PRIVATE GARDENS IN PUBLIC SPACES - COMMUNITY GARDENING: THE STRUGGLE TO EMPOWER INDIVIDUALS AND BUILD COMMUNITY

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ABSTRACT

PRIVATE GARDENS IN PUBLIC SPACES - COMMUNITY GARDENING:
THE STRUGGLE TO EMPOWER INDIVIDUALS AND BUILD COMMUNITY

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Community gardening has traditionally been viewed as a "self-help" activity designed to help participants end their reliance upon emergency food assistance programs while empowering them to gain a greater degree of control over their food source. Through a case study of a community garden, this study investigated the benefits of community gardening and in particular whether participation results in gardener empowerment.

The study revealed a conflict between the goals and assumptions of the organization administering the program and the actual experiences of participants. The study illustrates that programs that espouse an empowerment agenda must provide resources and opportunities for skill development that meet the needs and expectations of participants. Most importantly, they must provide opportunities for social action in which participants eventually gain significant and meaningful control over the initiative's resources and decision-making process. By doing so, individuals can attain a real increase in social power and self-determination.

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CHAPTER 1: INTRODUCTION

1.1) Emergency Food Assistance

Emergency food assistance programs such as food banks, pantries and soup kitchens have continued to grow across the United States and are accepted as permanent fixtures in many communities (Poppendieck, 1998). In the year 2001, over 23 million Americans obtained supplemental nutrition from emergency food providers (America's Second Harvest, 2001). In response to this crisis, the United States Department of Agriculture (USDA) spent $32.5 billion during fiscal 2000, on food assistance programs (Kantor, 2001). Additionally, many communities have established networks of food banks and pantries designed to ensure that all citizens are able to meet their basic nutritional requirements.

While these programs have been largely successful in preventing starvation, they are not intended to promote significant and lasting improvements in food access or empower individuals to reduce their dependency on charity (Tarasuk & Reynolds, 1999). Rather they represent a critical safety net that protects citizens from starvation and absolute hunger. Instead, charitable food assistance programs have become institutionalized creating what amounts to a new system of food distribution. "The widespread charitable food assistance system has effectively become a second tier of our food system, one in which the quality, quantity, and personal acceptability of foods are compromised, and participation is colored by the social stigma of a reliance on charity" (Tarasuk & Davis, 1996, p. 74).

Recognizing that emergency food assistance programs exist as a reaction to a crisis and that they provide no means in which to reduce or eliminate their necessity, a

number of new initiatives have been undertaken. These initiatives have been spawned in response to the continuing push for devolution of State and Federal social services, welfare reform initiatives and the Community Food Security Act of 1996 (Winston, 2002). These new initiatives seek to address and correct the underlying social and economic structures that created the need for emergency food assistance. Many of these programs are considered to be "self-help" efforts to empower individuals and communities to take an active role in defining their role in society as opposed to taking a passive role relying upon the charity of others.

1.2) Community Gardening

Community gardening has been touted as an effective alternative to emergency food assistance. It holds the promise of both providing food to those in need while acting as a community development tool intended to create positive structural social changes necessary to undermine the need for emergency food assistance programs. Community gardening is considered a "self-help" activity that holds the promise of helping to end reliance upon emergency food assistance programs while at the same time empowering individuals and communities to gain a greater degree of control over their food source (Lacy, 2000). Through the act of growing food and interacting with other members of the community, people immediately gain some degree of control over their diet, reduce the social and economic costs of maintaining the charity based food assistance structure and may promote social change.

1.3) The Greater Lansing Food Bank

The Greater Lansing Food Bank (GLFB) is a non-profit organization that solicits food and cash donations in support of a regional distribution system consisting of food pantries and kitchens. Founded in 1981 as the Greater Lansing Food Alliance, the GLFB was created in response to a mounting economic depression that resulted in an acute food shortage in Lansing, Michigan. The purpose of the organization is four fold (Hartlieb, n/d):

1) Educate the community on hunger issues.
2) Raise money, food and in-kind contributions for meeting the emergency needs in the Greater Lansing area.
3) Coordinate and support the work of the food banks and food closets in the area.
4) Promote, encourage and emphasize self-help programs toward the goal of food self-sufficiency.

In 1982, the GLFB established a Self-Help Committee to develop and coordinate the self-help activities outlined in the GLFB's by-laws. The GLFB also prepared a "Self-Help Policy Statement" to clarify the meaning of "self-help" and to establish appropriate policy and programs geared towards meeting this initiative. Members of the GLFB Board of Directors believed that emergency food assistance represented a short-term solution to the problem of hunger in the Lansing area. It was believed that long-term solutions were also necessary to help reduce hunger and that these solutions would most likely be discovered through the use of self-help activities in which households accepted an active and engaging role in food production, budgeting and job training.

The GLFB's Self-Help Policy Statement defines self-help as "an activity that increases individual self-sufficiency in food and nutrition related areas." (Hartlieb, n/d, p. 53). Furthermore, the Policy Statement says, "By increasing self-sufficiency, we mean

that a person becomes less dependent on relief and/or emergency assistance and becomes more self-reliant." The Policy Statement also asserts that a self-help project is essentially a set of educational experiences that is:

1) Practical. Relates to the life context of the target audience.
2) Pertinent. Addresses high-priority problems as perceived by the client.
3) Experiential. Includes a "hands-on" component.
4) Planning-based. Stresses the need for personal planning in order to increase self-reliance.
5) Replicable. Can be undertaken with similar target audiences at other times.
6) Supportive. Compliments self-help efforts being conducted by other organizations/agencies while avoiding duplication of existing efforts.

1.4) The Garden Project

One of the first actions of the GLFB Self-Help Committee was to secure a $60,000 grant from the Gannett Foundation to establish a community gardening project. The Garden Project, originally dubbed, the "Self-Help Garden Project" was conceived around six organizational goals (Chiang et al, n/d; Hartlieb, n/d):

1) Enable 1500 families to grow food. This would be accomplished by preparing 20 acres of donated land for cultivation at 15 community garden locations.
2) Support backyard gardening for 800 families through the distribution of seeds and tools.
3) Glean 10,000 pounds of food from area farms and encourage 250 farmers to "grow a row" for the food bank.
4) Provide employment for five seniors, five youth, one secretary, one director and 100 youths.
5) Provide 50 workshops for 800 residents.
6) Involve 5 community groups in the long-term commitment to continuation of the project after 1983.

The Garden Project's self help aspect was based upon the assumption that emergency food assistance is a short-term solution to hunger in the community and that through vegetable gardening and preservation, households can increase their level of self-sufficiency and reduce their monthly food expenditures. Furthermore, through public education efforts aimed at increasing public participation in gardening and food preservation, the program can help to create lasting changes that will improve the overall level of community food security.

The Garden Project currently provides three primary services to the community. These include community gardening, home gardening assistance and the gleaning and distribution of excess agricultural products. This study focuses solely on the community gardening aspect.

Between April 2001 and October 2002, the study researcher was employed as the Community Organizer for The Garden Project. A majority of duties focused on the coordination of community gardening activities, the distribution of gardening resources to participants and the provision of educational programs and materials designed to improve gardener success. This experience provided important access to the organization and its participants. Frequent personal contacts with community gardeners stimulated an interest in understanding the motivations and benefits of participation in community gardening activities and how this related to the program's self-help mission.

1.5) Purpose of Study

Communities investing scarce resources into the development of self-help programs need to determine if these efforts and resources are being effectively applied

and whether or not the empowering benefits of participation are being realized. The purpose of this study is to explore and understand the effectiveness of a self-help community gardening program that is part of the Garden Project. In 2001, The Garden Project initiated a strategic planning process to re-evaluate its mission statement, purpose and even the program's name. While the strategic planning process is necessary and appropriate as the program reached its twentieth anniversary, to this point, it has excluded the input of the community gardeners who will be impacted by any potential policy changes. It was this fact that ultimately led to this research project to seek out community gardener input and try to understand their motivations for participating in the program and whether or not empowerment or "self help" played a role in their experience.

The central research question is: Does participation in a "self-help" community gardening program lead to empowerment of the individual? The sub-components of this research question include:

1) Does participation have an impact on food access and diet?
2) What are the benefits from community gardening? Is empowerment a perceived benefit?
3) Are there barriers to participation?
4) What is the role and nature of skill development in the empowerment of participants?
5) Does the community garden fulfill its "self-help" mission, designed to assist unemployed and low-income families in growing their own food.

1.6) Layout of Document

This introductory chapter is followed by a review of the community gardening and empowerment literature (Chapter 2). In Chapter 3, the study methodology is

described, followed by a description of the case study setting (Chapter 4). Chapters 5-6 describe the study findings, while Chapter 7 provides a set of recommendations.

CHAPTER 2: LITERATURE REVIEW

2.1) Community Gardening

The American Community Gardening Association estimates that there are approximately 6,000 active community gardens in the United States used by 2 million community gardeners (ACGA, 1998). Community gardens are found in a wide range of communities and are used by a cross-spectrum of American society (Von Hassell, 2002). The gardens exist to serve a variety of purposes including hunger relief and neighborhood beautification and are administered by a multitude of organizations including everything from grassroots neighborhood groups to large bureaucratic government agencies (Landman, 1993). Although the size and physical layout of the gardens vary widely, they are often divided into individual plots of various sizes that are typically assigned to individuals or families for the purpose of growing food or flowers. Generally viewed as an interim land use of little economic value, community gardens are generally located on lands unsuitable for development (and often gardening as well) and are afforded little in the way of secure land tenure (ACGA, 1998; DeKay, 1997; Schukoske, 2000).

2.2) Gardener Motivations

Gardening provides a wide variety of both personal and social benefits. These include the tangible benefits of economic savings and food production as well as the less tangible recreational and social benefits. Given the broad spectrum of community garden types and gardener characteristics, the specific benefits of gardening at one site may not necessarily match those enjoyed at another garden.

2.2.1) Tangible Benefits

Community gardening is often used as a tool to improve food access for low-income households (Power, 1999; Warner, 1987). Much of this emphasis stems from the fact that low-income urban residents generally have less access to affordable, quality fruits and vegetables than their suburban and higher income counterparts (Pothukuchi & Kaufman, 1999). Gardening benefits low-income households by providing a readily accessible source of food while providing an economic benefit through a reduction in household food expenditures.

Gardening is also a tool for the promotion of nutritional health and access to fresh vegetables. American diets tend to consist of very little variety of fruits and vegetables (Putnam, Kantor and Allshouse, 2000). Through community gardening, people can improve their access to a wider variety of fresh vegetables (Patel, 1991). Participation in gardening is related to an increased frequency of vegetable consumption and a decrease in the consumption of sweet foods and drinks for adults (Blair, Giesecke & Sherman, 1991), the development of positive attitudes towards vegetables in children (Lineberger & Zajicek, 2000) and the improvement of diet and nutritional attitudes of senior citizens (Hackman & Wagner, 1990). Community gardening is, "an empowering nutrition strategy that overcomes many of the barriers to increasing vegetable consumption. Gardeners are able to use their own resources to meet part of their food needs in the manner they deem appropriate. Gardeners have greater control over the variety, quality and quantity of the produce they consume." (Blair et al, 1991, p. 167). Forty-four percent of urban community gardeners in New Jersey report that their main motivation for gardening is to improve their access to quality, fresh produce which tastes better and is

perceived to be more nutritious than store-bought vegetables (Patel, 1996). A survey of community gardeners in upstate New York found that access to fresh and better tasting food was the primary motivation for 90% of gardeners (Armstrong, 2000).

One personal economic benefit of gardening is related to the assumption that gardening helps to improve food self-sufficiency by improving household food budgets through a decrease in food expenditures. Estimates of the annual economic value of garden produce per plot range from $160 to $600 (Ball, 1983; Berman, 1997; Blair, etal, 1991; Naimark, 1982; Patel, 1991). These economic estimates are also uncertain in that they make efficiency assumptions regarding the climate, type of produce grown and skill of the gardener and do not account for the opportunity cost of providing one's own labor. In reality, the economic benefit gained from growing ones own food exists only in the absence of opportunity costs for the grower (Blaylock & Gallo, 1983; Cleveland et al, 1985). While the personal economic benefits of community gardening are often the focus of gardening organizations, gardeners themselves generally view the economics of gardening as a "fringe" or secondary benefit (Dunnet & Qasim, 2000; Patel, 1996). Given the amount of available land suitable for gardening in urban areas and the amount of work required to garden, food self-sufficiency is probably beyond the capabilities of most low-income households (DeKay, 1997).

Community gardening provides an economic benefit to units of government as well as the participating gardeners. The economic benefits of community gardening are the "most easily measured and often the most societally sanctioned justification for investing in community garden space." (Herbach, 1998) Community gardening in both Britain (Crouch & Ward, 1988) and the United States (Bassett, 1981) owes much of its

expansion during times of economic upheaval to its ability to ease governmental budget crises by reducing social welfare program expenditures.

Community gardening has also proven to be one of the most cost-effective government assistance programs. For every one-dollar of government investment, six dollars in food were produced through a United States Department of Agriculture program sponsoring community gardening in twenty-three cities (Hynes, 1996). Local units of government also see an economic benefit by providing gardening opportunities because community gardens are less expensive to develop and maintain than traditional urban parks (Herbach, 1998).

2.2.2) Intangible Benefits

Beginning gardeners tend to undertake gardening in an attempt to gain the more tangible benefits, which include producing food and cutting food expenses while more experienced gardeners enjoy less tangible benefits (Kaplan & Kaplan, 1989). As gardeners develop their skills and gain additional experience there is a corresponding shift in gardening priorities. Experienced gardeners tend to alter their focus from growing vegetables to growing flowers and unique varieties of vegetables. This shift is marked by a greater personal enjoyment of the intangible benefits of gardening including the sense of peacefulness and relaxation that accompanies gardening and an increased focus on gardening as a recreational activity.

While many organizations justify and support community gardening in terms of the tangible benefits, the less tangible benefits associated with gardening, though difficult to measure, are the true motivating factors for gardeners (Jamison, 1985; Schmelzkopf, 1995). Community gardeners find that their true enjoyment of gardening stems from the

recreational and social aspects. These "life-quality" benefits are the primary motivation for participation in low-income community gardening programs and are perceived to outweigh the assumed economic benefits (Blair et al, 1991). These "life-quality" benefits included access to recreational opportunities, improved mental and physical health, improved access to quality produce and personal spiritual reason including contact with nature.

While most individuals involved with gardening view it as primarily a recreational activity (Armstrong, 2000; Thorpe, 1975), the organizations that support community gardening often view recreation as a secondary benefit of participation. As a recreational activity, gardening provides a variety of mental health benefits including improved self-esteem and a sense of peacefulness. These mental health benefits are cited as the primary motivation to participate in community gardening activities (Armstrong, 2000). Community gardening improves an individual's self-esteem including feelings of self-sufficiency and a sense of pride in personal abilities (Waliczek, Matson and Zajiecek, 1996).

Gardening also provides an important opportunity for people to interact with the natural environment (Relf, 1992). This contact with nature helps to develop a sense of connection with nature as well as provides an opportunity for individual creativity and expression (Francis & Hester, 1990). Exposing children to gardening has been shown to increase personal environmental sensitivity (Stoelzle & Chambers, 2000). Gardeners tend to exhibit an overwhelming fascination with nature and the environment (Kaplan, 1973). This fascination causes them to spend more time in the garden where they develop substantial powers of observation. Regardless of whether people focus on growing food

or flowers in their garden, the greatest benefit of gardening is the sense of tranquility (Kaplan & Kaplan, 1989).

Gardening is also well recognized as a healthy form of exercise (Magnus, Matroos & Strackee, 1979) that physicians often recommend as a preferred form of physical exercise (Pate et al, 1995). Gardening has been associated with a reduction in cholesterol and blood pressure (Casperson et al, 1991) and the strenuous activities associated with gardening can improve muscle tone and lung capacity (Dunnett & Qasim, 2000).

2.2.3) Social Benefits

Community gardening provides a number of social benefits for both the individual and the community and is an important vehicle for community development (Armstrong, 2000; Brown & Jameton, 2000; Malakoff, 1995; Von Hassell, 2002). It provides people with an opportunity to develop new friendships, feel more connected with their neighbors as well as providing important opportunities for people to share food with neighbors (Patel, 1994; Schmelzkopf, 1995). In Philadelphia, community gardeners were found to share their produce with neighbors and relatives on a weekly basis. Community gardeners are also more likely than non-gardeners to participate in social events including food distributions as well as share their produce with local churches and community organizations (Blair et al, 1991).

Community gardening helps to promote a sense of community between gardening and non-gardening neighbors alike as people make personal investments in their communities (Landman, 1993; Von Hassell, 2002). Community gardening provides communities with an opportunity to create locally accessible food systems that connect

producers and consumers, developing a stronger community (Lacy, 2000) as well as providing opportunities for intergenerational and inter-racial socialization (Herbach, 1998). Placing community gardens within or adjacent to urban parks helps to improve the social environment by providing a broad range of opportunities for people to utilize these public spaces. The presence of neighborhood community gardens can also create spin-off benefits by improving neighborhoods through beautification and may improve the effectiveness of non-gardening community organizing efforts (Armstrong, 2000).

2.3) Community Gardening: Social Movement

Throughout its history, community gardening has been used as both a catalyst for social change and a tool for maintaining social order. Grassroots organizations find community gardening an appropriate method for creating social change within local communities while bureaucratic political, commercial and social organizations have effectively used community gardening to maintain social order and ensure continuity in the community's power structure.

2.3.1) Community Gardening: Great Britain

Community gardening is an old tradition, tracing its roots to social movements in 18th Century England (Crouch & Ward, 1988; Moran, 1990; Thorpe, 1975). Between 1700 and 1860 the British Parliament enacted over 3,500 Acts that enclosed more than five million acres of open fields and commons. Prior to these "Enclosure Acts", much of the rural landscape of the British Isles was held in common ownership, which were shared by subsistence farmers.

