, can provide the healthy foods needed for low-income urban areas where access to these foods is a concern, thus contributing to the food security of these communities. Local food production can provide some relief to food security issues caused by sub par grocery stores and markets in low-income and minority neighborhoods. These neighborhoods also usually lack sufficient transportation to travel to better grocery stores, thus limiting their choices (Schukoske, 2000). Gardens can also provide opportunities to engage in informal nutritional education (Payne & Fryman, 2001).

Community gardens have existed in urban neighborhoods for hundreds of years, responding to the many changing social demands of our built environments. The coming together in the community created space of a garden not only fosters a sense of community but also builds capacity and develops democratic values. As the

environmental justice movement has shifted to addressing the everyday environmental stressors of living in urban areas, community gardens can play a role in addressing these issues, specifically by increasing neighborhood food security.

THEORECTICAL FRAMEWORK

Community Organizing or Community Building?

The purpose of this paper is to look at community gardens as an organizing tool for environmental justice, testing the hypothesis that community gardens act as the 'free spaces' through which the transformative politics of environmental justice take place. The premise of these 'free spaces' is the realization that the power-relationships in environmental decision-making systems are contestable (Cole & Foster, 2001), requiring a process, which challenges the existing systems, such as community organizing. As illustrated in the background, however, gardens may contain elements of community building, a very different strategy towards achieving social change, that focuses on facilitating capacity and relationships within the community, instead of confronting outside power-dynamics. It is therefore important to define the difference between community organizing and community building. Both can lead to improving community conditions through engaging in problem solving, and include common values such as empowerment and participation, but come from very different perspectives.

Community Building

Community building is strengths-based, meaning that it emphasizes the community's assets and resources, placing the community at the center (Minkler &

Wallerstein, 2005). It is a process in which the "people in a community engage in themselves", (Minkler & Wallerstein, 2005, p. 28) and recognizes the community as diverse, multidimensional, inclusive, and complex (Walter, 2005). Community building also works to create opportunities to build relationships and social ties, allowing for the identification of shared interests between residents and organizations (DeFilippis & Saegert, 2008), and works to address multiple aspects of the community in a holistic fashion (Gittell & Vidal, 1998). The goal of this process is to build community capacity of the entire system and all of its participants to operate as a community (Walter, 2005).

Community Organizing

Community organizing, on the other hand, is power-based and "understood broadly as the restructuring of political, economic, and social relationships to permit disinvested neighborhoods to produce a high quality of life for residents" (Gittell & Vidal, 1998, p. 50). It is a struggle for political empowerment and has traditionally been seen as confrontational, challenging systematic discrimination and disinvestment (Gittell & Vidal, 1998). It is a process through which common interests and goals are identified, and the community is mobilized into collective action, engaging in collectively determined strategies, which aim to change the balance of power in the community (DeFilippis & Saegert, 2008). The overarching goal of community organizing is to confront power dynamics and change the

system. It is important, that while an outsider to the community can work as an organizer, the interests, goals, and strategies be determined by the community members, for those who do this will gain more success and be able to engage in more authentic social change with a real sense of community ownership (Minkler & Wallerstein, 2005).

Organizing to Save Gardens in New York City

An example of community gardeners engaging in community organizing can be seen in New York City during the 1990's when 115 gardens were threatened to be sold at auction. Similar to the national trends, many relief and Victory gardens existed in the city, but in the 1970's the community gardening movement in New York City began to respond to the social unrest seen throughout the city. The movement started at the grassroots level as citizen groups took on the initiative to create the gardens, many times without permission. Grassroots organizations such as the Green Guerrillas threw seed-filled water balloons over fences around vacant lots and then lobbied to turn them into community gardens. By 1985 there were more than 1,000 gardens in New York City (Smith & Kurtz, 2003). In 1978 the city responded and formed a program that granted leases for land on which to grow community gardens. The city however intended for these gardens to be only temporary until a more economically productive use of the land was found. Provisions were written into the leases of the land, that gave the city the right

to evict the gardeners at any time as long as there was 30 days notice (Smith & Kurtz, 2003).

In December of 1998 the city of New York announced that 115 community gardens were to be auctioned off in Mid-May of the following year (Kass & McCarroll, 1999). Massive garden coalitions formed which united individual gardeners and garden advocates across the city (Smith & Kurtz, 2003). Thus, the campaign to save the gardens from the auction moved beyond each individual garden, as both neighborhood and citywide groups engaged in advocating for the gardens. These groups questioned the city's emphasis on the monetary value of the gardens, which the city was pushing through its agenda (Smith & Kurtz, 2003).

These citywide garden coalitions were able to organize effective and cohesive local coalitions, which were linked to the citywide struggle. The groups held public demonstrations to bring the issues about the garden into the open. They engaged in media coverage and held civil disobedience demonstrations at City Hall, where 31 protestors were arrested. The groups also took advantage of using the Internet to broaden their scope and lobbied political representatives at the state and local level (Smith & Kurtz, 2003). Along with the demonstrations, media, and political pressure, four lawsuits were filed, two in the New York State Supreme court and two in the US District court, to challenge the legality of the auction (Kass & McCarroll, 1999). A judge unfortunately denied the lawsuits, but the garden coalitions were able to temporarily delay the auction, giving them time to make last minute deals to sell

the gardens to two public land trusts ultimately saving the gardens (Smith & Kurtz, 2003).

The coalitions were key in bringing together gardens, which were fragmented across the five boroughs and built on the strength of the sense of community forged within the place specific context of the gardens. The political struggles endured by the gardens in New York City transcended the space specificity of the gardens themselves bringing them together in a cohesive counter-campaign (Smith & Kurtz, 2003), and demonstrating an effective use of community organizing.

This example in New York City relates to the overall framework of this study because it shows how community gardening led to a successful community organizing campaign, using tactics such as public demonstrations, involving the media, and coalition-building. The gardens in New York City confronted the city's power to take back ownerships of the land. The empirical research in this study, aims to examine if the organizing seen in New York City can be translated into challenging the everyday environmental stressors experienced in neighborhoods of Philadelphia.

METHODOLOGY

Research Design

The methods used in exploring the aforementioned hypothesis, that community gardens function as 'free space' through which the transformative politics of environmental justice organizing can occur, include the examination of four case studies of community gardens in the city of Philadelphia. Based on the theoretical framework, the research was designed to capture two overarching questions about the gardens. First being what environmental justice issues or concerns have the gardeners become aware of since becoming participants in the community gardens? Secondly, what actions have the gardens collectively engaged in response to these identified issues. The findings of what these gardens are doing about environmental justice related issues were then used to determine if the garden was engaging in community organizing, community building, or a general garden improvement strategy (see attachment 1).

Each case study also included an inquiry into the neighborhood characteristics, history of the land and garden, structure or level of organization, the status of land ownership, relationships with the broader community, environmental justice concerns relating to the garden, and specific actions the gardeners were engaged in. These elements, along with the viewpoints of gardeners in these gardens, were used to frame a practical perspective to address

the overarching hypothesis of this research, and to understand what factors lead a garden to organizing, community building, or a garden improvement strategy.

Sample Pool

The sample pool in this research were the coordinators of 43 different community gardens, which are part of City Harvest, a program in collaboration between the Pennsylvania Horticultural Society (PHS), the Philadelphia Prison System, SHARE (a food distribution network), and the Health Promotion Council of Southeastern Pennsylvania. Through this program, prison inmates and volunteers grow fruits and vegetables at the community gardens, which is in turn donated to local food cupboards to assist those who lack access to fresh produce (PHS, 2009). These particular gardens were included in the research for two main reasons, first being that Philadelphia Green, part of the PHS, who assisted in the distribution of the surveys, has a well-established working relationship with these gardens. Secondly, participation in a program such as City Harvest, also provided for a baseline level of organization deemed necessary to engage in community building and organizing. The four community gardens to be included as case studies for this research were picked from those who first returned the survey and were available for interviews.