While the Enclosure Acts transformed British agriculture into a contemporary system based on the concept of private landownership, the Industrial Revolution was transforming the nature of urban society. During this period, waves of disposed agriculturalists migrated into England's urban centers and became industrial wage earners. This new industrial society represented a significant break from the laborer's rural agricultural past. The new urban society offered cramped and miserable living conditions and relatively high food costs while access to land was limited to a wealthy few.

This lack of access to land was a significant issue for the working class. For people accustomed to open lands and growing their own food, transformation into the new urban industrial society was difficult experience both physically and psychologically that creating a growing social unrest. This unrest stemmed from the strong desire for access to land suitable for gardening, supplementing food budgets and providing psychological relief. Landowners, recognizing an economic opportunity, began renting plots of vacant lands in and around English cities for the purpose of gardening. However, the limited space available and exorbitant rental fees limited access and proved insufficient in meeting the demand.

Responding to growing political pressures, The British Parliament officially recognized the importance of urban gardens as tools to improve social order in the new industrial society. The Parliament responded by enacting two Acts in 1907 and 1908 requiring local units of government to provide a sufficient number of "allotment gardens" to meet local demand (Moran, 1990). The Acts stipulated that the rents shall remain low and that the local authority was not responsible for providing any specific gardening

amenities such as water (Thorpe, 1975). These early allotment gardens were located on vacant lands at the edge of the city and were typically subdivided into evenly spaced rectangular plots that were "allotted" to individual households. Because the Acts did not specify the type of land to be made available or require long-term tenure over the land, allotments were generally placed on sites unsuitable for development (and often gardening) or on sites earmarked for future development. This lack of planning resulted in the continual uprooting of allotment gardens and ensured that they remain "do-it-yourself" projects located on in-fill sites, thus relegating gardening to a status of temporary land use (DeKay, 1997).

The British allotment gardens remained a permanent fixture in British cities throughout the 20th Century, although their popularity and the level of official support varied in response to social and economic crises (Thorpe, 1975). In response to the economic and social chaos that occurred during the First and Second World Wars, the rate of participation and amount of land devoted to urban gardening skyrocketed. Following the wars and the return to relative peace and prosperity, there was a corresponding decline in the level of urban gardening.

The popularity of British allotment gardening began to decline significantly following the Second World War (Thorpe, 1975). After reaching a peak of 143,000 acres of land devoted to gardens in the early 1940's, the popularity of gardening continued to decline for the next two decades. By 1965 the area of land devoted to allotment gardening had dwindled to about 70,000 acres. This dramatic decline spurred the government to begin investigations into the cause of the decline and to determine if allotment gardening should be discontinued. Investigation determined that fully 51.5%

of those using allotment gardens did so for purely leisure and recreational purpose. Furthermore, only sixteen percent gardened for purely economic reasons.

The realization that urban gardening served recreational more so than economic needs prompted a significant change in philosophical orientation (Thorpe, 1975). By the 1970s, urban allotment gardening came to represent an important recreational and social aspect of urban living. Many of the allotment gardens began dropping requirements that gardeners dedicate a majority of their plot to food production and began promoting flower gardening. Reflecting the increased orientation towards recreation, allotment gardens soon became referred to as "leisure gardens". This new name expresses the philosophy that gardens are important tools in meeting the recreational needs of all urban dwellers regardless of income.

2.3.2) Community Gardening: America

The growth and decline of community gardening in America closely mirrors the history of economic and social crises. During times of crisis, official support from government agencies and philanthropists tends to increase while support is withdrawn during times of relative prosperity (Bassett, 1981; Schmelzkopf, 1995). This is due to the importance of gardening as a tool for maintaining social control. Gardening reduces corporate and governmental responsibilities to provide for the welfare of the unemployed and promotes dominant cultural themes such as the private ownership of land and individualism that support the legitimacy of social, economic and political institutions. These institutions generally support community gardening as a symbolic representation of the Jeffersonian agricultural ideal in which urban gardeners are viewed as employing a self-reliant ethic of the modern American homesteader (Bassett, 1981). Working

individual garden plots within a larger community garden supports the notion of private landownership and self-determination.

The first American community gardens were established in Detroit, Michigan during a major economic depression beginning in 1893 (Bassett, 1981). This crisis, coupled with growing labor tensions, oppressive urban living conditions and a sudden rise in citizens seeking emergency food relief forced Detroit's Mayor, Hazen Pingree to provide community gardening plots on 450 acres of un-used land across the City of Detroit. The unemployed and destitute including many recent European immigrants used these gardens to grow vegetables, which supplemented their diets.

The Detroit gardens proved successful by not only meeting the emergency needs of those facing poverty and hunger but also by providing economic and political benefits to the City government (Von Hassell, 2002). The City found that by providing community gardens to the poor, it could reduce its costs and obligations of supplying direct assistance to the unemployed and reduce disposal costs for street sweepings and manure and by applying it as fertilizer on the gardens rather than paying for disposal. The gardens were also an effective tool in the maintenance of social order during this time of crisis. Wealthy landowners who allowed gardening to occur on their properties were gifted with tax breaks and the unemployed were provided with useful, though unpaid, employment. It was also felt that community gardening was a useful tool in the assimilation of immigrants into American society by having recent immigrants work side-by-side with naturalized Americans. Though none were as successful as Detroit, other cities across the nation took note and began instituting similar community gardening programs.

During the Great Depression of the 1930s community gardening was again revived under the banner of "Relief Gardens" (Bassett, 1981). During this period of time, the United States experienced a period of unprecedented economic and social decline eclipsing the Economic Panic of 1893. Again, idle urban land was brought under cultivation in an effort to both reduce reliance upon emergency food sources and to increase social stability and improve the self-esteem of the unemployed. In 1932, a least twenty-three states employed relief gardening programs (Von Hassell, 2002).

The "Victory Gardens" common in America during the Second World War were also used as a tool for maintaining social order (Bentley, 1998). American society faced a new social crisis as white men left the industrial workforce to join the Armed Services. This mass exodus resulted in a critical industrial labor shortage. Women and African-Americans, formerly ignored by the northern labor markets were suddenly coveted by industry and rural African-Americans from the south flooded into northern industrial cities seeking employment in the defense industry. The newfound employment opportunities altered the economic power and social structure creating new social tensions that resulted in urban riots in Detroit and Baltimore. Victory Gardens, which received significant support from the United States government, were viewed as tools to retain social order by providing African-Americans with a link to their agricultural roots and a reinforcement of democratic ideals.

Community gardening in America has never received the level of sustained institutional support found in Great Britain. During the past decade, non-governmental groups supporting community gardening including the American Community Gardening Association (ACGA) and the Community Food Security Coalition (CFSC) have become

politically active by focusing their effort on developing public and governmental recognition of the value of gardens. Despite these efforts, little significant governmental support for urban community gardening has yet been attained. Nationally, American public policy is largely indifferent towards community gardening as a social good (Schukoske, 2000). Combating this apathy towards community gardening will likely require a shift in public discourse away from the purely economic benefits of gardening and a renewed focus on the less tangible recreational and social benefits.

2.4) Empowerment

Proponents and critics alike lament the lack of a clear and consistent definition of the term "empowerment". (Gruber & Trickett, 1987; Perkins 1995; Rissel, 1994; Weissberg, 1999) However, a review of the empowerment definitions within the fields of community development, community psychology and health promotion illustrate the existence of a number of common themes that help to establish a working definition of empowerment:

> "...A process, a mechanism by which people, organizations, and communities gain mastery over their affairs." (Rappaport, 1987, p122)
>
> "The connection between a sense of personal competence, a desire for, and a willingness to take action in, the public domain." (Zimmerman & Rappaport, 1988, p746)
>
> "Empowerment, in its most general sense, refers to the ability of people to gain understanding and control over personal, social, economic, and political forces in order to take action to improve their life situation." (Israel et al 1994, p152)
>
> "[Empowerment is]... an individual's right and responsibility to partake in the life of the community, as well as a feeling of connection with that community and a sense of being able to successfully contribute to, and

assume some control over, its political and social life." (Wharf-Higgins, 1999, p 289)

"[Empowerment is]... the active, participatory process of gaining resources or competencies needed to increase control over one's life and accomplish important life goals." (Maton & Salem, 1995, p 632)

"[Empowerment is]... a social action process by which individuals, communities and organizations gain mastery over their lives in the context of changing their social and political environment to improve equity and quality of life." (Wallerstein, 1992, p 198)

"Empowerment involves a personal sense of self-efficacy and competence; a sense of responsibility to change self and social conditions based on a critical consciousness of conditions that are oppressive' skills to affect the behavior of others and to work in solidarity with others to obtain needed resources; and planning and implementation of social action efforts to remove power blocks and create liberating conditions." (Bartle et al, 2002, p 2)

The three common themes in the preceding definitions help us to create a working definition of empowerment. First, empowerment relates to a sense of control. It assumes that individuals lacking empowerment are not in control and consequently experience some degree of powerlessness or "disempowerment". This lack of control suggests that other individuals or institutions hold a position of relative power over the disempowered. Second, the individual seeking empowerment lacks possession of or access to critical resources, skills or knowledge required to gain control and experience empowerment. The disempowered individual may either be incompetent or simply lacking access to resources due to societal inequalities Finally, empowerment requires the active engagement in some form of behavioral change. Through this behavioral change, the individual regains control over the social environment and uses this opportunity to create change and increase relative power. These three components; sense of control, access to resources and behavioral change lead to a working definition of empowerment:

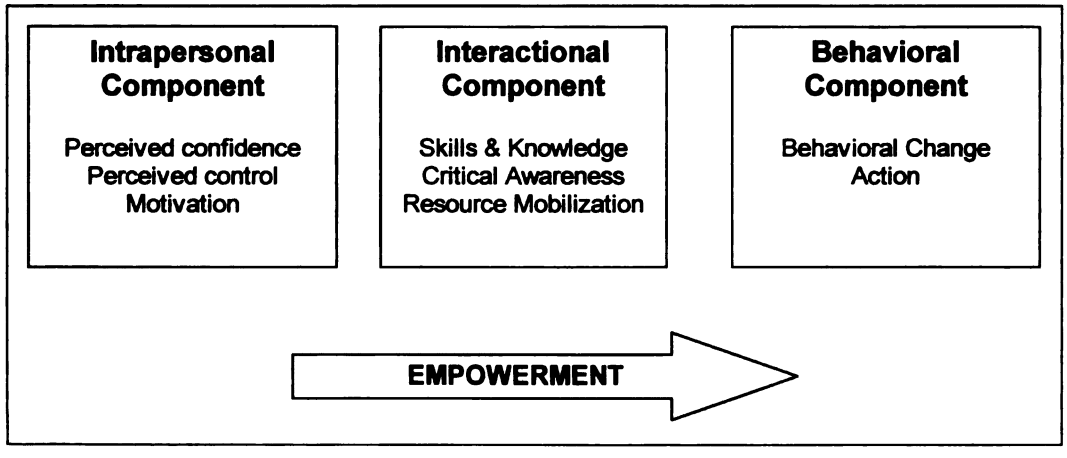
Empowerment is the sense of control that is gained through the development and active employment of the resources, skills and knowledge that lead to the behavioral changes needed to improve one's social condition.

Empowerment is both a process and an outcome. As a process, empowerment includes the mechanisms and actions by which individuals develop a greater sense of control (Zimmerman & Rappaport, 1988). This includes the attainment of resources and knowledge necessary to create change and is represented by the individual's actions that contribute to the development of social power (Speer & Hughey, 1995). Empowerment cannot occur by one giving power to another. Rather, empowerment is about enabling others to strengthen skills and gain resources needed to gain control (Israel et al, 1994).

2.4.1) Empowerment: Process

Zimmerman (1995) defines three basic components comprising the empowerment of the individual (Figure 1). These are an intrapersonal component, an interactional component, and a behavioral component.

Figure 1. Psychological Empowerment of the Individual (adapted from Zimmerman, 1995)



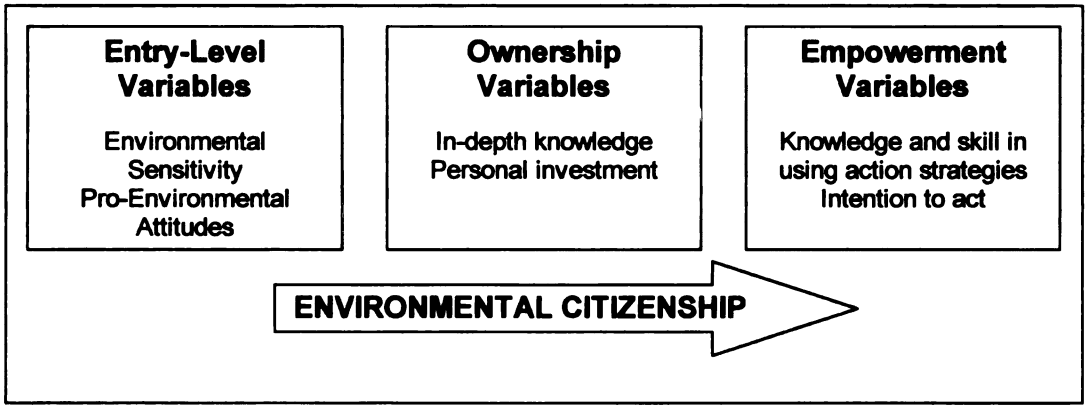
The *intrapersonal component* refers to how people think about themselves and includes perceived confidence in one's abilities, perceived control and the level of motivation to participate in a potentially empowering activity. This component is the basic building block in the process of personal empowerment because it defines how the individual perceives his or her ability to influence important life-domains, which in turn determines whether or not the individual becomes sufficiently motivated to participate. The intrapersonal component is based solely on perceptions because they represent the basic elements that provide people with the initiative to become actively involved in a potentially empowering activity.

The *interactional component* refers to the individual's understanding of how their community or institution of concern operates. Within this component, individuals develop a critical awareness of the environment and their position within it. Critical awareness is the ability to set realistic goals and a plan of action. It includes the individual's understanding of the resources and information needed to accomplish this goal, the ability to acquire those resources, and the ability to manage those resources once they have been obtained. The interactional component is a bridge between the perceived control and motivational basis of the intrapersonal component and the actions undertaken in the behavioral component.

The *behavioral component* builds upon the individual's motivation and refers to actions taken to directly influence outcomes. These actions are expressed as behavioral changes within the individual. The behavioral component is the desired outcome of the process of personal empowerment in which actions are taken to improve one's social condition.

Hungerford and Volk (1990) present a similar model in their description of the environmental education process (Figure 2). As with Zimmerman (1995), this model includes three "variables" that may impact a change in the behavior of the individual. These variables include *entry-level variables* consisting of attitudes and sensitivity towards the environment, *ownership variables* consisting of personal "ownership" and in-depth knowledge of an issue, and *empowerment variables* in which the individual reaches a highly developed understanding of an issue and engages in actions that influence and control the issue. These variables occur in a linear relationship that results in an outcome of the individual exhibiting a changed behavior in relation to the external environment. This change is due to the presence of initially positive environmental attitudes that are transformed through an educational experience into the behaviors and actions of an environmentally conscious citizen.

Figure 2. Environmental Citizenship Behavior (adapted from Hungerford & Volk, 1990)



2.4.2) Empowerment: Outcome

As an outcome, empowerment is the actual alteration in the individual's social or economic condition. Empowerment is realized when individuals have the opportunity to

control their own destiny and influence the decisions that affect their lives (Zimmerman, 1995). An empowered individual is one who has experienced a conscious behavioral change that results in an increase in social power. Theoretically, these personal changes can be evaluated by measuring the impacts of specific social interventions upon individuals or their communities. For example, a community gardening program designed to empower low-income residents to improve their nutritional status should be able to take steps to measure the program's effectiveness by demonstrating that participation results in a positive alteration to one's social condition.

Empowering outcomes are often difficult to identify because they may be of only local or personal relevance. The historical and cultural context in which the individual or organization operates has a significant influence upon program outcomes (Rappaport, 1987; Zimmerman 1995). The needs of one neighborhood may not necessarily be relevant in another community and the needs of one individual may not be the same as another. Individuals experience feelings of control (or lack of control) in different manners. While one individual may desire greater control over the variety of vegetables available to him or her, others may not.

2.4.3) Multiple Levels of Analysis

Empowerment can occur at multiple levels of analysis including the individual, community and organizational levels (Barr, 1995; Israel et al, 1994; Rappaport, 1987; Speer and Hughey, 1995; Zimmerman, 1990). At the individual level, empowerment is defined as an individual taking action within a group to achieve change. (Rissel,1994). "An empowered community is a group of people in a locality capable of initiating a process of social or community action to change their economic, social, cultural and/or

environmental situation." (Lacy, 2000, p 5). An empowered organization is one that provides opportunities for individual members to develop skills, gain control and identify with others (Prestby et al, 1990).

Gutierrez (1990) recognizes empowerment as a multi-level construct occurring on both a micro level involving personal feeling of increased power and a macro level involving collective political power. While a perception of personal control exists at the micro-level, this does not necessarily include an actual change in power. Actual change only occurs as a result of the interface between the micro (individual) and macro (group) level.

Rissel (1994) also makes a distinction between psychological and community empowerment. Psychological empowerment relates to the individual's perception of control over his or her own life. This is experienced through membership in a group and does not necessarily relate to an actual increase in political power or control over resources. Community empowerment includes both psychological empowerment and the control over actual resources. Psychological empowerment can occur without the relative disempowerment of others and is not a scarce resource. However, community empowerment impacts the distribution of real resources, is political and results in the disempowerment of others.

2.4.4) Interface

In order to achieve empowerment, the individual must engage in group activities that connect people and build upon their individual strengths. It is through this group interaction that actual social changes can occur, resulting in a relative redistribution of resources. The differing levels of empowerment experienced by individual are due to

social failures in the distribution of resources and opportunities essential to empowerment rather than due to personal faults and inadequacies of the individual (Breton, 1994; Gutierrez, 1990).

Empowerment refers to the relationship between the individual and the society or environment. It suggests that there is an authority or external power that in some way keeps the individual from experiencing one's full potential. This makes it necessary to study the social relationships involved and the contexts that promote or inhibit empowerment. Empowerment is the individualistic aspect of social power (Speer & Hughey, 1995). Empowerment and social power are dependent upon one another in that empowerment can only be realized through participation in a social organization and that social power is built upon the development and existence of empowered individuals acting in unison. "Individuals are empowered to the extent that they understand their own access to social power exists through organization, through the strength of relationships among individual members in that organization, and through active participation in their organization and subsequent reflection on their involvement" (Speer & Hughey, 1995, p. 737).

Empowering collective social actions include a consciousness raising experience in which individuals first develop a sense of shared community with others who face the same oppression and then take action to change the situation. Without this group action leading to social change, empowerment cannot be fully realized. Subjective perceptions of empowerment, though important do not constitute empowerment. Empowerment must include an actual change in objective reality; otherwise empowerment has not occurred (Israel et al, 1994; Rissel, 1994). Social action designed to increase power and control is

the necessary component that bridges the gap between feelings of control and actual control. "People can 'feel' empowered, but it is crucial to recognize that they will not be empowered if outside the group they continue to be deprived of resources, dignity and control." (Breton, 1994, p 33-34).

2.4.5) Empowering Situations

The study of empowerment tends to focus on participation in voluntary organizations (Eisen, 1994; Florin & Wandersman, 1990; Maton & Salem, 1995; Prestby et al, 1990). These organizations play an important role in empowerment because they offer skills and resources that allow individuals to make behavioral changes that improve one's social condition as well as opportunities to work in concert with others to create social change. The empowerment of individuals is tied to the existence of empowering organizations, which provide people with opportunities to gain a sense of control and create meaningful change.

Organizations that promote empowerment exhibit a number of common characteristics that enable members to develop a sense of control by adhering to an empowering process. Important points of analysis in determining the empowering potential of organizations include the belief system, roles, support system and leadership (Maton & Salem, 1995).

Belief System

An organization's belief system includes its ideology, values and culture. An organization's belief system shapes its view of members, their needs and problems and sets in motion the policies and actions taken to serve its members (Maton & Salem, 1995). Empowering organizations should inspire personal growth of members, be

strengths-based rather than deficiency-based and be focused beyond the individual to include the community (Maton & Salem, 1995).

Empowerment is most successfully promoted through locally controlled organizations that promote local control and ownership over resources and information (Barr, 1995). Locally developed initiatives that hold an empowerment ideology and organizational structure will more effectively develop resources than will an initiative that uses a cookie-cutter approach to development and views members as clients or service consumers (Rappaport, 1987). "Initiatives that are not controlled by neighborhood residents tend to define empowerment as seeking residents' input in needs assessments and encouraging residents' attendance at events staged by the initiative." (Eisen, 1994, p248) Such organizations assume that empowerment will be realized simply through group integration and increased access to residents outside the neighborhood who have more resources. However, professionally initiated projects may become empowering if they allow communities to organize themselves and act politically, eventually taking control over the effort (Rissel, 1994). In practice, smaller, more homogenous neighborhood-based initiatives may be more conducive to the development of a group identity that leads to successful empowerment.

Roles

To create a potentially empowering situation there must exist a large number of roles for members at multiple levels of the organization. These roles must be highly accessible and meet the needs and desires of members by varying in the level of skill and responsibility required to assume the role. The role structure must also contain many opportunities for skill development, learning and exercise of responsibility (Maton &

Salem, 1995). Empowering organizations must continually evolve and remain viable and active by promoting group membership and continued involvement. This requires an understanding of the needs and goals of participants (Prestby et al, 1990). "It is possible to develop a program aimed at individual empowerment, but this does not consider the context in which the individual is embedded – such as the organization or community – then there is less likelihood that actual increases in influence and control and concomitant improvement in health and quality of life will occur." (Israel et al, 1994, p 153). The conditions of participation within an organization are also expected to have a major impact upon the empowerment of its members (Rappaport, 1987). Empowerment is most likely to occur within those organizations that encourage participation in decision-making and provide a variety of roles for participation (Zimmerman & Rappaport, 1988). Since personal empowerment is linked to participation in community activities it is logical to examine social groups to discover the organizational contexts that allow personal empowerment to develop.

Support System

For an organization to support the empowerment of its members it must provide a support structure, consisting of its resources and setting, that is encompassing, peer-based and provides a sense of community (Maton & Salem, 1995). An encompassing support system offers a wide variety of resource types and sources of information. In a peer-based system, members give and receive support to peers who share common interests and goals. The support system must create a sense of community that can, "transform isolated individuals into public citizens." and provide, "a human-scale sense of place, purpose, and process that is rare in today's mass society." (Florin & Wandersman, 1990,

p. 44). This sense of community is essential to empowerment. "Empowerment is not only a self-perception of competence and control, but includes a concern for the common good and a sense of connectedness to others." (Zimmerman & Rappaport, 1988, p 747).

Leadership

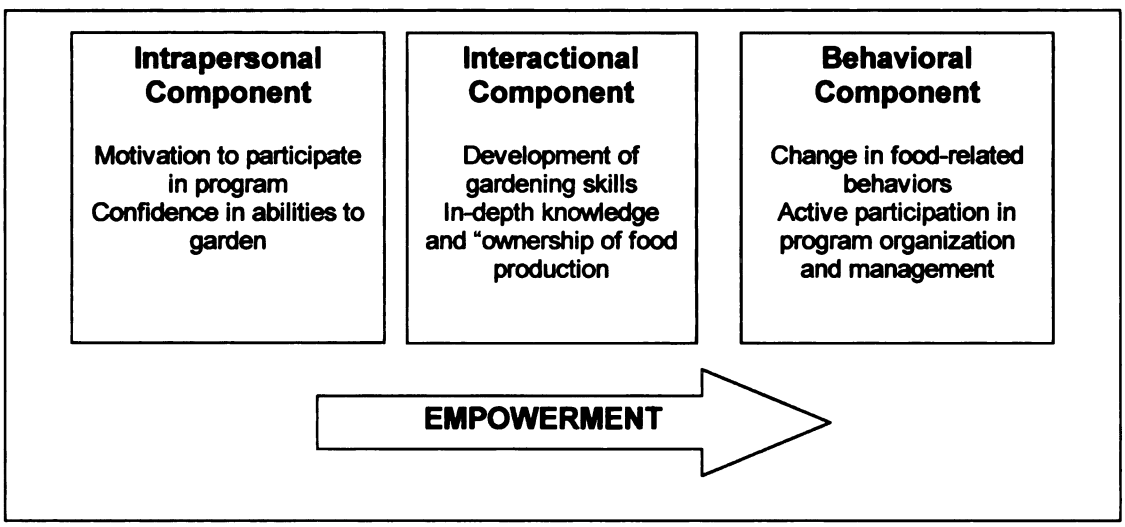
The existence of quality leadership is also a key component in the creation of empowering organizations (Maton & Salem, 1995). Leadership must be shared and open to new members rather than resting with one or two members. Leadership must remain committed to the goals of the organization and the sharing of leadership duties. This shared leadership must be viewed as an asset rather than a threat to organizational stability. This suggests that empowering organizations will likely be collective in nature as opposed to bureaucratic and hierarchical (Jamison, 1985). "Empowerment might be expected to develop more in organizations that encourage participation in decision making and provide a variety of flexible roles for volunteers to fill, while a more hierarchical and rigidly delineated voluntary organization may be less likely to promote the development of psychological empowerment." Zimmerman & Rappaport, 1988, p 748).

2.5) Conceptual Framework

This study focuses on the application of empowerment theory on a "self-help" community gardening program. The conceptual framework of this study is a synthesis of the work of Zimmerman (1995) and Hungerford and Volk (1990) (Figure 3) and is concerned with the interface between the individual and organizational empowerment process. It is assumes that individuals participating in a voluntary community gardening

program have attained the intrapersonal component prior to joining. Without the motivation to participate and perceived abilities for success, individuals lacking this component would not be expected to be undertake community gardening. Those individuals participating in the program are assumed to have developed this primary component prior to joining the program and through participation are actively developing the interactional component.

Figure 3. Personal Empowerment through Community Gardening (adapted from Zimmerman 1995, Hungerford & Volk 1990)



The interactional component is comprised of the development of the skills and knowledge required for continued participation and an "ownership" of food and gardening related issues through their personal investment in community gardening. The development of this component is believed to result in a critical awareness of food issues where in the individual develops a new understanding of food and understands his or her abilities to make empowering behavioral changes.

The development of the interactional component may or may not lead to the final, behavioral component. The behavioral component is assumed to consist of the

individual's actions taken to improve their level of control over the food system. This component is defined by an individual's actions above and beyond typical participation in program activities and may include changes in food purchasing behaviors, participation in management and organization of the community garden program or activism in issues related to gardening access, food quality, etc.

The interactional component of this model acts as an important link between the initial attitudes of the individual and corresponding behavioral changes. An understanding of this component is critically important for voluntary organizations with a goal of creating some type of behavioral or collective societal change. An understanding of the types of learning that may lead individuals through this process of change can be useful in the planning, implementation, and evaluation of educational programs.

CHAPTER 3: METHODS

3.1) Research Questions

As set forth in Chapter 1, the central research question is: ***Does participation in a "self-help" community gardening program lead to empowerment of the individual?***

The sub-components of this research question include:

- Does participation have an impact on food access and diet?
- What are the benefits from community gardening?
- Is empowerment a perceived benefit?
- Are there barriers to participation?
- What is the role and nature of skill development in the empowerment of participants?
- Does the community garden fulfill its "self-help" mission, designed to assist unemployed and low-income families in growing their own food.

3.2) Study Design

Proponents of empowerment insist that it is a phenomenon to be studied in the context of the individual's life experience (Rappaport, 1990; Zimmerman, 1995). Rappaport states, "We need to research the phenomena by studying how empowerment is actually experienced by those individual people who express the sense that they are, and are not, in control of their own lives, and by studying the mediating structures in which they reside...we need to study people in settings that are a part of their ongoing life" (Rappaport, 1987, p. 135). "If one wants to know about community life, it is probably helpful to see people in their community settings" (Rappaport, 1990, p. 55).

The goal of this study is to research the experience of community gardeners in their natural setting. This was done through the use of a case study approach. Case studies are a qualitative research approach that utilizes a number of data gathering techniques (Berg, 1998) to collect rich, detailed and in-depth information (Stake, 1994).

Case studies provide information from a variety of sources, thereby facilitating a more holistic research perspective (Sjoberg et al., 1991). They can be used to explain complex causal links in real-life interventions (Yin, 1994).

3.3) Case Selection

Of the 18 community gardens administered by The Garden Project in 2002, this study focused on the Foster Park Community Garden. It was selected for several reasons. First, based upon The Garden Project's registration data, a majority of community gardening participants live within the immediate neighborhood and possess similar socio-economic traits. This is consistent with the concept of personal empowerment in that it is believed to be uniquely relevant to individual neighborhoods and homogenous communities (Zimmerman, 1995). It is assumed that a group of individuals living together in a community possess similar traits and beliefs that are formed and reinforced to some degree through their interactions with one another. This results in the development of a sense of shared community between individuals. Participation in community based voluntary organizations has been shown to bolster feelings of personal empowerment, generate a greater sense of control and foster a belief that people can make a difference in their lives (Wharf-Higgins, 1999).

Second, the garden is well established within the neighborhood. It has been in existence for approximately 15 years and has developed a strong presence in the community through out reach projects such as partnerships with a community center to provide gardening and community service opportunities for neighborhood youth and through an annual surplus produce distribution open to non-participating neighbors.

Unlike many other community gardens administered by The Garden Project, Foster Park is physically located at a prominent location in a well-used city park situated at an active intersection. Its location as well as a prominent sign makes it a well-known local landmark.

Third, The Garden Project operates a distribution warehouse at Foster Park. The warehouse is the central meeting location for participants and staff plus it serves as the point of access for tools, seeds, plants and other vital gardening resources. The warehouse is intermittently staffed by the Community Organizer and volunteers throughout the gardening season for the purpose of distributing supplies and information. In comparison to other gardens administered by The Garden Project, Foster Park possesses a wealth of resources that are assumed to provide additional benefits to Foster Park gardeners.

The selected community garden consists of two separate but adjacent gardens known as the Foster Park Community Garden and Paradise Community Garden. (See Appendix A) For the sake of clarity, they are simply referred to as the "Foster Park" garden. Approximately half of the garden area lies on property owned by the City of Lansing Parks and Recreation Department (Foster Park) with the remainder located on an empty parcel owned by the Paradise Baptist Church (Paradise).

3.4) Population

During the 2001 and 2002 gardening season, Foster Park garden plots were assigned to a total of 48 households. Six of these households were excluded from participating in the study. Four households spoke little or no English. Given the

timescale and budget allotted for this project, securing a translator to assist in the interviewing and transcription was not pursued. Therefore, only English speaking households were included. Two additional households had moved out-of-state prior to the 2002 gardening season and did not leave a forwarding address.

The population size for this study was 42 individuals representing the remaining households. Regardless of the number of household members who worked a particular garden plot, only the individual whose name appeared on the gardener registration form was included. Of these individuals, 15 participated in community gardening at Foster Park in 2001 but not in 2002, 11 households participated in both 2001 and 2002 and 16 participated in 2002 but not in 2001.

3.5) Data Collection

In this study, interviews were the primary data source, supplemented by document review and direct observation. The use of multiple sources of evidence aids in ensuring construct validity (Yin, 1994).

3.5.1) Participant Interviews

Since the phenomenon of an individual's empowerment is a highly personal experience, semi-structured in-depth interviews are an appropriate data collection technique (Zimmerman, 1990). Two groups of informants were identified for the study. These included gardeners assigned to a plot at the Foster Park Community Garden and key informants including representatives of The Garden Project's Advisory Committee and volunteers with a degree of familiarity with the Foster Park Garden. Gardeners were identified using The Garden Project's database of registered gardeners. All community

gardeners must submit a completed registration form (Appendix B) prior to being assigned a plot or using any of The Garden Project's resources.

Key informants are identified as persons who possess unique skills or a professional background related to the issue being studied, is knowledgeable about the project participants, or has access to other information of interest to the researcher. Key informants can help the researcher better understand the issue being studied, as well as the project participants, their backgrounds, behaviors, and attitudes, and any language or ethnic considerations.

Initial contact with gardeners was through the use of either the telephone or e-mail. Of the 42 households included in this study, 39 included a home and/or work telephone number on their registration form and 28 included an e-mail address. Beginning on July 30, 2002, these households were contacted via the home telephone number or e-mail. Twelve of the home telephone numbers were either incorrect or had been disconnected and five e-mail addresses were incorrect. Of these individuals, attempts were made to follow-up using the work telephone number.

On October 11, 2002, postcards were mailed to 30 households who could not be contacted via telephone or e-mail (Appendix C). Two of the postcards were "returned to sender – forwarding address expired". Seven individuals contacted the researcher to schedule an interview. Of these, one was never interviewed as she failed to show for an interview at her home and repeated follow-up calls to her home were not returned. On November 5, 2002, follow-up postcards were mailed the 21 households that had yet to respond. There were no responses to the follow-up postcards.

In an effort to achieve maximum participation in this study, informants were eligible to receive a $100 cash incentive. All community gardeners who scheduled or completed an interview by October 31, 2002 were entered into the drawing. The cash prize was awarded to the winning gardener on November 6, 2002.

The interviews were conducted in the informant's home, workplace, The Garden Project office, or at the Foster Park Community Garden. All interviews were performed in an informal face-to-face setting between the informant and the researcher. Each interview was structured around an interview guide (Appendix D) approved by UCRIHS (Appendix E). The interviews lasted between 25 minutes and one hour and 40 minutes. All interviews were recorded on audiotape following the informant's permission and acceptance of the Informed Consent Form (Appendix F).

Shortly after the completion of each interview, written transcripts were created and reviewed for accuracy. The transcripts were compiled and maintained electronically on a laptop computer with an additional paper copy maintained in a secure filing cabinet. To ensure confidentiality, each informant was assigned an alias.

3.5.2) Document Review

The Garden Project possesses a number of internal documents that aided in this study. These documents include internal memos describing past project events (participants, times, issues of concern), chronological data noting interactions between gardeners and staff, annual gardener surveys and meeting minutes of the Garden Project's Advisory Committee and Garden Coordinator Meetings. These documents were used as secondary sources of information and provided some history and a framework in which to understand and corroborate information gathered through the participant interviews.

Additionally, they provided the registration data used to identify interviewee gardeners and develop a demographic profile. Does this include the registration data used to identify interviewee gardeners and develop a demographic profile? If yes add that.

3.5.3) Direct Observation

As an employee and participating community gardener with The Garden Project, the researcher had the opportunity to participate in various formal and informal activities throughout the 2001 and 2002 gardening seasons (May through September). These activities included numerous workshops, promotional events and garden visits. Most notably, the researcher spent approximately 300 hours at the Foster Park Community Garden operating the distribution warehouse, supervising volunteers, performing garden maintenance and visiting with gardeners. Observations of the garden conditions and gardeners provided the researcher with a general understanding of the community gardening experience and development of a rapport with many of the gardeners.

3.6) Interview Response Rate

A total of 24 individuals were interviewed between July 30, 2002 and November 14, 2002. This included 20 community gardeners and 4 key informants representing staff and volunteers. Of the gardeners, 7 participated in the 2001 season, 6 in the 2002 season and 7 participated in both the 2001 and 2002 seasons. This results in a gardener response rate of 47.6%.

3.7) Data Analysis

The data collection phase resulted in the compilation of nearly 110,000 words collected during over 23 hours of interviews. Immediately following the participant interviews, the researcher transcribed the audiotapes. Having the researcher conducting and transcribing the interviews helps to ensure the validity of the transcription by ensuring that the data is recorded in a systematic manner capturing all relevant verbal and non-verbal information. Following the transcription process, both the researcher and two professional colleagues reviewed the transcripts independently of one another. Following an independent transcript review, the researcher and colleagues met to discuss the quality and validity of the data and to share observations. During this initial phase of data analysis, researcher and colleagues reached a unanimous agreement that the data collection method and quality of data collected was appropriate.