Procedures

The 43 garden coordinators were each sent a survey with the help of Philadelphia Green. Each survey packet included the survey (see attachment 2), a self-addressed stamped envelope as a way to return the survey, and a form on which to indicate whether he or she would be willing and available to participate in a future interview session. Once the surveys were returned by mail, four garden coordinators were chosen, based on availability and the time and resource limitations of the research, to participate in a follow-up interviews. While the amount of follow-up interviews and who was chosen were limited by time and resources, choosing gardens based on content from the surveys would have allowed for a more systematic approach to gaining a variety of subjects for the case studies.

The surveys functioned as a guide for the follow-up interviews, which took about an hour. The questions were designed to capture more detail on the questions asked on the survey, and to gain a background on the gardens' structure, formation, and relationship with the broader community. The interviews were audio recorded, and then transcribed for analysis. If time and resources had permitted, it would have been useful to interview members of the community gardeners beyond the coordinators, so as to examine the extent to which were involved in environmental justice related activities. The findings acquired from the interviews was then supplemented with information from mostly local Philadelphia

news papers, magazines, and online sources, including if available the particular gardens website, or if a incorporated nonprofit, their annual report.

FINDINGS

The following are the results of four case studies from four different gardens in Philadelphia. Each case study contains the following elements: a community profile, history of the land, history and structure of the garden, ownership of the land, relationship with the broader community (including internal and external networks), funding, key environmental justice concerns, key actions, and perspectives on environmental justice organizing and community building.

The first garden is Duffield Farms located in West Philadelphia. The second, Merion Gardens, comes from the Germantown section, followed by the Ashwood Gardens located in the Squirrel Hill/Cedar Park neighborhood, also in West Philadelphia. Lastly, the Sourin Street Community Garden is located in the Southwest Philadelphia neighborhood of Kinsessing.

Duffield Farms

Community Profile

Duffield Farms is located on one and a half acres in West Philadelphia. According to the 2000 U.S. Census, 97.5% of the residents of the census tract including the Duffield Farms neighborhood were African-American (U.S. Census

Bureau, 2000a). The median household income was listed at $21,772, and 35.7% of the community lived below the poverty level (U.S. Census Bureau, 2000b).

History of the Land

The land is currently home to the Duffield Farms, which supplies produce to a nonprofit (Annual Report, 2006). Underneath the land runs the creek, which was enclosed and buried in a sewer during the 1880's. The surrounding floodplain was filled in and built upon, but this created unstable land, and subsequently led to the demolition of the previously existing row homes. The sewer, which formally was the creek, still drains storm and wastewater from half of West Philadelphia and the suburbs upstream. As new development has occurred in the outlying suburbs, the flow of wastewater has increased beyond the capacity of the sewer pipe, causing some water to leak between cracks and bubble up through manhole covers (Spirin, 2005).

Since the buildings were torn down a portion of the land was fenced off for a community garden about 30 years ago. The other section laid vacant until the Philadelphia City Water Department gained control and wanted to include the land in a storm water management project. Some of the proposals for this project would have displaced the existing community gardeners, so the cofounders of Duffield Farms wrote a proposal to save the garden and use the other part of the vacant land as a farm that would grow affordable produce for the neighborhood as

well as manage the storm water run-off (personal communication, October 11, 2008).

History and Structure of the Garden

Duffield Farms is now in its third season, growing over 50 different varieties of fruits, vegetables and herbs (Brubaker, 2007). The farm has only two paid staff members, and thus relies mostly on volunteers. When the cofounders began the farm, they had the soil tested for heavy metals, and continually work with the Penn State Cooperative Extension to monitor their soil quality (Tremble, 2008).

Along with the farm, 50 residents from all ages volunteered to build a shed out of cob, a sustainable material made out of a mixture of sand, clay and straw (online source, 2006), which includes a living roof that partly fulfills the Water Department's original goal of storm water management, (Smith, 2006) by limiting the surface area run-off. They also have a composting toilet, and are working towards a gray water system, which will irrigate the farm (Tremble, 2008). Several hundred volunteers from the community, local high schools and colleges help each year with various activities on the farm (Annual Report, 2006).

Ownership of the Land

Currently neither Duffield Farms nor the neighboring community gardeners have ownership of the land. The city of Philadelphia owns the land and leases to the Philadelphia Water Department, which has granted Duffield Farms and the community gardeners' access to its use (personal communication, October 11, 2008), through a 99-year lease (Tremble, 2008). Within the city, the Redevelopment Authority is the entity that actually owns the land, and oversees the Philadelphia Housing Authority, which has expressed interest in building housing on the land. Duffield Farms is attempting to get the title of the land transferred from the redevelopment authority to the Neighborhood Gardens Association (NGA), a land trust that would permanently protect the land as open space or a community garden dedicated to growing food. The process of getting into the land trust has been a political battle because the councilwoman who represents the Duffield Farms neighborhood and whose support is needed for the title transfer is the chair of the Committee on Housing, Neighborhood Development the Homeless (City of Philadelphia, n. d.), creating a possible conflict of interest. The cofounders are currently working to organize the community so as to show their councilwoman that the garden has support and is important to the development of the neighborhood because of its food production, contribution to education, and storm water management. They have invested time, money, and labor into developing the soil at the farm, and also do want to see the community

gardeners, of 30 years, displaced (personal communication, October 11, 2008).

The cofounders view that the garden is important to the neighborhood because:

> If you look at it from a community development perspective, housing is really important but there are other places housing can happen and the force that this [garden] has been in the community for education and food production and storm water management, and all kinds of things, from a planning perspective it makes total sense to have it here. (personal communication, October 11, 2008)

On the website for Duffield Farms, the cofounders have also posted an action alert about the threat of losing their garden, and a call for support to transfer the ownership to the NGA. Included is the following sample text:

> I am writing to express my support of the [name removed] Farm in West Philadelphia. The project is an important resource for healthy food as well as education in the community. I understand that there is an effort under way to preserve the land that the [name removed] Farm maintains as well as the adjacent community garden as open space for food production and storm water management through the Neighborhood Gardens Association. I hope that you will help support their important work by supporting the transfer of the title from the City to the land trust. (online source, 2007)[2]

Also provided on the website is the address to Councilwoman Blackwell's office and a link to easily post letters of support online (online source, 2007).

[2] Name of source removed for confidentiality purposes

Relationship with the Broader Community

Internal Networks

Duffield Farms shares land with a 30 year-old community garden, which is made up of mostly older residents from the neighborhood. They are loosely organized, paying no dues, and everyone generally contributes in whichever manner they are able to. The garden consists of a social atmosphere and lifestyle and generally the gardeners grow food for their families, friends, and neighbors. Duffield Farms and the community gardeners have a mutually beneficial relationship sharing seeds, seedlings, and stories. The farm provides visibility to attract new gardeners from the community, has assisted in getting a new fence and waterline, and has helped the community gardeners become more open to youth in the garden. One of the cofounders of Duffield Farms noted that in reference to the community gardeners, "now that they see kids here with us, they can see that we are teaching [the youth] how to be here responsibly, and they are a lot more open it" (personal communication, October 11, 2008). The gardeners on the other hand have helped Duffield Farms organize neighborhood events such as a community Bar-ba-que (personal communication, October 11, 2008).