Data analysis continued with the identification of several dominant themes based in part upon the literature review (Chapter 2). Each dominant theme was developed in an effort to answer the research question and six sub-components outlined in Section 3.1 of this chapter. This process initially included reading and rereading the interview transcripts allowing dominant themes to emerge . The themes were then incorporated into an electronic spreadsheet to provide a visual display of the data. This visual display was again shared with colleagues, ensuring consistency. The result was the creation of an overview grid (Appendix G) using spreadsheet software.

Following the development of the overview grid, the researcher again reviewed the transcripts. During this stage, direct quotations addressing the individual themes were inserted into the spreadsheet corresponding with each -theme. These quotations were

included in an initial draft of this document. This aided the researcher and a colleague to begin to answer the individual research questions. At this point, further consultation between researcher and colleague allowed for further refinement of the data.

3.8) Study Validity and Researcher Bias

The relationship between researcher and subject often has a significant impact upon the validity of a research project. This relationship frames the development of the research question, the selection and use of appropriate data collection methods as well as the analysis and interpretation of data. The researcher in this case study is an experienced and avid community gardener having been involved with The Garden Project during the 2001 and 2002 gardening seasons. Prior to his term of employment with The Garden Project, the researcher became interested in the potential benefits of urban community gardens. As a result, he developed a new community garden in his own neighborhood in the spring of 2001 and shortly after accepted an offer of employment with The Garden Project. Although gardening at another neighborhood garden, the researcher's experiences formed the basis for establishing the research question. Additionally, the researcher's employment experiences helped to guide the selection of interview questions and probes ensuring that they remained relevant and meaningful to study participants.

Although the researcher made significant efforts to inform participants that the study was being conducted independently of The Garden Project, his employment status with the program may have influenced the responses that individuals provided. It is unknown if or to what degree interview participants altered their responses in order to "please" the researcher by blunting their criticisms or inflating the quality of their

experience. Additionally, the researcher's personal interest in the subject matter may have also influenced the interpretation of gardener comments. The researcher's employment with The Garden Project did however, allow for an accelerated development of rapport between researcher and subject. This important rapport most likely had a positive influence on the data collection aspect by allowing participants to feel more comfortable during an interview than would be expected had the interviewer and subject been two complete strangers.

Ultimately, the strength of this study rests in the use of multiple data collection methods and the involvement of knowledgeable colleagues throughout the data analysis process. It is this triangulation of both data collection and data analysis as well as the strength of the researcher's relationship with the subject that helps to reduce the impacts of researcher bias and to ensure the validity of the study.

3.9) Limitations

The primary study limitation is the population size of 48 gardeners. While a census of this population was attempted, only 47.6% of gardeners were interviewed. While this is not an unreasonable response rate, combined with the small population size it is a limitation of the study. Another limitation of this study is its focus on a specific community garden - the Foster Park garden. Both the research setting and participants are in some respects unique. Thus the study findings are not necessarily fully transferable to community gardening programs in other parts of the Garden Project or other municipalities. However both the methods and findings of this study may benefit

other community gardening programs in designing and implementing their own program evaluations.

CHAPTER 4: THE GARDEN PROJECT: OPERATIONAL BACKGROUND

4.1) Introduction

The Garden Project is one of three programs of the Greater Lansing Food Bank (GLFB). While the other two programs focus on the delivery of emergency food assistance through food pantries and community distributions of recovered perishable foods, The Garden Project focuses on the delivery of in-direct assistance through a "self-help" philosophy. The program provides three services to the Lansing, Michigan area community including home-garden roto-tilling, community gardening and a gleaning program, which enlists volunteers to harvest surplus agricultural products and distribute them to local social service agencies.

The program is led by a permanent, full-time Director and is staffed by three seasonal part-time employees including a Community Organizer, a Gleaning Supervisor and an Office Support staff member. The Director, Gleaning Supervisor and Office Support staff member divide their efforts between all three of the program's service while the Community Organizer's activities focus solely on the community gardening activities. The Community Organizer is employed for twenty-seven weeks per year (April-October) and is responsible for the overall operations of the gardens and education of the gardeners.

4.2) Registration Process

All community gardeners are required to complete a registration form prior to receiving access to any of The Garden Project's resources. The purpose of the registration form (Appendix B) is to collect basic demographic information required by

funding agencies such as the cities of Lansing and East Lansing. Additionally, the registrant indicates which community garden location they prefer; the number of plots desired, volunteer interests, and any special needs that should be considered for plot assignment purposes. Following the completion of the registration form, The Garden Project office adds the information to an Access database and the individual is placed on a mailing list.

A new registration form must be completed at the beginning of each gardening season. Registration forms are typically distributed in mid-March and are mailed to all of the prior season's participants as an insert to the season's first newsletter. This newsletter contains basic information about the program along with instructions for completing the registration process. Additional registration forms are included in program pamphlets distributed through local social service agencies, food pantries, University housing offices, displays located at community events and area businesses including Laundromats and food stores. Individuals may also call or e-mail the office to request a registration form.

The Garden Project also encourages local residents to register for a garden plot through broadcast and print media. At the onset of the 2002 gardening season, The Garden Project gained media coverage in two local newspapers (Boyer, 2002; Trout, 2002), a citywide cable access television advertisement and a public service announcement on a local radio station. The purpose of these outlets is to encourage interested residents to contact The Garden Project and request a registration form.

4.3) Community Garden Preparations

As early in the spring as weather and soil conditions permit, The Garden Project hires an individual to prepare the garden bed. The process begins when the Community Organizer examines the garden bed to ensure that it is free of foreign objects that could damage the plowing equipment. Although The Garden Project's Community Garden Guidelines (Appendix H) requires gardeners to remove all string, wire, tomato cages and poles by the end of each gardening season, a significant amount of this material often remains in the garden over the winter. During the spring of 2002, Foster Park contained an exceptional amount of gardening material requiring removal. This indicates that few gardeners complied with the fall garden clean up requirement.

Following the garden clean up, soil preparations begin using a roto-tiller attachment on a small commercial tractor. Garden soil preparations at Foster Park usually occur in early-May.

Once the soil has been prepared, the next step is to stake out the individual garden plots and assign them to individual gardeners for use. This is generally the first point at which gardeners become actively involved in the process. The Community Organizer schedules and coordinates a "plot assignment meeting" and encourages all registered gardeners to attend. The plot assignment meeting is generally scheduled to occur within a couple of days following soil preparations and is normally scheduled on a weekday evening or weekend morning. In 2002, the plot assignment meetings for the Foster Park and Paradise gardens occurred on Friday, May 24th at 5:30pm and Tuesday, May 28th at 5:30pm, respectively. Fewer than fifty percent of the registered gardeners attended the plot assignment meetings.

4.4) Plot Assignment

The plot assignment meeting serves three purposes: to delineate and define the individual garden plots, to assign plots to the individual gardeners and to provide seeds and information including a list of garden guidelines (Appendix H) and information about the warehouse. The Community Organizer begins the meeting by explaining the garden layout. The physical layout is a pre-designed grid of evenly spaced, equal sized plots and walkways (Appendix A). A majority of the garden area is devoted to spaces assigned to and controlled by individual gardeners, with few common areas designed for use by all gardeners. The only common area in Foster Park is a demonstration area and perennial flower garden. Foster Street physically separates this area from the main garden. The Paradise section contains no community areas accept for the immediate area around the compost bin and water barrels. After confirming the general garden layout, gardeners then work with the Community Organizer to stake out the individual garden plots to match the design using a measuring tape and wooden stakes. Individual garden plots are delineated by wooden stakes driven into the ground at each of the four plot corners. A numbered stake driven into the center of the plot identifies the plot. This assists gardeners in finding their assignment.

Gardeners receive a plot assignment following the completion of the staking procedure. Returning gardeners are given first priority in plot assignments. A returning gardener will generally select the same plot from year to year but they are free to accept a new assignment. Once the returning gardeners have received their assignments, the new gardeners begin choosing their plots. Priority is given to those individuals who submitted a registration form earliest in the year. Garden plots are held for those registered

gardeners who do not attend the official plot assignment meeting. The Community Organizer contacts these individuals and makes arrangements to assign a plot.

After the plot assignment has been completed, the Community Organizer distributes the Community Garden Guidelines (Appendix H) and provides additional general information on the program and important site-specific information such as location of compost piles, water access, etc. Once this is completed, the Community Organizer distributes vegetable and flower seeds to the gardeners. From this point on, gardeners are responsible for their individual plot and must begin planting within two weeks.

4.5) Program Resources

To meet its self-help goal of assisting low-income residents to grow their own food, The Garden Project provides people with the supplies and materials required for gardening. In terms of physical resources, The Garden Project operates a gardening warehouse out of which seeds, seedlings, tools and fertilizers are distributed to gardeners free of charge. Individuals, local businesses and corporate donors donate these resources to the program. Most significantly, the program provides access to land for gardening and coordinates spring and fall soil preparation and improvement activities.

Foster Park is unique among the 18 community gardens administered by The Garden Project in that gardeners enjoy greater access to gardening resources and staff members. This additional access is due to the location of the program's warehouse adjacent to the Foster Park garden. The warehouse serves as a storage and distribution center for gardening tools, seeds and seedlings. Additionally, the warehouse housing a

small lending library containing books, magazines, pamphlets and other printed materials related to gardening. During the 2001 gardening season, 75% of Garden Project participants received free supplies from the program.

The warehouse structure is a former community activity center owned by the City of Lansing Parks and Recreation Department on which The Garden Project holds a 10-year lease. This $1 per year lease covers both the use of the warehouse, the Foster Park garden space and four other community gardens that are located on City-owned properties. The warehouse is an unheated cinderblock building measuring approximately 30' by 30'. The building has year round electrical service and seasonal water and telephone service. There are also two non-functioning restrooms in the building.

The warehouse is open and accessible for a limited number of hours each week during the gardening season, normally in 2 –3 hours blocks of time. During these times it is staffed by the Community Organizer who is occasionally supported by volunteer gardeners including some Foster Park gardeners. A majority of gardeners visit the warehouse during the months of May and June with warehouse usage dropping dramatically in early July. As a result, the warehouse hours are decreased in mid-summer and the warehouse closes for the season in September. During the 2002 gardening season, the warehouse hours were expanded from 92 to 153 hours to increase gardener access to staff and resources. The warehouse opened for the season on May 24th and closed on September 27th. In 2002, the warehouse was visited over 400 times by gardeners representing Foster Park and all other community gardens administered by The Garden Project.

CHAPTER 5:
FINDINGS: THE GARDENERS AND THEIR MOTIVATIONS

5.1) Introduction

This chapter outlines the study findings related to gardener background and demographics as well as the benefits of gardening that motivate people to join and continue participation in the program. The use of direct quotations from study participants is intended for illustrative purposes rather than as a comprehensive record of comments.

5.2) Entry into The Garden Project

Of the 20 gardeners interviewed, eight recalled that they were introduced to the program by a friend who is typically another Foster Park gardener. Five gardeners discovered the program by responding to a sign or pamphlet advertising the program, five were referred to the program by Michigan State University (MSU) Extension Service personnel, one through a message posted on an e-mail list serve and one through a story in the newspaper.

Table 1: Method of Introduction to The Garden Project

Method	Number of Gardeners
Friend	8
Sign or promotional pamphlet	5
MSU Extension Service	5
E-mail list serve	1
Newspaper article	1
Total	20

> "A friend of mine's girlfriend. She was a gardener here at Foster. And she tried talking me into it one day. She was like, "I'll be gardening down there. We can look after each other's plants". And you know, by the end of the night I was signed up for The Garden Project." – Darren

"I was talking to a friend of mine and... I was telling him I was gardening at home but I was sad to be leaving my plants because, you know, I was moving away from my mom's house. He said, "Well I'm involved in The Garden Project" and he gave me, I don't know, either your information or a newsletter or something." – Eve

"There was, for just a short time, maybe two years, there was a community garden by one of the elementary schools. And the first year that that opened up, these friends of mine, well their neighbors said, 'Come on have a garden"." – Nancy

"I saw a sign about The Garden Project that alluded to growing your own food. Well that appealed to me a lot because I was very poor at the time. And I thought, "Wow! You get free land and grow your own food. I'm gonna look into this." And that's how I got started." – Andrea

"I heard about it through the Food Bank. I get food from there and there were some pamphlets telling about the gardens. So I was interested." – Mary

"Well, at one point I was really hard up for money. I was really broke and I got this thing from.... I don't remember where it was from. It was a booklet of community resources. So it was just one of the things that I checked into and it just seemed, you know, a good thing to do." – Olivia

5.3) Gardener Profiles

Four types of data were collected to more fully understand who participates in The Garden Project. These included: 1) household/demographic data; 2) educational background: 3) prior gardening experience; and 4) food security status. A majority of the household/demographic data was collected from The Garden Project's Gardener Database, which contains self-reported characteristics including household size, income and race. Home ownership, educational background, prior gardening experience and food security status were determined during participant interviews and is unavailable for those individuals not participating in this study.

5.3.1) Household Demographics and Sample Representativeness

Specific data on the individuals sampled in this study is displayed in column 4 of Table 2. The sample is divided into two sub-populations, those individuals who continued their participation in the program after their first season (column 2) and those "non-continuing gardeners" who left the program during the gardening season or failed to return for an additional season (column 3). Table 5.2 also compares the sample to the entire study population of 42 Foster Park gardeners (column 5) and all 316 community gardeners registered with The Garden Project in 2002 (column 6).

The data suggests that the sample of gardeners participating in this study fairly well represent the total study population (i.e., the 42 gardeners) in terms of household size, income and head of household. A majority of the households consist of only one or two individuals and are most often headed by a single female. The racial make-up of the study sample differs somewhat from the total gardener population in that the sample is predominantly white as opposed to a more racially diverse population.

A comparison between the sample demographics (column 4) and those of the entire population of community gardeners registered with the program (column 6) highlights two primary differences. First, the sample of Foster Park gardeners consists of smaller household sizes with a majority of the sample representing households headed by single females as opposed to The Garden Project population in which a majority of households are headed by married or unmarried couples. Second, the study sample differs significantly from that of The Garden Project population in terms of racial characteristics. The study sample represents a significant majority of white households

as opposed to the more racially diverse total population of individuals registered with The Garden Project.

Table 2: Community Gardener Demographics

	SAMPLE				
	Continuing Gardeners	Non-Continuing Gardeners	Total	Population	Garden Project
Number	13	7	20	42	316
Household Type					
Single male with or without children	8% (1)	14% (1)	10% (2)	20% (8)	11% (34)
Single female with or without children	62% (8)	29% (2)	50% (10)	42% (18)	26% (81)
Married or unmarried couple with or without children	30% (4)	57% (4)	40% (8)	38% (16)	56% (178)
Unknown	N/A	N/A	N/A	N/A	7% (23)
Household Size					
1	47% (6)	29% (2)	40% (8)	33% (14)	22% (69)
2	15% (2)	43% (3)	25% (5)	29% (12)	26% (81)
3	15% (2)	14% (1)	15% (3)	17% (7)	19% (60)
4	15% (2)	14% (1)	15% (3)	14% (6)	11% (34)
5 or more	8% (1)	0% (0)	5% (1)	7% (3)	16% (51)
Unknown	N/A	N/A	N/A	N/A	6% (21)
Household Income					
Less than $21,050	77% (10)	43% (3)	65% (13)	64% (27)	49% (156)
$21,051 - $30,050	0% (0)	0% (0)	0% (0)	5% (2)	13% (40)
$30,051 - $34,850	8% (1)	14% (1)	10% (2)	7% (3)	9% (29)
$34,851 - $39,650	0% (0)	29% (2)	10% (2)	7% (3)	4% (14)
More than $39,651	15% (2)	14% (1)	15% (3)	17% (7)	17% (53)
Unknown	N/A	N/A	N/A	N/A	8% (24)
Race					
White	84% (11)	100% (7)	90% (18)	76% (32)	53% (166)
Black	8% (1)	0% (0)	5% (1)	14% (6)	9% (27)
Hispanic	0% (0)	0% (0)	0% (0)	2.5% (1)	2% (5)
Asian	8% (1)	0% (0)	5% (1)	2.5% (1)	28% (88)
Other	0% (0)	0% (0)	0% (0)	5% (2)	3% (10)
Unknown	N/A	N/A	N/A	N/A	6% (20)

These demographic differences between the study sample, population and the entire population of community gardeners registered with the program indicate that the sample is not entirely representative. Therefore, the findings in this chapter as well as chapter 6 cannot necessarily be generalized to the larger population of the Foster Park garden and other community gardens administered by the program. However, the findings of this study provide important new insights into community gardeners, particularly single-white females.

U.S. Census data (2003) reveals that the residents within Census Tract 12, Ingham County, Michigan, in which Foster Park is located, represent the following racial groups: 67.0% white, 26.0% black, 4.9% American Indian and Alaskan Native, 2.0% Asian and 0.1% Native Hawaiian/Pacific Islander. The average household size is 2.79 individuals with 21% of households headed by a single female and 31.1% by a married couple. The median household income is $27,159 with 25% of households earning less than $15,000 per year (U.S. Census, 2003).

The Foster Park garden lies in the center of a neighborhood bounded on the north by Michigan Avenue, Clemens Street on the west, Interstate 496 on the south and US-127 on the east. Twenty of the gardeners live within this immediate neighborhood placing them within 1800 feet of the garden. Thirty-one gardeners live within one half mile of the garden and six gardeners live greater than two miles from the garden.

Of the gardeners interviewed for this study, seven were homeowners during the time they participated in community gardening activities. All other gardeners rented either a home or an apartment. In the immediate neighborhood, 57.4% of homes are owner-occupied and 42.6% are rental units (U.S. Census, 2003). Four of the study

participants were foreign nationals hailing from North America, Africa and Asia. Additionally the four non-English speaking gardeners excluded from the study were foreign national from Asian countries.

5.3.2) Educational Background

Foster Park is located within one mile of Michigan State University (MSU). As expected, many of the gardeners are current college students. Eight of the gardeners are currently pursuing a college education (2 undergraduate and 6 graduate). All but one gardener has attained some level of college education. Forty percent of study participants have attained at least a bachelor's degree and 40% possessing a graduate degree (Table 3).

Table 3: Educational Profile of Study Participants

Highest Educational Level	Continuing Gardeners	Non-Continuing Gardeners	All Study Participants	U.S. Census Tract Data*
No College	8% (1)	0% (0)	5% (1)	35.4% (811)
Some College	23% (3)	0% (0)	15% (3)	37.3% (856)
Bachelor's Degree	31% (4)	57% (4)	40% (8)	19.1% (438)
Graduate Degree	38% (5)	43% (3)	40% (8)	8.3% (191)

* Census Tract 12, Ingham County, Michigan. Age 25 years and over.

The 2000 United States Census data reveals that 35.4% of residents living within the Foster Park area (Census Tract 12, Ingham County, Michigan) have no college experience. Of those residents with college experience, 37.3% attended college but did not earn a Bachelor's degree, 19.1% possess a bachelor's degree and 8.3% possess a graduate or professional degree (U.S. Census 2003). The educational level of study participants is generally much higher than the average resident with 80% of Foster Park gardeners possessing a minimum of a Bachelor's degree compared to 27.4% of neighborhood residents.

5.3.3) Prior Gardening Experience

All of the twenty participants in this study came into the program with some degree of gardening experience. Eighteen individuals commented that their earliest gardening experience was with a family garden. While, not all of these individuals fully participated in home gardening activities during their youth, it was cited as an important source of gardening inspiration.

> "I gardened with my mother as a kid, I used to dig potatoes with my grandmother, my great grandmother. I remember digging potatoes with her." – Pam

> "My parents had a garden when I was a kid and that probably kind of subconsciously put that in my head, that it was something I wanted to do." - Sherry

Those individuals lacking childhood exposure to a garden were exposed to gardening in their adult lives through friends or other experiences. Eight gardeners also came into the program with farm related experiences and prior exposure to community gardens, European-style allotment gardens and community supported agriculture (CSA) operations.

> "I grew up gardening with my mother. And, um she always had a community gardening spot for years and years when I was a kid." – Nancy

> "In New York where we lived, we were members of a CSA." – Ben

> "I worked on a small organic farm for 6 months in Traverse City." – Sherry

For a majority of gardeners, the community garden was their first adult experience with gardening. These individuals generally possessed few gardening skills upon their entry into The Garden Project.

> "[This was] my first year of really doing my own vegetable garden."

"This year is the first that I've ever grown my own garden myself with vegetables."

A minority of individuals were however, skilled and knowledgeable gardeners prior to joining The Garden Project. Three gardeners had completed the University Extension Master Gardener Program prior to their involvement in The Garden Project. A fourth gardener holds a Bachelor's Degree in Agriculture Education. One gardener described her gardening experience prior to joining The Garden Project. She had 5 years of serious gardening experience including Master Gardener training and was, "getting ready to get a greenhouse in and maybe take this commercially and sell at the farmer's market, that sort of thing."

Ten of the study participants have gardened as Foster Park for only one season, five for two to three seasons and four participants for four to five seasons. One individual has been gardening in Foster Park for 15 years and has been involved with the program from its inception over twenty years ago. A majority (14) of study participants use only one garden plot per season. Five gardeners maintained two plots and one gardener used three separate plots in both the 2000 and 2001 gardening seasons.

5.3.4) Food Security Status

The original purpose of The Garden Project was to serve low-income households dependent upon emergency food relief programs such as Food Stamps, food pantries and community kitchens. A predominantly low-income population, as defined by the United States Department of Housing and Urban Development (Appendix K), currently uses the Foster Park Community Garden. Of these, only a fraction of the gardeners have accessed an emergency food relief program. Four of the current Foster Park gardeners interviewed

have applied for and received Food Stamps to supplement their food budget. At the time of the interviews only one of these individuals was currently receiving Food Stamps. This is consistent with prior estimates that approximately 25% of The Garden Project's participants have received emergency food assistance through the GLFB (Chiang et al, n/d).

Two of the individuals who received Food Stamps commented that they were difficult to access and found that food pantries could provide food with fewer hassles. Olivia commented on her experience with Food Stamps by saying,

> "It was a lot of hassle. I don't know, maybe it was just me, that I was new to dealing with it but...you call your caseworker or whatever. They never get back to you or you can't get in to see them..."

Helen related a similar experience when asked if she had ever received Food Stamps,

> "I did years ago, but I haven't recently. My car is dead. I don't have a way to go and get it.... When I was getting it, sometimes it was just so far and of course back then I was still undergoing reconstructive surgery. I wasn't as functional as I am now. I just took my granny cart along. It took me what, 45 minutes to walk home, no big deal. If it's raining I've got plastic bags to put on the top and the bottom. But without the car it's difficult."

Both Olivia and Helen found other more acceptable sources of food including the use of their garden plot and a local food pantry. These gardeners, as well as two others, were the only ones admitting to using a food bank or pantry to supplement their food budget.

> "I do go to a Food Bank just to make sure, you know the Student Food Bank at MSU. That's just because, I used to volunteer there but it's nice to have you know, just a little bit of extra food so I don't have to spend the money on it." – Eve

> "...it's been since then [1997] that I was going to Saint Vincent and they give you two bags of what they feel is a reasonable supply. Then they give you a plastic bag. You have two packs of meat. One is usually chicken and one is ground beef, maybe." – Helen

> "Oh, St. Vincent's they have bread and flour. At one point one week they would have, or they would just give out whatever. And some times they

just had so much stuff that I couldn't carry it all home.....Yeah, you take a number and then when they call your number they have this, this and this and you know..." – Olivia

5.4) Gardener Motivations

Understanding why people choose to participate in community gardening is a useful starting point in understanding the individual's experience. Most gardeners gain a variety of benefits from participation with some benefits acting as primary motivators and others as secondary motivators. The motivation for and perceived benefits of participation can be classified into five general categories: access to resources, food-related, psychological, recreational and social. For example, a gardener may primarily garden for the benefit of fresh food but also enjoy the social benefits of meeting other gardeners or gaining access to needed resources that enhance the gardening experience. The relative importance of a given benefit may also change over time as a factor of the gardener's actual experience.

As displayed in Table 4, gardeners commenced community gardening with one set of expectations. In some cases these expectations were fully or partially realized. In other cases the actual benefits proved to quite different from the initial set of expected benefits. Most notably, psychological, social and recreational benefits were more commonly cited as experienced benefits than as initial motivation in engaging in community gardening. It is interesting to examine the motivations of the five gardeners who dropped out of the Garden Project. In three of the cases the gardeners' initial expectations were not fulfilled but in two cases (Gardeners C & N) the expected benefits were largely met by actual experience. These two gardeners experienced health problems that made the physical act of gardening in Foster Park prohibitive.

Table 4: Community Gardener Motivations and Perceived Benefits

	Initial Motivations							Actual Benefits						
Gardener	Food Economics	Fresh Produce	Organic Produce	Local Produce	Social	Recreational	Psychological	Food Economics	Fresh Produce	Organic Produce	Local Produce	Social	Recreational	Psychological
A	X	X	X	X				X	X	X	X	X		X
D						X						X	X	
E	X	X	X	X			X	X	X	X	X			X
G		X	X	X					X	X	X		X	
H	X	X	X	X			X	X	X	X	X			X
I		X	X	X					X	X	X		X	
J		X	X			X			X	X			X	
K		X	X	X					X	X	X			X
M	X	X						X	X				X	
O	X	X				X						X	X	
P		X	X	X					X	X	X		X	
R		X			X		X		X			X		X
S		X	X	X	X				X	X	X	X		
Left Foster Park but remain active with The Garden Project														
C	X	X	X	X					X	X	X		X	
L	X				X		X					X		
Left Foster Park. No longer active with The Garden Project														
B		X	X	X	X									
F		X				X	X						X	
N	X	X	X	X			X	X	X	X	X			
Q					X	X								X
T		X	X	X	X							X		

The benefits of participation in The Garden Project, like those of most community gardens can be classified as being either tangible or intangible. The tangible benefits are those that can be measured and quantified to some degree. These include the economic benefits associated with gardeners gaining access to land, tools and information free of

charge. In addition to these, access to garden produce, specifically fresh garden produce provides people with a tangible benefit.

The intangible benefits are those that cannot accurately be measured or quantified in a systematic nature. These benefits are typically highly personal and subjectively valued. The intangible benefits of community gardening include improvements to an individual's psychological, recreational and social environment.

5.4.1) Access to Resources

The purpose of The Garden Project is to provide low-income residents with the resources and support necessary to promote vegetable gardening. Officially, the program supports gardening through the provision of land, tools, supplies and educational support. Gardeners also report the existence of a third important resource, personal support, which encourages and motivates them to continue gardening even when faced with hardships.

Physical Resources

The Garden Project's 2001 Gardener Survey revealed that 74% of all gardeners received free supplies from The Garden Project warehouse with a majority of these being seeds, seedlings and fertilizers. Foster Park gardeners generally agree that the project provides ample resources.

> "Because of what was donated to The Garden Project I got to plant a lot of things that I never would have thought of.... I think if I were living in the city and couldn't garden, that would be frustrating to me." – Eve

> "I had no idea that there would be so many free plants I guess.... So, it sort of seems like they had a lot more resources available than I realized and I ended up duplicating that to a large extent." – Faith

> "Anything I want I can get from the Garden Project." – John

> "Why wouldn't you want to do this? You're given space, you're given tools, you're given seeds, you're given plants" – Katrina

Several gardeners noted that the Garden Project made gardening affordable thanks to the distribution of free garden supplies.

> "The resources that you offer to people is incredible... We didn't have tools and hadn't thought about investing any money into things like that. You know, to be able to come and have a plot where people are providing you with tools and seeds to get started is just incredible." – Lily

> "You don't have to have any experience to garden here. You don't have to have any money; you don't have to have anything." – Sherry

> "Well the project itself, I think is fantastic because if you don't have a lot of money it really helps you get started on a garden where as if you had to buy all your own tools and all your own starter plants it might be overwhelming and you'd never start. It might not be feasible because there is that big output of money in May and June and you might not have that much to spend. Then you'd be stuck." – Gina

The availability of The Garden Project's resources is also regarded as an important benefit that makes community gardening more attractive than home gardening.

> "I mean one of the real benefits of a community garden is that local businesses donate and you can get transplants and seeds and you can borrow equipment when you need it. When you're on your own its not available.... You know what, the other thing that's wonderful about this particular community garden? I had used the pressure canner a number of times and that's an expensive piece of equipment... It's certainly not in my budget, this year, or last year or the year before." – Nancy

> "I think, unless I had a really good space at home I'd use the community garden because of all the resources." – Iris

The second major resource provided by The Garden Project is access to land suitable for gardening. While a majority of gardeners rent their home or live in an apartment building without access to a private lawn, access to a gardening space is a basic need shared by all participants. For these individuals, The Garden Project provides a highly valued resource, making gardening a possibility.

"It was definitely nice to have a place to go because I have a basement apartment and that's it.... There was absolutely no other way that I would have been able to do that [garden] otherwise. To me, there was a very big difference between having a basement apartment and then having a garden space." – Faith

"Most of the people are doing this gardening I think because they don't have space at their own house. So, its kind of a substitute for home garden." – John

"I mean, I probably could talk my landlord into giving me some space but I don't even want to. Now, my mom's got a big yard...but you know it takes me 45 minutes to get out there."
– Olivia

Home ownership is enjoyed by only seven of the gardeners. Despite this luxury, yards in the Foster Park neighborhood tend to be small and largely shaded by mature trees. These facts make home gardening difficult if not impossible and while homeowners tend to have better incomes, without The Garden Project, they would have little if any opportunity to garden.

"I have just a little tiny yard, it's just really tiny.... I would definitely feel the loss if I couldn't grow my own vegetables just because I live in the city and have a dinky yard. Cause, I almost didn't buy the house because of that, because the yard was too small." – Pam

"In my backyard I was running out of sunny spots. I thought, "Oh this will be great, I can have a nice big vegetable garden of my own." - Tammy

"I've got my backyard garden but with the trees around, it limits what I can grow." – Helen

Educational Support: Formal Aspects

Providing educational assistance to gardeners is the second form of gardening support offered by the program. These efforts appear to be working given that seventeen gardeners report that their community gardening experience helped them to improve their

gardening skills. Formal educational support is provided to gardeners through the distribution of informational newsletters, workshops, a demonstration garden, access to the warehouse's lending library and program staff and volunteers. These efforts constitute a significant proportion of the program's human and financial resources.

Community gardening at Foster Park also creates additional, non-formal opportunities for gardener education. These informal educational opportunities are largely experiential in nature as gardeners simply learn through trial and error and simple observation of the garden and the actions of others. Conversations with fellow gardeners and random interactions with staff members also prove to be important sources of valued and credible information. These informal aspects appear to be a much more significant component of the gardener education process than the formal aspects.

Newsletter

The Garden Project distributes 10 newsletters each season to all Foster Park gardeners via the U.S. Postal Service. The newsletters contain a significant amount of timely gardening tips designed to assist inexperienced gardeners in overcoming current garden problems as identified by staff and gardeners, numerous recipes and invitations to attend workshops and promotional events. The newsletters also contain numerous references to the Foster Park warehouse, encouraging gardeners to visit and take advantage of the resources. While the 2001 Gardener Survey reveals that over 90% of gardeners find the newsletter to be both interesting and helpful, only one Foster Park gardener made reference to the newsletter during the interview.

> "Actually I think the newsletter was nice. I never really used any um....this is, I never used any...I found it had some nice, um recipes and things. But I never used them myself I did read it occasionally." – Quinn

Workshops

The development and delivery of gardening related workshops represents a second major educational effort. These free workshops are generally scheduled to cover seasonally important issues such as seed starting in the early spring, pest control during mid-summer and harvesting and food preservation during late summer. During the 2001 season, The Garden Project offered three workshops focusing on seed-starting, pest control, canning and freezing. The seed-starting workshop was held in early April and was attended by approximately 20 gardeners. However, for the pest-control and canning and freezing workshops were attended by only one and two gardeners respectively.

In 2002, The Garden Project received additional program funding to revamp its gardener education programs. A majority of these efforts focused on expanding the number of workshops and improving gardener access program resources. As a result, The Garden Project hosted eight workshops and demonstrations. These workshops included two seed-starting demonstrations, seed saving, harvesting/food preservation, two new gardener orientations and two informal gardener forums. To improve access, seven of these events were held at the Foster Park warehouse and demonstration gardens. A total of 49 gardeners attended these seven events.

Six gardeners, each of whom attended a workshop, identified workshops as sources of pertinent gardening information. These individuals generally agree that the workshops are useful and accessible.

> "The classes are offered and every year they ask, you know, is there something you want. Let us know. So the door is open." - Helen

> "Oh, the seed starting workshop. That was great too. I never, I tried it this year and I'll probably do a lot more next year. I never tried that before." - Gina

"And I took this freezing and drying class and that's been really helpful."
- Iris

However, three gardeners (two of which have attended a workshop) noted that they are not necessarily practical or convenient.

"I've been a pretty busy person, it's been very hard for me to participate in structured events that The Garden Project has sponsored....I went to several of those and learned a lot there, almost overload on those events [laughs] It just can't soak in, there's just so much information that you know, kind of becomes counterproductive after a point because you can't absorb that much, that quick. But um, here, you know it's uh, kind of move at your own pace." – Andrea

"I think that, I know that they offer workshops. I know that that is useful however, they are not necessarily practical. I often say, "yeah I'd love to can my tomatoes or yeah, I love to do this" but part of it is time constraint on my own life. It's just to busy to sit there, to even take time and go and learn." – Katrina

"Well, the problem is you know, the workshops are usually at night and my nights are pretty full. And you know I don't get down here in the evenings. I'm usually working or in the middle of a project and uh, you know I don't need to go to. A, I don't have time and I know pretty much everything they'll be teaching at the workshop." - Darren

Demonstration Garden

Michigan State University Extension trained Master Gardener volunteers maintain both a demonstration vegetable garden plot and perennial flower garden in Foster Park. During the 2001 season, Master Gardener volunteers used the demonstration garden to illustrate the use of various types of mulches. The demonstration plot, which is prominently located and accessible, included signs describing the mulching techniques and the purpose of the demonstration. The Garden Project encouraged gardeners to visit the demonstration plot through articles in the newsletter and e-mail messages. Master Gardener volunteers were available to answer questions during normal warehouse hours.

During the 2002 gardening season, the Master Gardener volunteers focused a majority of their efforts on the perennial flowerbeds. Because of this shift in priorities only half of the demonstration vegetable plot was planted by a volunteer. However, during mid-summer, this individual notified The Garden Project that she would no longer be involved. Maintenance and harvesting then became the responsibility of the Community Organizer. As a result, the educational potential of the garden was squandered.

> "Last year, I thought they had somebody that did that vegetable plot [demonstration garden] and they kept it up pretty good. This year it was just nothing. I think it's sad. You know that was a good plot and it was easy to water. Maybe somebody else could have been using that. And I don't think those plots had as many weeds in them and so forth." – Rachel

Warehouse Library and Interactions with Gardeners and Staff

Two additional aspects of educational support include access to printed gardening information and conversations with Garden Project staff at the warehouse. Access to printed materials including books, magazines, Extension Bulletins, seed catalogs and brochures is generally limited to the seasonal hours that the warehouse is open. Staff members including the Community Organizer, Director, Gleaning Supervisor and Office Support personnel are accessible by telephone and e-mail Monday through Friday from 8am until 5pm. Staff can also be contacted during the hours of operation at the warehouse and during intermittent garden visits. Gardeners generally value the information provided by the staff and warehouse volunteers.

> "I think you did a good job telling people what to expect, like how it worked, where your plot would be and what the rules were in the garden. What to expect with like, the dryness of the summer and what to expect from the community around. They might walk through and pick stuff and so I sort of shaped my garden based on that." - Eve

"...The people working in the warehouse had different tips of what to do.... The warehouse was giving us information on how to deal with it [insect damage] in an organic way." – Lily

"I just read the little book that you had given me from The Garden Project and I think it helped here because I was doing it myself." – Sherry

Educational Support: Informal Aspects

Gardener education is achieved primarily through informal methods such as simple trial and error, observation and conversation with other gardeners. Gardeners generally find these methods to be the most useful and appropriate.