There is a rich tradition of gardening in the neighborhood, including not only the community garden at Duffield Farms, but also many others that have been around for decades, such as Aspen Farms, which was started in 1975 (West

Philadelphia Landscape Project, 2000). When the cofounders began Duffield Farms, the reception by the community was very welcoming, because they were not introducing “something really foreign” (personal communication, October 11, 2008). According to the cofounders, the informal feedback from the community has been positive towards the farm. Many residents have gotten excited about getting a plot in the community garden, while neighborhood youth enjoy visiting the farm. In general one of the confounders noted that community members are “glad it’s not a vacant lot, and that someone is taking care of it” (personal communication, October 11, 2008). Residents have supported the farm with materials such as umbrellas and tables, and neighbors directly across the street are generally watchful of the garden, and as a result there has been very little vandalism or theft (personal communication, October 11, 2008).

Duffield Farms has also collaborated with community-based organizations to further its mission, such as a recreation center, just a few blocks from the farm, which runs youth programs and also runs a small garden. Many youth from the Recreation Center visit the farm after-school, and representatives from the farm are invited to community fairs held at the center (personal communication, October 11, 2008).

External Networks

Outside of the neighborhood, Duffield Farms has worked with an organization called the Urban Tree Connection, located in the nearby Haddington neighborhood. This organization also works with youth in cleaning up and transforming vacant lots into parks, while incorporating art. Urban Tree Connection and Duffield Farms have talked about collaborating more in the future. Currently they bring some of their youth to the farmers' market to see first hand a harvest (personal communication, October 11, 2008). They have also worked with University of Pennsylvania's Netter Center for Community Partnerships' Urban Nutrition Initiative. This runs outreach programs to Philadelphia high schools and education on urban agriculture (Wang, 2008).

The cofounders have also helped to form the Philadelphia Urban Farmer's Network. This is a network for people to get information about farming in the city or finding a job in this line of work, and has connected people doing urban agriculture from all over the city. Originally the network met in-person once a month, but it has now evolved into an online resource with a list-serve. The network has helped people get services or materials related to urban farming, and is intended primarily for farming instead of gardening, defining farming as being associated with some sort of economic activity (personal communication, October 11, 2008).

Funding

Duffield Farms receives funding from a variety of sources. The farm was started with a $50,000 grant from the state's Growing Greener program (Smith, 2006). They sell wholesale crops to local food co-ops (Wang, 2008), and receive educational grants, private donations (Digiacomo, 2008), in-kind support from local organizations (Annual Report, 2006), and hold an annual benefit party (online source, 2007).

Key Environmental Justice Concerns –

Access to Fresh and Organic Foods

The cofounders of Duffield Farms are concerned about access to fresh foods and pesticide and chemical use (personal communication, October 11, 2008). In some neighborhoods of West Philadelphia, supermarkets are not be accessible to residents, and corner stores in the neighborhoods do not usually provide fresh or nutritious food options. High prices and few options of local or organic foods discourage vegetable consumption (Annual Report, 2006). The few opportunities to buy food in the immediate neighborhood include a corner store, a town market, a produce truck, a farmer's market, and a farm stand newly started at the Duffield Farms. Overall it is difficult to get good quality, affordable or healthy food in the community (personal communication, October 11, 2008).

According to the cofounders, there are also high rates of diabetes and heart disease in the neighborhood, a population whose nutritional needs are critical. There is also a stigma that organic food expensive and sold only at high-end grocery stores (personal communication, October 11, 2008). One of the cofounders stated that she considers this an "environmental or food justice issue, that people can't get fresh food or good quality food, or affordable food, or healthy food, in an area that's lower income, primarily African-American, where there are higher rates of diabetes and heart disease" (personal communication, October 11, 2008). The farm has been started to improve access for the residents in the community to healthy and fresh produce and to educate about urban agriculture (Wang, 2008).

Key Actions –

Improving Community Food Security

To improve food security in the neighborhood, the cofounders are creating a model of how vacant urban land can be transformed through urban agriculture to contribute positively to the local community, and make regular donations from part of their harvest to local food shelters (Annual Report, 2006). They have also opened a farm stand, which is located at the farm, where their organically grown produce is sold at an affordable price. They have engaged in some outreach

related to the farm stand, but most of the residents in the neighborhood become aware of the stand through word of mouth. Each season they adjust to the demand of the neighborhood as to what types and how much of the vegetables are grown and sold at the stand (personal communication, October 11, 2008).

Education

The cofounders of Duffield Farms are also working hard to educate the community about urban agriculture, nutrition, and food security issues. They host groups to the farm, including school groups especially those from the local public schools, graduate and professional groups, and youth groups during the summer. Groups take a tour, taste some foods, and learn about plant to food connections. Groups come from all over the city, but the cofounders try to focus on groups from the neighborhood, especially since many schools in the community cannot afford transportation for field trips. The farm provides for a cheaper alternative since many schools are with in walking distance (personal communication, October 11, 2008). During their first growing season, twenty school and youth groups visited the farm (Brubaker, 2007). Duffield Farms also is host to interns from the local high schools. Youth work 20 hours a week for six weeks on the farm. Other youth from the neighborhood also come by and help out after school and on the weekends (personal communication, October 11, 2008). One of the cofounders said that the field trips have been useful in attracting more youth to the farm “because they

have gotten a little glimpse of what we do here through a field trip it gives the sort of a level of comfort for them to come back" (personal communication, October 11, 2008).

Lastly, Duffield Farms also holds public workshops. While building the tool shed they held a workshop on cob buildings, and they also held a workshop where participants learned about what common weeds are edible or can be used for medicinal purposes. A guest from Texas held a workshop at the farm on urban sustainability, and discussed rainwater catchments and solar cookers. In the future, the cofounders would like to offer additional workshops including ones on nutrition, cooking, and preserving food through such methods such as canning. They do not have access to a kitchen at the moment but are working on using a kitchen at a local church. They plan to do surveys of community members to get a better idea of the kind of workshops the residents would like to see offered at the farm (personal communication, October 11, 2008).

Perspectives on Environmental Justice Organizing and Community Building

When asked about the potential for community gardens to be used as an environmental justice organizing tool, one of the cofounders stated that it varies from garden to garden, noting that more structurally organized gardens, such as the nearby Aspen Farms where there is a more cohesive group working together, would be in a better position to mobilize against a threat that comes into the

neighborhood. On the other hand, she noted that even loosely organized gardens, such as the one which Duffield Farms shares its land, can have a significant impact in the community by contributing to the local food security in a way that isn't captured economically. To her this is an important contribution that community gardens bring to the neighborhoods, and there can "be a lot of force coming out of people coming together" (personal communication, October 11, 2008).

Merion Gardens

Community Profile

Merion Gardens is located in the Germantown neighborhood of Philadelphia. Similar to Duffield Farms, the neighborhood is predominantly made up of low-income, African-American residents. According to the 2000 U.S. Census, 84.3% of the residents of the census tract including Merion Gardens were African-American (U.S. Census Bureau, 2000a). The median household income was listed at $26,569, and 29.6% of the community lived below the poverty level (U.S. Census Bureau, 2000b).

History of the Land

The garden began as a corner plot in the 1980's with the help of a federal grant. The city demolished a house on the lot next door, which fell on top the garden, destroying it and the surrounding fence. Around 2002, activists in the neighborhood asked the city to reclaim the land to use as a new community garden. With help from the Pennsylvania Horticultural Society, a new garden was created in 2002 and shortly after was incorporated as Merion Gardens, a 501c3 nonprofit with a board of directors (personal communication, October 25, 2008).