Trial and error

Trial and error is a valued form of gardener education. This method of experiential learning is widely practiced by gardeners.

"I just thought, "No, I'm just gonna try this." And a lot of things worked out nicely. There were a lot of things where I had no idea they would be so big or so small and I would probably do that again, just refining the basic trial and error." – Faith

"There are certain things I planted that never came up. I'm like "what, what did I do wrong?" [laughs] Carrots, my carrots never came up. Then I just started noticing if I planted and the soil was right and it rained at it was you know, everything was right it would work. So over the summer I would just be much more aware of the weather and the wetness and how I could save time. If I did something at the right time it just worked out so much better." – Iris

"It's always a learning experience. It's always something new each year... I read a lot but book knowledge doesn't do squat. I think you really need to go out there and get in the garden and do stuff. Really all the book knowledge in the world isn't going to do anything when you don't get rain for two months."
- Katrina

"I just got used to the idea that everything you try is an experiment and to accept the fact that it's not going to work, it's never gonna work the way you think it is. But, every time you do it, you'll learn something that will help you do better the next time." – Pam

Observation of other gardeners

Gardeners gain a great deal of experience through the careful observation of their plot and those of their neighbors. Observation inspires gardeners to attempt new techniques and avoid pitfalls. Gardeners enter the program possessing a broad array of gardening experiences as evidenced by the unique design, mix of planting material and cultivation techniques found in the individual garden plots. This diversity in gardening techniques provided an excellent opportunity for learning through observation for eight of the gardeners.

> "You learn what works and what doesn't. Just by doing, watching others. Seeing what other people have done sort of gives you ideas." - Ben
>
> "I had no idea that you actually could pack so much into such a small space. They had an interesting way of alternating things so that they, and stringing off different areas so they had control over exactly what was in what location. So, seeing the layout of other ones [gardens] was interesting." – Faith
>
> "[I learn] mostly by kind of watching what other people do and what they succeed with. Yeah, I have learned a few things from that." – Pam
>
> "We like to see if this works better than this or the other, what and how and all this stuff. And you like to watch somebody else do something if you're not doing it, to see what they can come up with." – Rachel

Conversations with other gardeners

Informal conversations with fellow gardeners are another significant method of gardener education. The presence of other gardeners facilitates conversation and learning in the garden. Conversation allows people to both ask questions about the gardening techniques they observe and to explain their own methods to others. Conversations with fellow gardeners is the most valued method of informal gardener education.

"... I've gotten all the knowledge I can get from a book. Now it's to the point where I have to go and interact with people to find something." – Katrina

"But I gardened with my mother from the time I was a little kid and I can remember a couple of years ago I was out here in my spot gardening away and um, there were a couple of new people, you know in a plot near mine. I hadn't met them and they started talking, we were talking and they started talking about what they were going to plant, what we were going to do. And they said, "Wow, how do you know how to do all this stuff?" I was like, "I don't know. How do I know how to do all this stuff?" ...And then I realized I learned everything from my mother. You know, just kind of observed it." – Nancy

"The Garden Project was nice because it was there but it was the people involved with The Garden Project that really offered the skills. So it was nice because you got different opinions." – Quinn

Motivational Support

The importance of informal means of gardener education shows that community gardening provides participants with more than simply the physical resources and formal educational support sanctioned by The Garden Project. Community gardening provides the environment in which people can develop and benefit from a motivational support structure of their peers and staff members. Seeing the successes of other gardeners and realizing that others face the same difficulties helps people to understand that gardening success is possible and that hurdles can be overcome. For four of the gardeners, this creates a sense of mutual support that motivates continued participation in the program.

"I wanted to have a community spot as well [as a home garden] because I felt the support was so strong in being able to do it there [Foster Park]. The processes are made easier for you somehow. You know, you come, it's cleared, you're doing it with people. There's a sort of level of motivation and assistance that helps you to go from one point to the next." - Lily

"You know it was really helpful, especially the first couple of years to be in a community garden as opposed to doing it on my own, was having people to talk to about things that are different in Michigan from

Minnesota. That was pretty helpful I think. I probably could have figured it out on my own but that would have been more work. So I especially appreciated that." – Nancy

"I feel like the garden program is so supportive.... I feel like there was always so much support and encouragement. I really appreciate that. I mean, it's helped me out at times...It's encouraged me to keep gardening even at times where I felt like I couldn't." – Iris

"...What an incredible resource The Garden Project has been and how easy everybody has made it for me and how supportive. I mean it's just been an incredible support network for me to learn more and meet the people that I live by... I'm really glad that The Garden Project is here so that I can do it myself. I can keep growing as a gardener, I can keep learning as a gardener, it's been really encouraging." - Sherry

5.4.2) Food Access

Since The Garden Project promotes itself as an organization dedicated to "Helping people grow their own food" it is not surprising that the food-related benefits of community gardening were nearly universal motivating factors behind gardener participation. Community gardening programs, including The Garden Project, generally promote the idea of increasing food self-reliance toward the goal of self-sufficiency. There is however, little evidence that Foster Park gardeners are motivated to achieve this goal of self-sufficiency. None of the gardeners revealed that food self-sufficiency was either a motivation to join or a reality of participation (Table 5.4). While some gardeners did produce a significant quantity of fresh vegetables, it is unlikely that the Foster Park Community Garden plays a significant role in the total quantity of food consumption. Program-wide, gardener estimates of the per plot value of garden produce hovered under $50 in 2001 with over 50% of gardeners feeling unsatisfied with their garden yield.

In terms of food-related benefits, the true strength of community gardening is that it provides people with the opportunity to gain a greater degree of control over their food

choices. This includes access to affordable, locally grown, fresh and often organically produced vegetables. Providing gardeners with greater access to these high-quality foods benefits the gardeners through an improvement in diet and personal satisfaction. It is this importance of food quality that is the primary food-related benefit of community gardening.

Improved diets

Nine gardeners noted that community gardening plays an important role in improving access to fresh vegetables which may in turn, increase the consumption of vegetables and by adding variety to the diet.

> "It has taken me back to the way I grew up. It has improved my diet since I moved away from home." – Helen

> "It definitely changes my diet. Like, whatever is growing in my garden. When I had beans, I ate beans everyday, I'm eating tomatoes everyday now and greens" – Iris

> "I definitely have a larger quantity of fresh vegetables than I would usually buy for myself. I don't usually go out and buy cherry tomatoes, but I come home with handfuls. I would say that I have more fresh vegetables." – Eve

For several gardeners, gardening provides an added dietary benefit as people seek out new ways to incorporate their produce into their diet.

> "I ended up, yeah, making things to incorporate what I had grown." - Faith

> "I mean I still have to buy meat and fruit. But I've made more vegetarian dishes and found that I don't need meat. It's good, why would I need that? It's better than hamburgers." – Gina

> "So, as far as cooking, I ended up having more diversity in the vegetables that I was using because they were the plants that were provided. So I was exploring the palate of the different vegetables that either I hadn't known before and there were different kinds of squash." – Quinn

> "Yeah you know I was never really a squash eater. It was when I grew some last year. No the year before that, and cooked it. I don't even know why I grew it. I think there was just some here and I stuck it in the ground and, and then I realized how good it was." – Pam

Control over food choices

While a majority of gardeners have access to sufficient quantities of food, they often feel that they do not have sufficient access to quality foods. Quality foods include fresh vegetables and organically grown/pesticide-free produce. Additionally, gardening allows people to control the specific varieties that they consume. The gardeners are generally otherwise prohibited access to these foods due to the high costs or the lack of availability at local markets.

> "When you're on disability, when you don't always get the kinds of food through other people that you would buy for yourself, to me gardening is that important..... and you're not stuck with what somebody else put on the shelf, not being able to ask any questions and having to take it or leave it." – Helen

> "I would have liked to eat more organic produce and organic produce is expensive so it's a good way of doing that. It's a good way of doing that. You know, ordinarily to make the budget go you maybe would be buying non-organic food. So, it has increased the quality of the food for the family to eat." – Lily

Control over Production

A majority of gardeners in this study are skeptical of the quality and social/environmental costs associated with contemporary food production. The act of gardening is a personal form of food production in which the gardener has complete control over the method of production. Locally grown and organically produced vegetables are highly valued by 13 of the 20 community gardeners interviewed. Gardening allows these individuals to circumvent this system by providing foods that are personally acceptable to the individual. This increased

personal control over food choices provides the individual with a sense of control and peace of mind.

> "You're not at the mercy of a large farm." – Ben

> "You sit there and you think about lettuce and even if you go to the local store and you buy that little tray of organic lettuce that you get from Earthfield Farm or where ever the hell it is, from California. I buy that and it's great but how do I know it's not an organic factory farm?"
> – Katrina

> "I wanted to be more in control over where my food came from, because it's a big concern for me." – Sherry

> "Oh, well, I try to eat organic and I can't eat organic unless I grow it. I can't afford the food costs, you know. That's just over my head... In an ideal world, I'd love to see bio-regionalism and sustainable agriculture here. But at this point I think we're just lucky to get it from anywhere. I know a lot of things are grown in Mexico now and that's crazy. I mean the amount of resources you're using to truck them across country is just insane."
> - Crystal

> "It's given me practical means to do something about my desire to eat healthy food, to have some control over you know, the food that I eat and there is nothing that tastes better lot of times and you have control, you know what goes into the food you are eating." – Andrea

> "..You know you get things shipped in from some other country or other state and yeah, you don't know what it's been exposed to. You don't know the environment it's grown in, you don't know how many hands have been on it." – Helen

Control Over Variety

Gardening allows people to control the specific vegetable varieties that they grow and eat rather than relying upon the relatively narrow selection found in food stores. This is another form of improving personal control over food production.

> "Well peppers are an example. I suppose you could buy several different varieties but there are so many available to grow that it was kind of nice to have a few different and try them out." – Faith

"If I go to the grocery store and I see vegetables sitting there and I don't know anything about them, I'm not very likely to buy them unless they have some recipe sitting there and I'm bold enough to try it. But if I have these vegetables sitting here and they're just going to go bad and somebody says, "Oh, you ever tried eggplant parmesan? You don't even need meat." – Quinn

"It's just as easy to try several different varieties as one if you're doing it yourself. So, I mean just controlling what you plant controls what you have access to." – Faith

Control Over Taste

Gardeners generally agree that the taste of fresh vegetables is superior to that of store-bought and commercially produced varieties. With the exception of two gardeners, commercial varieties of vegetables are viewed as inferior in quality to garden produced vegetables.

"I have an opportunity to grow my own tomatoes instead of eating that crap you buy at the store. Why wouldn't you want to garden? Why wouldn't you want to do this?" – Katrina

"Yeah and I don't normally eat squash but this summer I ate tons of squash. It just tastes so much better than if you buy it." - Gina

"I eat fresh vegetables all the time so I could get it at Meijers [supermarket] but it's much cooler to have something I've grown....they taste better because vegetables in the grocery store are picked earlier and they ripen in transport. So when you get them out of your garden, especially tomatoes, they taste totally different. Same with carrots." – Eve

Abundance

Several gardeners expressed a sense of surprise upon discovering that the garden provides an unexpected bounty of produce. This abundance inspired new and inexperienced gardeners to continue with the program. Since the garden produces more food than can be consumed by the gardener, it provides people with the opportunity to share their food with others.

"It was nice because I was able to grow a lot of things in abundance where I would have only bought one or two. You know to last several weeks. And to have...it just wasn't much more effort to have, say tomatoes, to plant many of them rather than just a couple." – Faith

"Usually if you do well with the garden you can get more than you just need for yourself." – John

"I didn't think I'd be as successful as I was this first year. That was kind of nice for my first garden. I expected some things to die or they wouldn't make it, especially some of the things I'd never grown before like cauliflower, broccoli, cabbage." – Gina

"The first year that we gardened we had no idea what would happen. We couldn't believe the rate of growth.... even just the quantity of growth, I couldn't believe it... and we had a lot of produce there that we didn't collect one year and I'd have been happy if someone took some of it." - Lily

5.4.3) Psychological Benefits

Gardening provides a number of psychological benefits. These include a sense of accomplishment or pride emanating from the gardening experience, feelings of relaxation and the enjoyment of the aesthetics and creative nature of gardening. For some, gardening is also an important part of the individual's identity creating a positive effect on mental health and a sense of well-being.

Sense of Accomplishment

Gardening is often a challenging activity. Successful vegetable gardening is dependent upon not only the skill and knowledge of the gardener, but also upon luck. Weather, pests, vandals, disease and a host of other relatively uncontrollable factors work to make gardening a challenging activity for even the most experienced and competent gardener. Most gardeners experience some level of frustration over their inability to maintain complete control over their plot. Over-coming a host of barriers and seeing one's efforts produce beautiful flowers or edible vegetables they feel an often-

overwhelming sense of pride and accomplishment that leads to an improved sense of self-confidence.

> "Gardening is work, people sometimes, for whatever reason, don't want to do that work. Even I know people that do garden get real enthusiastic and then the long haul comes and they let it go. They don't stick with it. Um, that's kind of the part I enjoy, because I'm the kind of person that, once I start something, I try to stick with it, try to learn something and it makes me feel good to be able to do that." – Andrea

> "It [gardening] showed me that I'm capable of going out in the garden and producing stuff. Like every time I go out in the garden I pick something and go, "This came from my garden!" I always showed people when I got home like this is really cool. So I feel more capable...But I like the idea of being able to go out, put my time in and get fresh stuff out of it." – Eve

> "It gives peace of mind, it makes one a more content person, it gives you that little bit of independence feeling, you know, at least I can do this for myself." – Helen

> "Well it's so rewarding. I felt like all the time I put in I got back like four fold. Beautiful tomatoes. So it just made me want to spend more time there.... I mean, because I feel like it was so frustrating and I'm so proud of myself that I grew something to eat.... I just felt so pleased that I'd been able to grow this stuff. It's not easy." – Iris

> "It's nice to see the fruit of your labors. No pun intended. It's just a good feeling to know that, "Wow I grew this!".. I gain confidence through my actions of gardening... There is a satisfaction in eating something that you've grown." – Katrina

> "I think of it as a positive experience because it is a nice symbol and shows people that if you put an effort forward, you can get something back." – Quinn

> "I think the top thing is seeing what I've done and knowing that I did it myself.... The growing your own food, the seeing what you can do with your own hands and seeing how, just with a little bit of extra time what you can do by yourself and you know, making people feel good about that. It makes people feel a bit more in control maybe of their lives... It feels really good when I see people driving by and they pick their head up even if they don't know what I'm doing out there" – Sherry

Relaxation

The garden also provides an important environment in which a gardener can relax and recover from stress. Gardening is an important personal therapeutic activity that provides people with a sense of peacefulness and calm apart from their everyday stresses.

> "It's nice being able to go out there and relax. I remember some of the best times I had early spring was when it was just a cool morning and the sun was up. One of those early summer late spring days when you know it's going to warm up eventually but it's kind of misty in the morning and you just go sit in the garden and it's quite and you're weeding or pulling peas and it's beautiful." – Katrina

> "I mean it was just a really nice stress reliever. Calming. During a busy day it was just nice to go to the garden.... It's therapeutic, getting your hands dirty." – Ben

> "I really had a lot to work with and that was certainly a big stress reliever for me once I was there. That was really a big benefit." – Faith

> "I'm growing it [garden] because gardening is very healing, it's meditative. I like, it's good for the mind, body and spirit but it's also good for the tummy....Feeling good within yourself.....Um, spiritual, meditative, calming." - Helen

> "It was just a relaxing place for me to go in the garden. This was not vegetable this was just flower and I don't know. Sometimes it just helped me to keep my sanity I think." – Rachel

Worldview

One benefit of community gardening is that allows individuals to act upon their worldview or personal belief system. Seven of the Foster Park gardeners can be described as "Bohemians", self-directed individuals who make personal choices consistent with their ideals rather than those that are socially dominant while placing a high value on life's simple pleasures.

> "I haven't exactly taken a vow of poverty, but I've enjoyed not having to worry if my stocks were doing okay in the market, you know, my land, here, you know, I've kept it pretty low-key. As long as I can pay my bills

and have time to do gardening and you know, writing poetry and spending quality time associating with friends and practicing yoga, I find it produces a pretty happy existence." – Andrea

"I was gonna say, the girls that I was living with, one of them, she thinks of herself as a hippie. She wears tie-dye and you know wears all sorts of paisley and stuff. That's totally cool but um like I sort of, I think of myself sort of in those terms but not really. Like, I don't wear that. I don't have to subscribe to that whole idea of it, like whatever the stereotype is. One of my friends came out to the garden with me. She said, "you sew, you cook, you garden, you're more of a hippie than she is." [laughs] So, I keep going back to that and not to toot my own horn but I think that's more what it's about. Not the image, I'm more into the real stuff." – Eve

"I just don't embrace some people's values of how to raise a good crop. My values are very different." – Helen

These individuals are generally well educated yet choose low-income occupations and lifestyles. They generally hold negative attitudes towards the dominant American social, economic and political system and value local, community-based systems.

"I don't like big corporations, just in general. Because they move into a town and they sort of destroy all the local stuff, local infrastructure. That's frustrating. I go to Meijer because I need stuff but I'd prefer to go to the local store you know, just for the community's sake." – Eve

"You know, it's just really too bad. We've got a really manageable sized city and I don't think anybody really pays attention to what's the possibility here. I think people are just really blind Capitalists in this area thanks to Oldsmobile and the big institutions." – Crystal

Gardening supports their lifestyle by providing an expression of their beliefs.

"I just think it's so important to be involved with, giving yourself some chance to work with plants and the earth because that's just becoming so under rated in our society. We've become people who spend more and more time on telephones and in front of computer screens. I mean look at the obesity problem we have in this society and gardening definitely is a blow against the problems of sitting in front of computer screens so much and on the telephone so much, I'm sure there's gonna be cell phones [laughs hard] in the garden.... It [gardening] helps me walk my talk yeah,

if you will and I hope to always be involved in gardening till I die, pass on to the next life whatever."
– Andrea

Gardening as a form of personal identity

For some, gardening is an integral part of their self-identity. Having access to garden is an important component of their life. Gardening allows these individuals to feel connected to their cultural past and their families.

> "If you look at my roots, that's the way I grew. You know, you are what you are." – Helen

> "Having access to a garden, I think, is important to a family....Yeah and gardening it's sort of something that roots you again really." – Lily

> "In my country, Zimbabwe, everybody is a gardener.....That's how people live in Zimbabwe. People do their own, they grow their own crops, their own processing. It's not like here where we buy food from the shops, no. They grow their own food there. So I was used to being with my mom, sending me to the garden to gather food. When I came here it was most difficult for me, I wasn't able to do it." – Mary

> "You see, I grew up participating in the community gardens. To me it's kind of like riding a bike. It's just something you do when you live in a city.... I mean I kinda grew up with the idea of growing vegetables and canning and freezing.... So to me it's almost up there like wearing clothes, you know it's just what you do." – Nancy

> "Other people, you know, didn't grow up with gardening, their parents might not cook, so they just don't know how to do it. It's not just hard, it's just that they don't know how and they don't think of that as part of what an adult person does. It's not part of their identity. It's definitely part of mine." – Eve

Creativity and Aesthetics

Gardening provides a creative outlet and the opportunity for people to enjoy the aesthetic beauty that gardens provide. Gardening provides a form of personal inspiration and provides people with an opportunity to enjoy the aesthetic quality of plants. One

gardener uses her prominently located plot to display a piece of stained glass artwork surrounded by a carefully arranged flower bed.

> "You know, the inspiration of doing it makes you do it. It's not something that should be a chore... The main draw I think was the whole you know, creating this, well creating a garden. Enjoying this place where you could go and just, it's almost like playing." – Quinn

> "[Gardening] keeps your hands and hopefully your soul in touch with the creative Earth." – Andrea

> "The joy of gardening is kind of intangible. Everybody has the own different perception about what that really is. So it's not real easy to describe in words. That's the best part of gardening. You can't get that anywhere else." –Katrina

Mental Health

Gardening also contributes to an overall sense of well-being and promotes good mental health. Gardening has helped two gardeners to cope with and overcome episodes of serious psychological depression. For another, gardening has helped to recover some degree of mental health that was damaged as a result of a serious accident.

> "Spiritually, emotionally it's healthy. That's what I would say the experience is about. Spiritually, emotionally it's healthy. That's what I would say the experience is about...I would have suffered depression, I would have had ill health without The Garden Project. I was very depressed at arriving here [in America] and living in a small apartment." – Lily

> "I've had trouble with depression, uh and gardening has always helped with that. I haven't ever been depressed when I was gardening...In all honesty and sincerity and seriousness, um, just the quality of time, just doing it, growing a garden whether it contributes a whole gigantic amount to a food budget, which it will and it can quite a bit. Just the, the contribution to mental health, to spiritual health is what community gardens provide to a community is probably as important as anything." – Andrea

> "You see, I was hit by the drunk driver and I had a lot of blows to the head. I've had to re-learn so much. It's not that I didn't ever know but it was lost to me. I was re-exposed to what I used to know. It's like, "yeah,

> I used to know that." I needed that. It [gardening] opened a door of learning or re-learning that I really needed. The kinds of things I wanted to hold onto that I had lost with all the bangs on the head. It's back again. I like that." – Helen

5.4.4) Recreational Benefits

Study participants generally perceive gardening as a form of recreation and not simply a food-production activity. As a form of recreation, gardening provides several personal benefits. First, gardening provides people with an excuse to spend time in the out of doors. Second, it represents a time to enjoy the nurturing of plants and an opportunity to connect with the natural world. Finally, gardening provides people with a no-cost and healthy form of physical exercise.

> "It's a nice past time. It's the most popular form of recreation in this country and a majority of that is flower gardening. But you get a reward just as much with fruit, tomatoes or broccoli just as you would with the blooms of a flower." - Katrina

Outdoor Commitment

Having access to quality outdoor recreation opportunities is an important part of the life of graduate students who spend much of their day indoors. While the Foster Park area offers numerous "traditional" recreational opportunities including basketball hoops, children's play equipment and baseball diamonds; the community garden is the neighborhood's only public opportunity for gardening. Successful gardening requires a personal commitment to tend and cultivate on a regular basis. For individuals seeking such an outlet, gardening provides an important chance to free themselves from the daily grind. One gardener was specifically drawn into The Garden Project as a means of coping with a difficult post-graduate assignment.

"Mainly, or to a large part, because of what I do all day, I'm never outside. So it was really nice to have some commitment where I needed to be outside." – Faith

"But mostly it's just so different from everything I do. It's like I get to take a break, I get to be outside and I get to do something that you know, the garden is beautiful and the food is beautiful. When things are not going well with my work, I have an office in the basement, and all of my work is around just like writing articles and working on a computer. It's a nice break from that and it produces something that is totally different from my work.... Like I can't imagine not having a garden because it's my excuse to be outside." – Iris

"The reason I garden, it was mostly because I like being outside" – Eve

Nurturing plants

Gardening is the act of nurturing plants. Many Foster Park gardeners experience a sense of fascination and are awed by the cycle of plant growth and the feeling of being connected with the natural world. While the Foster Park neighborhood contains a significant amount of green space, most of it is in the form of relatively sterile looking open grass fields dotted with the occasional shade or ornamental tree. Gardening provides people with a healthy alternative to this environment and an opportunity to learn about the cycle of life.

"Growing, seeing things go from seed. The growing experience, the nurturing, the complexities of helping things to grow well and eating the food that you've grown." – Lily

"I specifically decided to come back because it's nice to grow things.... It's kind of comforting, tending something. It involves a huge investment at the beginning of the season and a pretty large one at the end of the season if you're trying to process or collect your harvest but relatively when it's in the ground and you just watch it grow, it's pretty miraculous to stick a seed in some soil and add some water and light and bam you got food." – Katrina

"I think the thing that threw me into it was just being outside, to watch something grow and eat it in the end. I think that is one of the neatest experiences that most people don't have. You know their parents didn't

> garden or you know, they've never watched something grow, they've never cared for something like that. I think just that whole experience would be the best thing....You know plant, something, watch it, take care of it and to have something like that, that you can commit to. That's kind of an important part of it too. You know you can plant a garden but have to keep going back. That's an important skill to learn for life in general." – Eve

> "I enjoy watching the whole cycle, putting seeds in the ground, preparing the soil, putting seeds in the ground, watching the plants come up and weeding, then maturation where they produce fruit, then dwindling and death, you know, fall and winter, and then the whole cycle beginning again, the rebirth of spring.... I just think it's so important to be involved with, giving yourself some chance to work with plants and the earth because that's just becoming so under rated in our society." – Andrea

Connection with nature

Gardening provides an opportunity for wildlife enthusiasts to enjoy a bit of nature in the urban environment. Two Foster Park gardeners are extremely interested in promoting the welfare of wildlife and took steps to provide drinking water sources for songbirds and squirrels. One gardener placed floating wooden stakes inside the water barrels to allow birds the ability to access the water without becoming trapped in the barrel. Another gardener installed a shallow plastic bowl near the edge of the garden and dutifully kept it full of water for use by birds and squirrels.

> "You sit out there and the birds are in there and there are insects in there and you don't see that anywhere else in the park. I mean yeah there are birds and butterflies throughout the park because there is grass and trees and open areas and closed areas, but they are very attracted to that. So that's also attractive to me.... It's just nice to sit amongst the birds and the plants and all the other things." – Katrina

> "There might be an inclination to grow your food and want to produce a lot but also it's because of the connection we have with the Earth." – Lily

> "And because I can plant and can do things there that will provide habitat for birds and little animals in the city. And you know, I think that's really important for cities to try to get more spaces back to the point where, you know, they are welcoming to butterflies and birds and that sort of thing."

– Pam

Physical exercise

Gardening is recognized as a healthy form of physical exercise and is considered an important aspect of an overall healthy lifestyle by several gardeners. Gardeners must tend a relatively large garden plot ($625ft^2$) and haul water buckets to and from their plot.

> "It's good exercise, it's a great activity to do with your kids in the summer." – Nancy

> "I used to go to the gym, but it's better to go to my garden. Working in the garden exercises all my muscles. It is good exercise." – Mary

> "I'm being told at the moment that I'm reaching the age of health problems you know. It's gone beyond the bad eyesight now. You know the first question that the doctor asks is, "Are you exercising?" Then you think, "Oh I'm not." But I say, "I garden!" Hopefully, I see gardening as my get out for the exercise question. It is hard work actually. I mean over the past couple of years, I've been going to the doctor with pains because of gardening." – Lily

5.4.5) Social Benefits

As the term "community gardening" implies, it is an activity that takes place within a social context. While each gardener controls a specific plot within the garden, he or she is influenced by the actions of other community gardeners and non-gardening neighbors alike. These social influences can have a significant impact upon the attitudes of gardeners and ultimately these attitudes impact gardening success and willingness to continue participation in the project.

Study participants experience a number of positive social benefits including meeting people, sharing food and gardening experiences with others, developing a sense of shared community and a feeling of personal ownership and investment in the garden and surrounding neighborhood. Foster Park gardeners hold mixed opinions as to

community gardening's impact as a community development tool and the level of community-building that actually occurs. Fourteen gardeners believe that their experience resulted in a greater personal sense of community while six gardeners did not experience a greater sense of community.

Meeting People

Most of the gardeners who participated in the study are quite gregarious in nature and enjoy the opportunity to meet others in the garden. Several gardeners are self-described "people persons" who believe that meeting other gardeners is one of the primary benefits associated with community gardening. Some find the experience a useful method of meeting people with similar interests and personal values.

> "You know I'm a people person. It always seems like people who garden are always pretty thoughtful, pretty kind, considerate people." - Andrea
>
> "I've met people from all over the world gardening next to me. Nepal last year. This year.... Zimbabwe. There's Asia, Africa right there you know. And people from all over the States too," - Andrea
>
> "It's a pretty cool idea that you can meet people and form community through gardening. We wanted to gain, you know food, obviously, but we also wanted to meet people. Meet a similar community; meet people who had similar values. We'd hoped to do that through the garden." – Ben
>
> "You know I've made new friends obviously meeting people from around the neighborhood and from different walks of life. And granted you know you meet people no matter what you do.... But the advantage of gardening is that it's not a time-oriented task... Here you can start to talk to somebody and you can finish your conversation and get done what needs to be done." – Darren
>
> "I was on my own with the children. You know, what do you do, how do you find.... how do you meet people? And so, if you're gardening people generally, I think, have the same focus in their lives, a certain kind of love of nature that I think you have to have to do that. That's what I found with people." – Lily

"The people that I met here were so incredible and so nice to talk to.... I mean it's just been an incredible support network for me to learn more and meet the people that I live by....meeting some of the people in the other neighborhoods that I never would have known." – Sherry

Sharing Food

Gardeners enjoy food on a social level as well. Sharing food with others gardeners, friends and family is an important aspect of gardening. The garden provides people with access to an abundance of high quality foods that are valued by both the gardener and the individual receiving the gift. The sharing of garden produce is an important activity that would not otherwise be possible without access to a community garden. Sharing food enables gardeners to make new friends and share the rewards of their labor with others.

"[Through gardening] I had the opportunity to reach out to more people by giving vegetables." – Darren

"I love having the vegetables in the summer. I love being able to share them. Like I said, I don't have any friends that garden except for David so I like to be able to, and I like to cook. So the whole thing is like cooking and giving it to other people. Its just addictive." - "Iris

"I like gardening because when I grow something like this time I grow a lot of tomatoes, I just like to give some tomatoes to people. My neighbors, my friends, I give them free tomatoes and they really appreciate it... I have a lot of them [tomatoes] that I give to my friends. You know you make friends by just giving. You know I like to give because people appreciate it so much." - Mary

"One of the reasons that we are growing is to share with people. There are Korean people around and they like to eat these kinds of vegetables. Usually if you do well with the garden you can get more than you just need for yourself. Last year, if you remember we had lots of tomatoes. I took boxes of tomatoes to my school and to my neighbors. It is very nice to share this kind of product with people." - John

"What do you get out of Christmas? To share, I mean and I've made friends. I mean if you share with your friends it's a mutual trade-off. I made some spaghetti sauce with those tomatoes you gave me, why don't

you come over for dinner? Whatever. It was things like that. It's um, it's just probably mostly giving, yeah." - Quinn

Sharing Experiences

The sharing of gardening experiences is another way in which gardeners build a connection to others. Gardening is often a highly valued aspect of an individual's self-identity that people wish to share with others.

> "I share a lot with people too. You know it's a mutual sharing of information. It's a non-competitive sport.... I was down here [warehouse] sharing information with people you know taking a really active part." - Darren

> "I've had a lot of fun, yeah. I've tried to, like I said, spend a lot of time out here. More than I thought I would, but it's all been because I wanted to. I shared it with my boyfriend, with my mom, with my friends, you know tried to convince people to get involved. I've directed a few people toward The Garden Project website, let people know what to do and how to do it." - Eve

> "Then I made some other friends who aren't at the garden because like I would be at a department party and the person hosting it's wife would have a big garden so I'd talk to her. They were very interested in the community garden although they have, just as an idea, and they were the ones who loaned me the wheelbarrow and extra herbs and stuff. So I've made friends and contacts outside the garden by sharing information." - Iris

For some gardeners, the sharing of information and personal gardening experiences is equated with teaching others about gardening techniques.

> "I was teaching them, telling them. Basically they didn't know anything. They were coming with like four people and sitting down trying to do things. So I was teaching them a lot." - Mary

> "I guess I wanted to reach out to people in my community about some alternatives to using chemicals on their gardens and some easier ways to get things done in the garden. That's what I wanted to do, to learn things for myself and help others mostly, about some alternatives.... I guess for me it would be helping people feel like they have more control over their garden more so then even using chemicals. Helping people feel, you

know showing people ways they can improve their garden without resorting to pesticides and stuff like that." - Sherry

Sense of Community

Community gardening helps to foster a sense of community for gardeners. This sense of community involves feelings of being connected with neighbors and the social web of the neighborhood. Watching out for one another, interacting with neighbors and working together are important aspects of community.

> "I'm a people person, I like being out in the community and I like this spot in particular because it's close to my house, it's easy to get to and it's my neighborhood you know. We tend to, American society, withdraw into our own little worlds and don't interact so well a lot of times, and fear our neighbors even. And a community garden facilitates a healthy way to be in interchanges, relationships between people in the community. I try to be friendly and I think that makes a big difference. Try to be a good part, positive part of the community by gardening." - Andrea

> "I don't expect it [community gardening] to be, "Oh, it's one big happy family and everybody gets along." But I really, you know, it's nice to know your gardening neighbors. You kind of watch out for each other. You watch each other's back." – Katrina

> "I guess the first benefit that I would highlight would be, I guess the community aspect and getting to know people in your community and keeping your food from your community in your community, grown by your community. I think that's the most important thing with The Garden Project is getting people together a little bit even though we all have our individual plots.....I think that the way that people feed off each other in the garden is really important you know, to get other ideas and learn from each other." – Sherry

> "I liked the community aspect of it. I really like community building. We're involved with our neighborhood watch on the street, we're part of the Neighborhood's in Bloom Program which did so much for our neighborhood as far as community building. And I thought, "That was great and this (Garden Project) will be another aspect, I could do the gardening and the community building." - Tammy

Ownership in neighborhood

Three female Foster Park gardeners reported that participation in The Garden Project allowed them to overcome their fear of the neighborhood and to develop a greater sense of ownership and identity with the community.

> "I always felt that neighborhood [Foster Park] is kind of shady and it makes me nervous but I've had no problems in the garden. So it made me feel more at home in Lansing because before I'd been on that street and thought, "Oh no"... I remember a couple of weeks where every time I'd go at night and the house next door, kitty corner, was playing like really loud salsa music. I thought, "wow, this is city gardening." I'm trying to garden, it's twilight and really pretty and the salsa music is just blaring and then the cars with the big basses go by. It's just a very different experience. But I prefer that because it makes me feel like I'm part of the neighborhood.... I really feel more involved in my neighborhood.... I feel more invested in where I live." – Iris

> "Well you know I ended up being less afraid of that neighborhood. It's kind of scary looking sometimes and some people, when I would tell them where it was, they would go, "Oh, I don't think so." But as I got there and it, yeah, I became less afraid of that neighborhood and that was good. That was good." – Tammy

> "I never would have wandered over here [Foster Park]. I probably would have stayed that side of Kalamazoo. I'd heard stories. One of my neighbors when I moved in said, you know, you don't what to hang out at that grocery store over there because drug deals go down.... She said, sort of avoid that at night because it's sort of a shady area. You know, not that this neighborhood was scary, but I wouldn't have come over here much. There was no reason to. So it would have been, "I wonder what's over there, but it's mysterious and dark and scary"." – Eve

Ownership in plot

The Garden Project places a substantial emphasis on encouraging gardeners to improve the soil in their garden plot. The program encourages people to amend the soil with compost, shredded leaves and cover crops which are all provided free of charge. The program also provides education on soil improvement through the newsletter, workshops, printed materials and cover crop demonstration gardens. Returning gardeners

receive top priority during plot assignments to encourage them to reinvest in their plot. Several gardeners report the development of an emotional bond to their garden plot as a result of their personal efforts to improve the physical condition of their plot.

> "I feel like a tie to that particular plot in the garden because I've been working at it." - Eve

> "I picked the same one [plot], the system was pretty good I think if you had the plot you get first dibs on it. I think that's fair because I put quite a bit of work into improving the soil. We brought in a lot of composted horse manure, I think there must be at least 5 pick-up loads of horse manure on that plot by now, because I have a friend who has horses and she would donate, bringing it in her truck. So we put a lot of horse manure down and we put down a lot of leaves, we planted rye grass, um we put in a lot of work to improve the soil. So whoever has that now is in good shape."
> - Nancy

> "I had that same plot...once or twice in the fall I brought over big bags of shredded leaves to try and amend the soil.... Although you know, when I spend all that time to make my plot better, I kind of had mixed feelings about giving it up too." - Tammy

> "I got these two corner plots and I've been gardening those same two plots every year, which I really enjoy. It gives you a chance to do like people who own their own land. You can do long term projects. Building up of the soil and paying attention to the soil is something I always, uh tried to do with gardening." - Andrea

Two gardeners felt as though their community garden plot was an extended version of a home garden. Having the garden located within the immediate neighborhood proves to be an important asset.