History and Structure of the Garden

The board is made up of about half of the garden members, and performs the majority of the garden business. Members pay fifteen dollars a years in dues to participate in the garden. Originally each gardener was required to participate in at least one committee and commit a minimum of three hours a month to the garden beyond taking care of his or her individual plot. Recently the board has offered a new membership option, designated a supporting membership, for those who may not have the time to devote to working in the garden over and above their own plot. Through a supporting membership, gardeners can help in other ways, which suit their specific skills such as teaching or fundraising. The board offered this alternative in hopes that this option will allow for more possibilities of growth. The majority of the gardeners live with in the surrounding neighborhood; however, there are a few outliers. Members range from all ages, including children and the elderly, and come from a variety of ethnic and racial backgrounds. While overall many of the gardeners are community activists and highly educated, everyone is welcome to join as a member (personal communication, October 25, 2008).

Ownership of the Land

The land on which the garden is located is not completely owned by Merion Gardens. The garden covers two lots, the inner plot which was purchased by

Merion Gardens for $25,000 through a sheriff's sale, and the corner lot, which was promised to Merion Gardens by the city sometime in the future; however, the city has unfortunately changed its policy and is not giving any land to anyone who is not building low-income housing. Merion Gardens is now trying to negotiate a lease for the land from the city for a dollar a year, but with a lease they would not be allowed to build anything on the land, including their future plans of a office and classroom facility. The board president is concerned because other gardens have been sold or given away by their council representative, and therefore is looking at the possible option of buying the lot at fair market value (personal communication, October 25, 2008).

Relationship with Broader Community

Internal Networks

According to the board president people in the community feel that the garden is a good addition to their lives, describing how "people generally enjoy the beauty of the garden, you know especially in comparison to what used to be there. People really feel that it's a good thing in their lives" (personal communication, October 25, 2008). Many residents walk by the garden on their way to school or the local shopping district, engaging in conversations with the gardeners and enjoying the beauty of the garden, especially in contrast to the debris filled lot,

which previously existed. “I find just people walking by the garden are just like ‘Whoa! That is great! You really grow tomatoes? Can I have one?” (personal communication, October 25, 2008) said the president about those who pass by the garden. Business owners on Wayne Avenue are also happy with the garden’s presence. In reference to the effects of the garden on the broader community, the president noted:

> So I would say, are we affecting hundreds and hundreds of people? More like maybe a few hundred. You know its almost serendipity because a lot of people in our garden, most of us I think, are actually pretty sociable. We like talking to people. We like talking to people about the garden. So if you are in the garden a lot of times people stop. They ask questions and they say wow this is really great. (personal communication, October 25, 2008)

Merion Gardens also collaborates with a variety of community programs and organizations. Along a 4-H club, Merion Gardens has worked with the science classes at the John B. Kelly School, from which students visit the garden to plant some seedlings. Unfortunately the school does not have a science teacher anymore, but some classes still visit the garden, although not at the level seen in previous years (personal communication, October 25, 2008).

External Networks

Merion Gardens has worked with a land trust, which has been helpful in providing information and assisting the board members in navigating the politics of community gardening in the city. Merion Gardens was connected to the trust

through one of the original founders in the 1980's, and is now head of the organization. Merion Gardens has also collaborated with other organizations including, the Environmental Leadership Program, where one of their members used the garden as part of their study, and the Senior Environment Corp. a group which picnics in the garden once a year (personal communication, October 25, 2008). Other supporters and partners of the garden include, The Pennsylvania Horticultural Society, Philadelphia Green, Citizen's Bank, State Senator Shirley Kitchen of the 3rd District, Councilwoman Donna Reed Miller, 8th District, Enon Tabernacle Baptist Church, and Germantown Jewish Children's Folkshul (online source, n. d.)[3].

Funding

The funding for these programs, as well as other garden activities comes from mostly flea markets, held one Saturday of each month, where many different items are sold to raise money, including lunches and plants. They have also received a few grants, the biggest one being around five thousand dollars, and the board president has expressed interest in applying to foundations for more funding. They have also had a silent auction, and send out an annual fundraising letter soliciting donations (personal communication, October 25, 2008).

[3] Name of source removed for purposes of confidentiality

Key Environmental Justice Concerns –

Conditions of the neighborhood

According to the current board president, the original six founding members saw the neighborhood strewn full of debris, drug dealing and pimps, and envisioned that the community garden could have a role in ameliorating the existing conditions of the neighborhood (personal communication, October 25, 2008).

Access Fresh Foods

The second major issue of focus is access to fresh foods. According to the board president many of the gardeners are concerned about organic gardening and are aware of the health benefits associated with organic and fresh produce. She stated, "just the idea of having access to fresh foods is an important thing in peoples lives and people are really aware of the health benefits and trying to help other people who may not have ever had this before," (personal communication, October 25, 2008). She also noted that the gardeners are concerned about ensuring that the next generation can experience the process of growing their own food, and that everyone has access to and is educated about proper nutrition (personal communication, October 25, 2008).

Key Actions -

Environmental Education

The original founders had aspirations that environmental education through the garden would help develop a sense of community and benefit the neighborhood. The president said the "vision was that it would be … educational… not just growing food and flowers" (personal communication, October 25, 2008). The mission statement for Merion Gardens, adopted by the board of directors in 2002 states their goals are to, "promote awareness and appreciation of the natural world and engender the values and attitudes among people that foster responsible stewardship of our urban environment," (online source, n. d.).

Collaborating with Local Schools

To accomplish their mission, the members of Merion Gardens engage in a variety of activities. They have formed 4-H clubs at two of the local elementary schools. The club at the John B. Kelly School received a hydroponics system through the Penn State Extension Service, which they used to grow seedlings at the school and then transplanted them into Merion Gardens (personal communication, October 25, 2008). The club meets at the garden in the spring and the fall and at the school during the winter. In 2007 there were fifteen members in the club (Penn State Cooperative Extension [PSCE], 2007). The

second 4-H is located at the St. Francis School, where youth grow and take plants home. According to the board president, the students are excited about being apart of this group (personal communication, October 25, 2008).

A Community Health Fair

Merion Gardens has also hosted a community health fair open to residents from the neighborhood, intended to focus on many different levels of wellness. The garden gained permission from the city to block off a few blocks of the street where venders and exhibitors were featured, while inside the garden were demonstrations. The fair offered health screenings and agencies such as the Philadelphia Corporation for the Aging, and AIDS awareness program, and a program that brings therapeutic animals to the elderly and the ill. The gardeners also sold fresh produce form their garden and other local farms, as well as homemade soups. There were demonstrations of tai chi and yoga. They also showed a video on women, health, and the environment about additives to personal care products. A nurse clinician demonstrated how to make peppermint foot lotion out of all vegetable products. There was also music, and African dancing and drumming. The president noted that the health fair was “a lot of different levels of wellness so it wasn’t just things like medical,” (personal communication, October 25, 2008).

Other activities

Merion Gardens also holds workshops, focused primarily on gardening, such as The Pennsylvania Horticultural Society's workshop on attracting birds to a garden. The board president has expressed interest in offering more workshops to the community. There have also held cooking demonstrations, where a nutritionist has visited the garden and created a small simple dish out of something grown out the garden, such as a beet and carrot salad, and those who attend could sample the dish. The nutritionist brought information to these demonstrations to help promote education about proper nutrition. The garden also participates in the City Harvest program, through which the board president estimates they donate a few hundred pounds of produce a year. Lastly, the garden is trying to keep their day to day business environmentally friendly, for example by purchasing paper or more 'green' options for events instead of plastic (personal communication, October 25, 2008).

Future Plans

In the future the garden plans to construct a building with offices, classrooms, a meeting space, and a greenhouse. They also would like to offer more environmental education programs including workshops, summer camps, and after-school programs and develop programs that will enrich the science education in the local schools. They would also like to increase the promotion of

recycling and litter control and work towards organizing the community around environmental issues that affect the neighborhood (online source, n. d.).

Perspectives on Environmental Justice Organizing and Community Building

When asked about the relationship between community gardens and environmental justice organizing, the board president noted that while there is a positive impact on the community, the garden is of "the most benefit to the people who are members" (personal communication, October 25, 2008). Those part of the community garden are still working on bringing about an awareness about the garden within the broader neighborhood, and that while it is a slow process, they still continue to work on outreach in the neighborhood about the garden and its purpose.

Ashwood Gardens

Community Profile

Ashwood Gardens is located n the Squirrel Hill/Cedar Park Neighborhoods of West Philadelphia. Compared to the neighborhoods surrounding Duffield Farms and Merion Gardens, the Squirrel Hill/Cedar Park area is more diverse, due to the close proximity to the University of Pennsylvania. According to the 2000 U.S. Census, 61.9% of the residents of the census tract including Ashwood Gardens were African-American, while 28.6% identified as white (U.S. Census Bureau, 2000a). The median household income was listed at $28,885, and 16.6% of the community lived below the poverty level (U.S. Census Bureau, 2000b).

History of the Land

Similar to the previous case studies this garden is also a land reclamation project. The land was previously an old apartment building that was deemed structurally unsafe. In 1984 the Squirrel Hill Community Association and the city worked together to demolish the 52-unit apartment building, and a year later eight residents of the neighborhood started to grow a small garden on the vacant lot, forming the beginnings of Ashwood Gardens (Neighborhood Gardens Association [NGA], 2009).

History and Structure of the Garden

Currently the garden has around 30 plots, and from season to season about 26 to 27 families participate, leaving three to four plots open during each growing season. It is a transient neighborhood, being close to the University of Pennsylvania, so people are frequently moving in and out. Most of the gardeners live within six blocks of the garden and have college degrees. According to one of the garden leaders the garden membership is:

> about maybe 75% white. We have a few African-American gardeners and a few Asian gardeners. Most of the people have been affiliated with UPenn or just been in the neighborhood for a really long time. I would say about half of the gardeners have been in the garden for at least ten years. There is sort of a flux of other gardeners who come and go, they go and then come back. (personal communication, October 25, 2008)

The garden is loosely organized, communicating mostly through a list serve. "Here we are a little bit more casual in our structure," said one of the garden leaders (personal communication, October 25, 2008). There originally were two garden coordinators, who would plan out what the garden was going to do from year to year, however, now most of the planning is done communally. The gardeners meet once a year, usually in February or March to plan for the year and invite new people as members of the garden. At these meetings they discuss what are the goals for the upcoming year, how their money will be spent, and what infrastructural changes will be made. They also make decisions on the important tasks, which need to be addressed every year, such as keeping the front and

pathways neat and coordinating workdays (personal communication, October 25, 2008).

Ownership of the Land

The garden is now part of the Neighborhood Gardens Association (NGA) land trust, which holds the land in perpetuity as a garden, and has been a part of the land trust for about 15 years. Despite this protection, buyers have still approached the land trust to purchase the property because of the rise in property values in the community (personal communication, October 25, 2008). NGA the same land trust which Duffield Farms is advocating becoming a part of, and is a nonprofit corporation. Its mission is to preserve community gardens and open space in Philadelphia. In 1986, the Pennsylvania Horticultural Society (PHS), the Penn State Urban Gardening Program (PSUGP), local businesses, and community gardeners created the nonprofit, as a method to protect gardens threatened by development (NGA, 2009).

Relationship with Broader Community

Internal Networks

At the garden there is a central gathering area (see Attachment 5: Garden Photographs) where some residents from the neighborhood come together for

picnics, parties, and other types of community gatherings (personal communication, October 25, 2008). The members of Ashwood Gardens have collaborated with Cedar Park Neighbors, a neighborhood association, previously the Squirrel Hill Community Association, which has since disbanded.

External Networks

Many gardeners have worked with a tree-planting project, which plants hundreds of trees throughout the city each year. Ashwood Gardens received some funding from the PHS to care for trees on their land, and as part of the requirements for this grant, volunteers from the gardens had to devote time to planting trees throughout the neighborhood. The garden has also worked with the Philadelphia Orchard Project to plant fruit trees along the back on the garden. One of the garden leaders has also found the American Community Gardening Association as a good reference and source of information to bring back to the other gardeners (personal communication, October 25, 2008). According to their website "The American Community Gardening Association (ACGA) is a bi-national nonprofit membership organization of professionals, volunteers and supporters of community greening in urban and rural communities" (American Community Gardening Association [ACGA], n. d., para. 2). Gardeners use the association's list serve and it provides for a sense of being part of a wider community of gardens across the nation (personal communication, October 25, 2008).

Funding

The garden is primarily funded through membership dues, which are twenty-five dollars a year. The Neighborhoods Gardens Association has helped with logistical and technical needs, such as obtaining a water connection. Overall the annual bills to run and maintain the garden are minimal, with the water bill running at only about $80 a year (personal communication, October 25, 2008).

Key Environmental Justice Concerns –

Lead and other toxins in the soil

One of the garden leaders discussed four main concerns about community gardening, which has arisen since becoming involved in the garden. The first was lead and other toxins in the soil, specifically related to the previous use of the land as an apartment building with lead paint. While the garden's soil has tested negative for lead, it is still written into their agreement with the Neighborhood Garden's Association to use lime to prevent lead from leeching up into the top layers of the soil. As an added precaution, gardeners also use raised beds, and import their own compost. There are also concerns about particulates from street traffic contaminating the soil, which has influenced the gardeners to set the vegetable garden back about 100 feet from the street (personal communication, October 25, 2008).

Access Fresh Foods

The second concern was access to fresh foods. One of the garden leaders noted that for many of the gardeners at Ashwood Gardens this was one of the primary motivations for people to participate in the garden. "To grow fresh tomatoes, for things that taste better, or things that you don't get organic" (personal communication, October 25, 2008), she commented. The garden allows members to grow foods that are not normally found organically grown in the local grocery stores. The garden also allows for members to grow a variety of herbs, which tend to be expensive to find fresh in the stores (personal communication, October 25, 2008).

Threats from Development

Another concern was the threat of development to community gardens and the need for land trusts to protect gardens. While Ashwood Gardens is already in a land trust, one of the garden leaders was aware of other gardens, which had been lost to development, especially when property values rose making the land more attractive for other uses. "You see that a lot in New York," she said, "where you see a lot of very established gardens, some vegetable gardens, some beautiful flower gardens, are sold away. You even see that in Philadelphia," (personal communication, October 25, 2008).

Vandalism

Lastly, vandalism has been a concern for the garden. Despite what one of the garden leaders has said is an overall positive feeling about the garden from the community, and many community groups hold events in the garden, the garden has experience some damage from a few neighborhoods. In particular there has been some damage done to bushes and trees in the front of the garden (personal communication, October 25, 2008).

Key Actions

According to one of the garden leaders many of the gardeners discuss with each other, friends, and family about environmental issues, such as recycling and energy use. In fact, many of the gardeners are now putting solar panels on their roofs. Another topic of discussion is organic gardening, specifically due to the bylaws with the land trust, in which it is written that the gardeners cannot use pesticides or herbicides. Besides influencing their topics of conversations, one of the garden leader's choice for Mayor of Philadelphia was influenced by her concerns for the environment at a panel discussion she attended at the Pennsylvania Horticultural Society. "When I went to a panel at the horticultural society," she said, "with all of the mayoral candidates, and he [Mayor Nutter] was the only one who had a plan, an environmental plan," (personal communication, October 25, 2008).

Perspectives on Environmental Justice Organizing and Community Building

According to the view of one of the garden leaders, one very important impact to the community is that a garden provides green space in an urban area. Reflecting upon a garden as a tool to organize a neighborhood, she noted, “I think in some places you can. I think in some tough neighborhoods the gardens can be a mobilizing force to change a neighborhood” (personal communication, October 25, 2008).

Sourin Street Community Garden

Community Profile

Sourin Street Community Garden is in the Southwest Philadelphia neighborhood of Kinsessing. The neighborhood around the Sourin Street Community Garden is also predominantly lower income African-American residents. According to the 2000 U.S. Census, 94.4% of the residents in the census tract including the garden were African-American (U.S. Census Bureau, 2000a). The median household income was listed at $26,790, and 26.7% of the community lived below the poverty level (U.S. Census Bureau, 2000b).

History of the Land

The land where the garden is now located was previously the site of two vacant houses. The city eventually demolished these homes, and the vacant lot became the site of many drug deals and other crimes. Noticing the dangerous new role the vacant lot was now used for, the cofounders of the garden, who live next door to the lot, asked the city if the land could be used as a community garden. Around the year 2000, the city granted permission and the land has been used as a garden ever since (personal communication, October 26, 2008).

History and Structure of the Garden

The garden is loosely organized with community members contributing to the garden in whichever way their particular skills and abilities fit best. “Whoever does a particular thing best, that’s the one who does that job,” (personal communication, October 26, 2008) noted one of the cofounders when referring to the structure of the garden. Compared to the other gardens in the study, there seems to be no real definition of who is a member of the garden. One of the cofounders also discussed that this helps build the confidence and self-esteem of the community members who work in the garden. Every year, residents of the neighborhood meet to plan what will be done the upcoming year. For those community members who do not have the time to devote to the garden, or might be a little timid at gardening, the cofounders let these neighbors take home a tomato plant to try growing either in a container on their porch or in their yard. In many cases, this technique has sparked the interest of those who might not have otherwise engaged in the garden (personal communication, October 26, 2008).

Ownership

To help ensure that the garden does not end up in similar situations as other gardens the cofounders have built a relationship with the local City Council Representative, Jannie Blackwell, for protection against losing the garden to new development. “Council Lady Blackwell, she is the person who makes sure our

garden doesn't get taken over for industrial purposes or what have you," commented one of the cofounders on their ownership status (personal communication, October 26, 2008).

Relationship with Broader Community

Internal Networks

Because of the amorphous structure of the garden, the relationships that the garden has bonded within the local community have themselves become an intricate part of the gardens existence.

External Networks

In addition to building connections within the surrounding neighborhood, the garden has helped to connect the community to people and organizations throughout the city, and even the state. "It's not just people in the local neighborhood. It's people from all around, and that's what we intended it to be a community garden, not just maybe the immediate community (personal communication, October 26, 2008)," said one of the cofounders. The gardeners have networked with others outside the community, including doctors at the University of Pennsylvania's Wharton School of Business, to obtain resources for not only the garden but also for the neighborhood. The cofounders have also

formed an alliance with State Representative James Roebuck. This relationship has helped gardeners and community members receive the services that they need. When a young man was killed in the neighborhood, gardeners advocated to the representative to eventually donate $5,000 to cover the cost of funeral services. The garden has also worked with other organizations to obtain volunteers, informational resources, and continuing education on gardening topics, including Fairmount Park, Morris College, Bartram's Gardens, Haverford College, Wagner Science, Cobbs Creek Environmental Center, and the Pennsylvania State University (personal communication, October 26, 2008).

Funding

"You can pinpoint where out garden started. Our garden started with cans," (personal communication, October 26, 2008), began one of the cofounders. The garden, which was originally funded by the money raised from collecting cans, is primarily funded by people in the community. The garden has been the recipient of one grant, and gains additional funding through money raised at workshops and raffles (personal communication, October 26, 2008).

Key Environmental Justice Concerns –

Soil Quality

One of the cofounders identified four key issues of concern to the garden and the community. The first issue was the quality of the soil, specifically in reference to the previous uses of the land. When the garden began there was a need to do a clean sweep of the lot, for there were still debris from the demolished buildings. In order to reduce contaminants in the soil, the cofounders worked with the recycling center to bring in new soil (personal communication, October 26, 2008).

Trash

Also discussed were concerns about litter around the outside of the garden. There used to be a trash bin but it was either consistently stolen or the dumping grounds for the neighbors' household trash (personal communication, October 26, 2008).

Providing for day to day needs

Another issue discussed was the stress and hardships that those in neighborhood experience just providing for their everyday needs. Many in the community live day to day, and services such as food stamps do not cover all of

their needs. “People find it hard, and in this area there are a lot of people who live day to day so anything they can do in the garden makes that day to day living a little better,” (personal communication, October 26, 2008) said one of the cofounders.

Access to Fresh Foods

Lastly, access to fresh foods was an issue concern. Food prices are high making it difficult for those in the neighborhood to afford fresh produce. What little affordable produce does reach the neighborhood is usually not as fresh. There are also many elderly and disabled residents of the neighborhood who have difficulty getting fresh fruits and vegetables (personal communication, October 26, 2008).

Key Actions –

Workshops

At the garden there have been many workshops, some in conjunction with the Pennsylvania Horticultural Society. There have been some workshops, which pertain gardening such as ones on growing vegetables and others on how to get rid of rodents and other pest in an environmentally friendly manner. Other

workshops focus on broader issues such as how to get fuel assistance for low-income residents, and some feature cooking demonstrations.

Hazardous Waste Disposal

The garden has also become a site where neighbors can bring hazardous waste (household items such as batteries and paints) so that they may be properly disposed of, and workshops are offered to educate the community on household hazardous waste disposal (personal communication, October 26, 2008).

A Community Gathering Space

During the summer months the garden becomes a gathering space for neighbors to come together and cook communal meals. During these gatherings the women do the majority of the cooking, while the men talk in the garden. As the men congregate in the garden they keep a watchful eye out for the neighborhood children, keeping them safe during the evening hours (personal communication, October 26, 2008).

Addressing Immigrant Needs

In the community there are also significant immigrant and refugee populations, and the garden has helped support their needs as well. One of the cofounders discussed working this emerging community, “you see we work with

them to show the how to grow their own food, get their citizenship papers, and things like that to achieve a higher level than where they were when they first came here," (personal communication, October 26, 2008). She has helped with obtaining citizenship, especially studying for the citizenship test. Gardeners have also worked with Liberian immigrants to send clothing collected at the garden to those in need in Africa. A part of the garden has also extended across the street to the house of a Liberian immigrant (personal communication, October 26, 2008).

Assisting Those in Need

The garden has also been a focal point for neighbors to gather together and assist those in need. Gardeners prepare meals for those in need, and assist those who need help accessing social security or other social services. Whether its tokens for the bus so a neighbor has transportation to their parole hearing or unclogging drains, through the garden neighbors have built a system of community trust and support. We all work together (personal communication, October 26, 2008)," says one of the confounders. The Garden also serves as a drop off point for common household items, such as comforters, children's hats, or school uniforms, which are then redistributed to those who are in need in the community (personal communication, October 26, 2008).

Perspectives on Environmental Justice Organizing and Community Building

One of the garden leaders believes that a community garden can help to organize a community around environmental justice. She discussed how working in the garden has led many in the community to be more active. "Before everybody was like I mind my own business, I don't get involved. But now everybody is a little closer together" (personal communication, October 26, 2008).

ANALYSIS

Through examining the four cases studies presented this research, there are examples of garden improvement strategies, community building, and community organizing. All four gardens have undertaken garden improvement strategies around the issue of lead and other contaminants in the soil, while some of the gardens have engaged in a community building approach to address issues of food security, trash in the community, and poverty. The activities occurring at the gardens primarily reflect community building techniques, however, Duffield Farms as will be demonstrated in the following analysis, is currently engaging in community organizing in order to save their garden.

A Garden Improvement Strategy

Lead and other contaminants in the soil

An environmental justice issue, which has threads through all four gardens, is the concern for lead and other contaminants in the soil. It is important to note that only two out of the four garden leaders specifically cited this as a concern for the garden from the survey data. Both leaders of the Sourin Street Community Garden and Ashwood Gardens were concern about the soil quality because of the previous uses of the land that their gardens currently occupy. Both gardens have

taken precautions to avoid further contaminating any edible plants grown in the garden. Ashwood Gardens is specifically influence by their ownership, in which the bylaws of the NGA specifically state that the soil must be periodically tested and lime must be used to prevent any leeching of lead. Although the cofounder of Duffield Farms did not specifically identify lead and other contaminants as an issue of concern (with the exception of pesticide chemical use in the relation to organic gardening), the garden has worked with the Penn State Extension to test the soil. While this is an important environmental justice issue, as the legacy of lead paint in deteriorating housing permeates our urban communities, the concerns and actions raised by three out of the four gardens are limited to specifically the garden and not to the broader community, for which the purposes of this research, is identified as a garden improvement strategy.

It is important to note that during the initial interview of the president of Merion Gardens, soil quality was not mentioned, however when the researcher brought up the subject in post-interview conversation the president seemed surprise that this should be a concern. This brings up an interesting finding, especially considering that like the other three gardens, Merion Gardens was also previously the site of a residential housing unit. While this might be an isolated incident, about which this research cannot determine, this finding might demonstrate that there is a need for education on this issue, and an area of

environmental justice, which is underdeveloped, and therefore potentially an issue for which organizers can build on the foundations put forth by community gardens.

Community Building

Duffield Farms, Merion Gardens, and Sourin Street Community Garden all exhibit elements of community building, by building on the strengths and relationships in their neighborhoods. These gardens are also collectively problem solving and building the capacity for these neighborhoods to address issues such as food security, trash, and poverty through strategies such as education or by providing the services needed in these communities to address these issues.

Food Security

The most prominent issue identified by all four gardens was a concern for food security, specifically access to fresh foods, which could be as a result of all four gardens being primarily vegetable gardens and are participants in the City Harvest Program. While all four gardens might have identified this as a concern, only three out of the four did so in a way that reflects environmental justice. At Ashwood Gardens, the garden leader discussed how gaining access fresh foods was a motivating factor for many to get involved in the garden; however, this was more of a concern for organic, or specific produce which is often difficult to find or more expensive in stores. The other three gardens all identified a lack of access

to fresh food as a result of their community's environment and demographics. A lack of marketplaces to purchase fresh foods was an overarching concern, as well as a concern for the overall ability of those in their communities to afford the foods needed for a healthy diet. Over and above the community variable influencing the identification of access to food as an issue, the cofounders of Duffield Farms have specifically called this an issue of food or environmental justice. This issue is also driven by the farm's specific history, of being establish to improve access to fresh foods, and the structure of the organization, a 501c3 nonprofit with a mission of improving food security.

The above mentioned gardens have not only identified food security as an issue, but as seen through the case studies, have all engaged in some type of action to ameliorate the issue, including educational workshops, cooking demonstrations, and the sale or donations of produce. All of these actions increase the level of participation beyond those who are members or volunteers in the gardens, to a broader audience in the community. The specific workshops, educational and cooking demonstrations at Sourin Street Community Garden, are also driven by the expertise, skills, and knowledge, of which the cofounder has sought out in vegetable gardening, nutrition, and cooking.

All three of these gardens, through their educational programs and their contribution of their produce to improving the food security of their respective neighborhoods are all examples of a community building towards environmental

justice (See Attachment: 3). The increase in participation beyond those who are directly involved in the garden, through educational programs and workshops, has helped to strengthen relationships between the gardens and their broader community, while the contributions to nutritional education and home gardening skill-building has all helped to build the capacity of the respective communities to tackle this food security issue on their own. This is reflected on Duffield Farm's website, where they state that they are committed to "Developing a greater sense of community within the … neighborhood" (online source 2007).

Trash in the Community

For both Sourin Street Community Garden and Merion Gardens, trash was an issue, specifically referencing the conditions of the neighborhood before the gardens existed. Both gardens were once vacant lots that were full of trash and debris from deteriorating homes. Each garden, however, took a slightly different route to tackle this issue.

For the Sourin Street Community Garden, once the garden was created, one of the cofounders noticed that the community trash was still piling up outside of the garden. In response she placed a trashcan outside, but unfortunately that too began to overflow. The garden cofounders decided to take action, focusing specifically on the disposal of hazardous household wastes (such as paint, batteries, cleaning supplies). The garden has now become a receptacle site for

the community to bring their household wastes to be properly disposed of, and host to informative workshops on environmentally friendly disposal. These workshops are open to anyone in the community, increasing those who are participating in the gardens activities. On the other hand, those at Merion Gardens have focused on environmental education in general as an attempt to tackle the conditions of their neighborhood, eventually leading to the adoption of environmental education into the mission of their incorporated 501c3 nonprofit. Like Sourin Street Community Garden they have workshops, but have expand to cover broader environmental issues, and have also reached out and collaborated with the local schools.

Both courses of action, whether specifically linked to hazardous wastes disposal, or broader environmental issues, are examples of community building, as opposed to community organizing, as they work to positively strengthen relationships with community members, especially with those who were dumping their trash at the garden. This strategy also builds the capacity of the garden to solve its own trash problem. Engaging in environmental education throughout the community exhibits community building because it strengthens relationships with the community, specifically with the next generation, and also builds the capacity of the community as a whole to engage in environmental education. The president of Merion Gardens did express that they would like to in the future organize the community around the environmental issues that are affecting the neighborhood.

The use of environmental education as an organizing tool towards environmental justice can be potentially a useful strategy suggesting the need for future research into this topic.

Providing for every day needs

The cofounder of the Sourin Street Community Garden also identified a concern about the hardships of providing for day-to-day needs. As explained earlier the community is representative of a disinvested urban neighborhood, where residents struggle to live day to day, yet also with a rising African immigrant population, who brings new and specific needs. The cofounder described the garden as a place that can help make everyday living a little easier. The garden has also served as a site for workshops on how to obtain assistance from the government, and a strong network of support. In many ways this exhibits the strongest example of community building through social capital development, because this strategy strengthens relationships amongst the residents and builds the community's capacity to get assistance and rely on each other. This strategy also builds on the community members' individual strengths, recognizing the unique skills that each person brings to the garden whether it be gardening experience or plumbing, to create a cohesive network of support.

Different Approaches to Community Building

While the three gardens, Duffield Farms, Merion Gardens, and Sourin Street Community Garden are all engaging in community building, they are doing so through different approaches. Both Duffield Farms and Merion Gardens, compared to the Sourin Street Community Garden, are more structured and are incorporated non-profits. Whether it is paid staff managing volunteers, serving on committees, or a paying membership, both gardens function as traditional nonprofit organizations, engaging in outreach, education and service delivery to build community capacity. Both gardens also have a definition of who is staff, a volunteer, or a paying member.

On the other hand, for the Sourin Street Community Garden, there is no membership dues or nonprofit status, instead with this garden, the lines between who is a gardener and who is not are not as apparent. In many ways the garden and the activities, which take place in the garden, have diffused throughout the community, to the extent that the garden has literally expanded across the street. Both the more formal strategies of Duffield Farms, and Merion Gardens, and the less structured approached of community building by the Sourin Street Community Garden have made significant strides in developing community relationships and capacity, building on the individual skills of the residents.

Community Organizing

The case of Duffield Farms: Organizing for Ownership

In this study, the only garden, which exhibited community organizing strategies, was the case of Duffield Farm's fight for ownership over the land on which it sits. This situation, although not explicitly identified through the survey, was a constant thread throughout many aspects of the interview, and therefore is included here. The case of Duffield Farms is not unlike that experienced by the gardens in New York City. In Duffield Farm's situation their lease with the city has been threaten with a proposal for affordable housing. This has happened to many other gardens in the city of Philadelphia, however not at the extent to which has in the cases of New York City, where the strategy was to build coalitions across the five boroughs and bring the city to court. The founders of Duffield Farms have decided to take another course of action, and organize politically to demonstrate the community's support for the garden. This strategy directly challenges power dynamics, specifically the ownership of land, which is deeply rooted in American culture, and is therefore considered here as an organizing strategy.

A need for a catalyst

While all four gardens have developed a consciousness of everyday environmental justice issues connected to their gardens, the general trend is

towards more of a community building approach. The potential for organizing is apparent, especially demonstrated by the perspectives of each garden coordinators included in this study. All of the gardeners interviewed in this study acknowledged the potential for organizing, especially the power which can be fostered when people come together through a community garden. Community gardens can be "a mobilizing force to change a neighborhood" (see Ashwood Gardens case study). The question still remains, why then was Duffield Farm's fight to save its land the only example of organizing?

An emphasis on the actual force behind the organizing might be a possible answer to this question. Similar to the case in New York City described earlier, Duffield Farms was being threatened by the possibility of development. It was this threat, which motivated the cofounders of the garden to begin mobilizing the community around this issue. It was not the garden, which propelled the community to organize, but rather the threat of actually losing their garden. While the outcome of this situation, which are currently unfolding, will determine whether the conditions for organizing were present through the garden in a way to effectively mobilize to save it's existence, it is clear that the cofounders are using the relationships and capacity which have already been built with-in the community. This then leads to more questions? If gardens tend towards community building, is this then a stepping-stone to organizing, or can gardens begin from an organizing approach?

The case of Duffield Farms, and the tendency of the other gardens towards community building, challenge the grounds on which the original inquiry of this paper was made. Community-building seems to be the more natural progression through which community gardens can contribute towards creating more environmentally just communities, while organizing still needs some type of catalyst to drive a community garden in that direction. Instead of looking at a garden as a tool for organizing, rather, it is more appropriate to look at gardens as a platform, on top of which organizing can take place, building upon the relationships and capacity that has been demonstrated gardens contribute to the community. For organizing, however, there still may need to be a threat, or a dynamic leader, or another such element to serve as the driving force to mobilize the community.

CONCLUSION

This paper has used the case studies of four community gardens in Philadelphia to provide an empirical context in addressing the original question**:** *what is the potential for community gardens to be used as an organizing tool for engaging in systemic change towards achieving more environmentally just urban communities?* Based on the examination of these cases, if community garden organizations go beyond garden improvement strategies to address environmental justice issues, the trend is towards a community building approach. The style of the community building also depends on the structure of the garden organization, as those which are more organized tend to function through more formal methods such as outreach and education, while those with a fluid structure build community in a more informal manner, through social and communal interactions.

Based on the findings presented here the potential for organizing exists, yet not without a catalyst, or an additional driving force, which then can then build upon the capacity and relationships built by the community gardens. While gardens may not function as a tool for community organizing, the power to change the community exhibited in these case studies shows that community gardens can potentially still serve as 'free spaces,' through which organizing for environmental justice can take place.

Recommendations

For individual community organizers or organizations interested in building upon platform of community gardens to organize for environmental justice, a few lessons can be learned from these case studies on how to sustain and transform the garden as an effective stage for environmental justice organizing.

Keeping the Land

An important theme throughout the case studies was the need to protect the community gardens from the threat of development. Presented in the cases are three different approaches to counteract this issue. First is the option of trying to outright purchase the land. A second option is to call upon those who work in political office to protect the best interest of the garden. Lastly, a land trust can be an effective method for ownership, protecting the garden in perpetuity from development. Purchasing land at market value can be difficult, especially considering that community gardens can raise the property values in a neighborhood. Political connections are definitely beneficial, especially from a community organizing and building perspective, but can be unstable as administrations or political climate can change. A land trust can be the best option for land ownership, since it is more stable, and easier to achieve than purchasing the land or political ties. Gardens can also benefit from a land trust because they can provide technical and logistical support. Whichever approach is used, it is

important that some mechanism be sent in place to ensure the sustainability of the garden for environmental justice organizing.

Involving Youth

Many community gardens, including those in this study, are created around the elders of the community, and as this population ages, it is important to involve the next generation in the garden so as to sustain the garden. Some examples, as seen in the case studies, can be reaching out to youth organizations in the community, working with local schools, hiring youth as workers or volunteers, and providing opportunities for youth to be involved during the summer vacation months. Opportunities can also open up for youth to build their own sections or even entirely new gardens, developing a sense of ownership over the creation of the space. Not only will this build a strong organizing movement, but becoming involved in the garden can also have a positive impact on the development of the youth of the community as well.

What can citywide organizations do?

Not only in Philadelphia, but also throughout many other cities, larger organizations exist to network and provide support to community gardens across neighborhoods and regions. For these larger organizations that are interested in engaging garden groups in community organizing or building, it is important to

remember that in either approach, issues and strategies need to be community identified. The most important concept for gardens to function as 'free spaces' is that they are community created. Each of the gardens in this study has unique characteristics, and is deeply rooted in their community. The sense of ownership and community which develops out of building a garden can be a powerful force, and therefore it is recommended that larger citywide organizations, while providing support for gardens, avoid using prescribed methods to engage gardens in community organizing or building, and ensure that the process comes from the community

What larger organizations can do is work to address the aforementioned issue of ownership, by providing means for protecting the gardens form future development. More importantly these organizations, along with protecting existing gardens, can work to secure spaces for the creation of future gardens, so that new communities can engage in the process of creating their own 'free spaces.'

Further Research

In this paper it has been demonstrated that while the gardens in this study were not the organizing tools, organizing can happen *through* community gardens. The question then leads to what elements of a garden, and of a community in general can be the catalysts, which engage a community in organizing for the everyday environmental justice? Can the garden leadership play an important

factor? Does the structure of the garden organization influence the potential for organizing? Does paying dues, or incorporation as a nonprofit change the process? Do characteristics of the surrounding community have an influence? What is the extent of organizing that can happen through community gardens? Is it limited to the garden leadership, gardeners, or does the process and effects penetrate throughout the entire community? These are important questions which future research can enlighten and further develop the understanding of how community gardens can engage in developing more environmentally just communities.

Regardless of whether gardens function as places for where community organizing happens, it is clear that community gardens are a positive addition to any community. The environmental impacts alone can have a positive effect, specifically in urban communities, as one of the leaders from Ashwood Gardens stated, "One impact is that you have this land that is full of trees and that is in an urban environment, and is an important part of the urban culture, to clean the air, and open space" (personal communication, October 25, 2008). There are also the positive impacts that community gardens have on the residents of the community, as the president of Merion Gardens put it, "people really feel that it's a good thing in their lives" (personal communication, October 25, 2008). The overall contribution that community gardens can have in community development

reinforces the need for cities to protect existing gardens and expand opportunities for the creation of new ones.

As community development practitioners work towards improving the conditions of our urban neighborhoods, it is important that we examine the tools we can use to get us there. When it comes to redressing the legacy of environmental degradation and discriminatory policies on the conditions of our urban neighborhoods, community gardens can be a useful space where efforts to organize the community around creating a more environmental just neighborhood can happen. While there is potential for community gardens to function as 'free spaces' where the transformative politics of environmental justice take place, further research into this matter can help establish what can be used as an effective catalyst for this transformation.