> "Yeah, well it was something that I could call my own even...it was, I remember catching a woman in the garden and I was asking her what she was doing and she was picking the weeds that were growing. I was like, this is my garden." - Quinn

> "It felt like my extended garden. I could just stop there on my way home.... I really like the fact that Paradise is nearby my home. Like I can walk there. It's totally on my way home so I can just stop by and pick up stuff and it also feels safer than Lilac Street [a nearby community garden].

At Lilac Street you go out and you're in the big field and there are no neighbors and it's beautiful because of that but it doesn't. Paradise feels like it's sort of my house is extended because it's so close. At Lilac I always felt like I was going to the garden." - Iris

CHAPTER 6:
FINDINGS: EMPOWERMENT AND ITS BARRIERS

6.1) Introduction

This chapter begins with a description of gardener perceptions of empowerment. This is followed by gardener accounts of the specific barriers to participation in the program. The use of direct quotations from study participants is intended for illustrative purposes rather than as a comprehensive record of comments.

6.2) Gardener Perceptions of Empowerment

The Garden Project's Mission Statement contends, "Through self-help efforts, the Project enables families to take an active role in improving their own nutritional, economic, and social condition. Without such efforts, relief would take the form of a food or cash handout." (Appendix I)

As discussed in Chapter 2, while a variety of definitions of empowerment exist, three themes are common to these definitions: a sense of control; possession of or access to critical resources, skills or knowledge; and active engagement in some form of behavioral change. The concept of personal empowerment requires individuals to take an active role in improving their condition. This is achieved through the development of the skills and resources necessary to create a change in the individual's condition and to improve the individual's sense of control. Personal empowerment requires that an individual develop these skills and resources rather than rely upon the charity of others. Given the similarities between the program's Mission Statement and the concept of personal empowerment, gardeners were questioned as to whether their involvement empowered them and if so, in what way?

Seventeen of the Foster Park gardeners believe that their experience with the program contributed to a greater sense of empowerment. Given the ubiquitous nature of the term "empowerment", several gardeners were asked to provide their personal definition of empowerment and examples of how empowerment applied to their experience. The definitions provided are similar to those found in the literature review in that they include "sense of control" and access to relevant resources and knowledge.

Sense of Control

> "[Empowerment] It's just the concept of being able to do things that nobody else has any control over I guess and having your own area where, you know beyond the courtesy rules, you can do whatever you want." - Faith
>
> "Taking control of your situation..." - Olivia
>
> "The ability to do something yourself I mean, without having someone else tell you what to do." - Quinn
>
> "The ability to gain confidence through one's actions." - Katrina
>
> "To have some control in your life. To make your life better and healthier and that you're not just at the whim of what's provided to you." – Iris
>
> "In control and feeling capable... Empowerment is kind of overall, knowing what I want in life and how to do it and actually being able to go out and apply myself to doing it. " - Eve
>
> "That sort of feeling of self-sufficiency and controlling what you are doing.... Maybe empowerment is not so much freedom from, I don't know, an authority or whatever, but in a sense it's going back to a feeling of responsibility where you need to have experience like that. Where you're not just going to the supermarket and getting your own food, that it isn't handed to you, that you understand that there are difficulties associated with it" - Lily

Access to Resources and Knowledge

Having access to relevant information and resources is another important component of the gardener's empowerment definitions.

"[Empowerment is] Feeling like you have the resources to provide what you need in your life.

"I think there is a certain aspect, a teaching aspect to it. Through teaching and experience you can take what you've learned and the experience and send people off on their own to further what you've learned. To share and continue sharing and to continue what they are doing and to grow.... I think of it as the teacher empowering the learner. But, ideally it would work both ways." - Tammy

"Gaining the insight, having the foresight to assess a setting, see what it is you have, what you can do with it, where you want to go. Set your goal and then decide logistically how you are going to get there." - Helen

6.3) Types of Gardener Empowerment

Since each gardener is motivated to participate by a variety of unique potential benefits, each individual also experiences a unique sense of empowerment. Empowerment is a highly personal and subjective phenomenon. However, types of empowerment fall into three general categories related to the improvement of an individual's nutritional, social and psychological well-being. Of the seventeen study participants reporting a sense of empowerment, eight reported a sense of nutritional empowerment, seven a sense of social empowerment and three a sense of psychological empowerment, with two respondents reporting the experience of a combination of empowerment types.

6.3.1) Improvement of Nutritional Well-Being

Community gardening at Foster Park is an activity that provides people with the resources and knowledge necessary to increase personal control over their diet. Gardening provides people with a sense of control over their food choices and reduces their reliance upon commercial food sources. This allows individuals to improve the personal acceptability of diet.

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"It's [gardening] given me practical means to do something about my desire to eat healthy food, to have some control over you know, the food that I eat and there is nothing that tastes better lot of times and you have control, you know what goes into the food you are eating." – Andrea

"Empowered in terms of, yeah the food that we were eating was our food.... We knew what we put on it, we knew where it came from." – Ben

"The empowering it [gardening] gives me is, "Hey I live in the city but I'll grow my own organic foods dog gone it." – Helen

"It [gardening] empowers me to do my own stuff. To grow my own vegetables. My own fresh vegetables, rather than buying them from a shop." – Mary

"I'd say that [gardening] empowers me because I have a lot of friends who are kind of gourmet cooks and there are a lot of things I can do with things fresh from my garden. It may not be gourmet but it's so fresh that it can be really, really great." – Pam

"I wanted to be more in control over where my food came from, because it's a big concern for me... but that's something I was looking for and its [gardening] given that to me because I don't have the space to do it at home or have all the resources, so that's definitely done that. It's been really incredible... It makes people feel a bit more in control maybe of their lives." – Sherry

6.3.2) Improvement of Social Well-Being

Community gardening also improves the social well-being of participants. Gardening provides people with the opportunity to share gardening knowledge, experiences and food with others in the community, meet fellow gardeners and overcome feelings of social isolation. These individuals believe they would not otherwise have access to these benefits.

"Because we can't garden here [at home] it's given us a chance to do that. It's given us a chance to help people and also we are learning from that helping the people" – Rachel

"Using my spare time to do that [gardening] instead of something else you know and getting what I get out of it and meeting people and spending

time volunteering and stuff. I mean, it's not like I am nowadays desperate [for food], but in other little ways." – Olivia

"I guess for me it would be helping people feel like they have more control over their garden more so then even using chemicals. Helping people feel, you know showing people ways they can improve their garden without resorting to pesticides and stuff like that." – Sherry

"I didn't feel like I did this thing like I can grow my own vegetables. It's not like I wasn't getting fed before. But it was just more of, it gave me an opportunity. But some people, some young mothers that need to feel like yeah I can grow my own food, the self-confidence, excited about it. But for me it's not the empowerment it's more the opportunity to give [food]." - Darren

"Through teaching and experience you can take what you've learned and the experience and send people off on their own to further what you've learned. To share and continue sharing and to continue what they are doing and to grow." – Tammy

"I was very depressed at arriving here [United States] and living in a small apartment... The Garden Project empowered me to feel more at ease being here." – Lily

6.3.3) Improvement of Psychological Well-Being

Community gardening also improves people's psychological well-being by providing a sense of control over their ability to raise food and through experiential learning in the garden, it significantly improves their skills and ability to use the available resources. Taken together, this improves the individual's self-concept and causes them to feel a significant amount of pride in their accomplishment and confidence in their abilities.

"Every time I go out in the garden I pick something and go, "This came from my garden!" I always showed people when I got home like this is really cool. So I feel more capable... Like, I know what to do. I know enough plant stuff. It's nice to know that. Like if all the sudden you know, it was really tough to get stuff at Meijers I could go out and garden. So, that knowledge is nice.... I feel I gained a sense of knowing what I'm doing in the garden from this project." – Eve

"I've learned every year and I can apply what I know and produce more food." – Iris

"I think it [gardening] empowers us in terms of understanding how life, cycles of life work. I think it's empowering in terms of having control over your life." - Lily

6.3.4) Preaching to the Choir

While most gardeners admit to experiencing empowerment through community gardening, many don't view "empowerment" as being an important aspect of the experience. Others believe that they are already empowered and that the empowering benefits of gardening do not apply to them.

"You see, I grew up participating in the community gardens. To me it's kind of like riding a bike. It's just something you do when you live in a city.... Like I said I grew up with this. It's not like, "Wow, look what I can do", I've been doing this all my life." – Nancy

"[Empowerment] assumes that the person or community that we are talking about doesn't have control over their lives. And, I suppose having made a conscious decision to move from one country to another, that's the last thing I felt because we had taken control of the situation... To make that choice, leave your relatives and your home in order to support your family, that you've actually got travel that far to get a job, you're already trying to take control of your life. So in fact, I probably needed an antidote. I was pretty over-empowered." – Lily

"I think in all, most areas of my life I think I have good control and I've had a very good background. So, I didn't need the type of empowerment that maybe some other people in the area might need. Like I've had a very good education, good family, my mom showed me all of the gardening stuff I know pretty much." – Eve

"...For me it's not the empowerment it's more the opportunity to give." – Darren

6.4) Barriers to Empowerment

Community gardeners face a number of actual and potential barriers to participation and empowerment. The barriers identified by the gardeners can be

classified into three general categories: limitations of resources; social factors; and organizational and philosophical constraints. These barriers pose a significant threat to The Garden Project in that they discourage participation in the program and limit program effectiveness. While identifying these barriers is relatively easy, finding solutions is made difficult by significant philosophical and organizational differences that exist between The Garden Project, its gardeners and the GLFB Board of Directors, who are ultimately accountable for the program.

The barriers to gardening may contribute to the turnover of gardeners who fail to return to the program after their first season of participation. Sixty-four percent of participants in The Garden Project's 18 community gardeners are repeat gardeners for at least two seasons (Chiang et al, n/d). However, Foster Park experiences a higher rate of gardener turnover. Only 39% of Foster Park gardeners returned for a second season between 2000 and 2002. During this time period, 8 Foster Park gardeners remained with the program for each of the three seasons. One gardener participated in 2000 and 2002 only.

6.4.1) Resource Barriers

While there is general agreement that The Garden Project does provide beneficial gardening resources there are some serious limitations that discourage participation. A majority of gardeners cited some degree of frustrations over water access, soil quality and preparation, pests and plant diseases. These barriers to participation in community gardening activities limit access to the full range of benefits that community gardening has to offer.

Water Access

A majority of Foster Park gardeners are faced with limited access to water. In both the Foster Park and Paradise sections, gardeners are provided with several 55- gallon water barrels that are intermittently filled by volunteers and staff. In the Foster Park section, water barrels are placed in two locations near the warehouse (Appendix A). These barrels are filled by stretching a series of garden hoses from a water tap located inside the warehouse across Marcus Street. Access to the warehouse is limited to Garden Project staff and selected gardener volunteers who posses a key to the building. The barrels are typically filled during warehouse hours of operation. In 2002, only two Foster Park gardeners held a key to the warehouse to fill the barrels at other times.

Five- 55-gallon water barrels are located at the southeast corner of the Paradise section of the garden. These barrels are not accessible from the warehouse water tap. Instead, the Paradise barrels are filled using a fire hydrant located across the street from the garden at the northeast corner of Foster and Elizabeth Streets. Lansing's Board of Water and Light provides The Garden Project access to water through the hydrant free of charge. At the beginning of the gardening season, a representative of the Board of Water and Light provides the program with the tools and equipment necessary to operate the hydrant as well as a brief training session on operation of the hydrant. This equipment is stored in the Foster Park warehouse. One gardener at the Paradise garden has a key to the warehouse to access the fire hydrant equipment as needed and is responsible for filling the water barrels used by all gardeners. The water barrels are filled by this volunteer gardener as needed by tapping into the hydrant and then running a garden hose across Foster Street into the water barrels.

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During the 2001 and 2002 seasons, water access became a contentious issue due to abnormally hot and dry weather. The issue for Paradise gardeners became even more acute in 2002 when The Garden Project opened a new community garden across town. The new garden also lacked a water source and relied upon the use of a nearby fire hydrant. However, the Board of Water and Light would only provide one set of fire hydrant tools that were to be shared by both gardens. This situation further limited water access for Paradise gardeners and frustrated the volunteer responsible for filling the barrels because the equipment was often unavailable. Towards the end of the season, the volunteer ceased to fill the water barrels and the responsibility fell upon the Community Organizer. A majority of study participants believe that the difficulties associated with intermittent water access represents the single largest barrier to participation in the program.

> "Well, the water was tough. Making sure that we had enough water anytime that I came to water. Sometimes I would actually carry water from my house. A couple gallons just for emergency because I couldn't count on it. So it would be better if there was some rotation or more volunteers to water or make sure there is water." – Eve

> "When I really needed to water my schedule was off with [the individual who fills the barrels]. I would always show up and there would be no water. So, I just had to be sure and figure out when she went. You know, when I should go. It was really so dry and people were really going through it fast.... It was kind of scary because I thought, "Oh, if I don't water all my plants are going to die!" ...Maybe if I knew when she was going to be there. It would have made it easier. I wouldn't have to drive over there and realize there wasn't any water." – Gina

> "There was like a three week drought right in June. There just wasn't enough water. Like I'd have time to water and I'd go over and the barrels wouldn't be full." – Iris

> "I think the water thing has always been a difficulty over there at Paradise... I was sometimes unhappy because a lot of times there wasn't any water there... I think you have to have someone who is super reliable

to handle that and we don't have enough people to really you know be able to do that [fill the water barrels]." – Pam

"When we wanted water there wasn't a lot of water. There were only three drums over there [Foster Park]. Sometimes when I came to get water it was gone....Not all people are getting water its just like first come first serve." – Mary

Gardeners must transport the water from the barrels to their individual garden plot, in some cases up to 200 feet. Gardeners typically use plastic buckets (not provided by The Garden Project) and make numerous trips back and forth between the garden and water barrels.

"If I got to choose I would have picked one that was closer to the water barrels too, for sure. All of that would have been more convenient." – Faith

"...You have to truck it [water]...because, being a new one, I was way far away from the water source. So I had to truck the water and I think it was really dry that first year. I would say there is a tremendous amount of work every spring." – Tammy

Two gardeners suffering from physical disabilities cite the difficulty in carrying water as a major frustration that caused one individual to leave the program.

"I'm the back corner and it's just really hard getting to and from the water when I didn't have a free walkway to use." – Helen

"So when I had this opportunity to garden with my friend at her house I thought it might be better because she would be doing some of the work, the watering would be easy cause we could hook up a sprinkler. Carrying water (at Foster Park) was killing me." – Nancy

During the 2001 and 2002 gardening season, several gardeners requested that The Garden Project install piped-water taps at the garden. The presence of water taps would allow people to access water at any time. Additionally, those individuals who are physically unable to haul water in buckets could attach hoses to the tap. The Garden

Project provides water taps at two other community gardens, at fact noted by several Foster Park gardeners.

> "You know what would be really cool is if we had a piped water system put in, an irrigation system or something like that. That would be just, I mean that would be just wonderful if you didn't have to carry. I mean even when there is water, it's still, you know, a lot of work to water your plants when you're used to just pulling out the hose....If you just had a faucet there so people, if they wanted to, could bring their own hoses and be responsible for it themselves. If they wanted to, bury soaker hoses, if they wanted to go through all that work, that would be, be really great." - Pam

> "If you had a tap, you would just put a hose and then water your garden that way. It would be a communal tap like in a campsite." – Lily

> "You could put in [water] taps there, like they have at Lilac Gardens. I think you should do that, or put some more drums over there." – Mary

The use of open topped water barrels creates additional problems for the gardeners. First, they are often used as trash receptacles. Items from candy wrappers to dead birds have been discovered floating in the barrels. This caused one gardener to question the safety of the water.

> "Well you found out that people would throw stuff in it and I always kind of wondered, "What's in this water anyway?"... I really started worrying about that and I started worrying about the water that was in those big barrels. What's in that water?" - Tammy

A second problem with the use of water barrels was that neighborhood children often tip over the barrels spilling the water and flooding nearby garden plots. To combat this situation, a Paradise gardener drilled holes into the top lip of the drums and secured them together using a heavy cable. Once the five full water drums were secured together they were rendered immobile. However, by the end of the season, vandals had cut away the cable and continued to dump the barrels.

> "A couple of times when I came over to water and there was you know, probably the kids came over and tipped over the buckets....That's the only thing that was ever a problem was the water once in awhile, but usually it was fine the next day or two. Sometimes it was a really long time like when it's dry out and you feel like you need to give your plants a drink, but the was the only thing." – Sherry

A third problem with using water barrels is that they provide an ideal breeding location for mosquitoes. In most years the mosquitoes are viewed as simple nuisances but during the spring of 2002, several cases of human infections of a mosquito-borne disease, West Nile Virus, were reported in Michigan. The fear surrounding this public health threat caused at least three gardeners to contact The Garden Project asking for a solution to this problem.

Soil

Soil is the basic building block of the garden. The quality of soil including its structure and fertility is probably the most important component of a good garden. The heavy clay soil naturally found in the Foster Park area is far from an ideal garden soil. The soil generally lacks organic matter causing it to dry quickly during hot weather making the soil extremely difficult for most gardeners to cultivate. A handful of gardeners cited the quality of the garden soil at Foster Park as a major limitation to gardening success and enjoyment.

> "If I hadn't had someone at least to talk to about the soil I probably would have just thrown in the trowel. You know, it's like looking at this stuff its like man I could make dishes out of this." – Nancy

> "The soil there is so bad. I had that same plot...once or twice in the fall I brought over big bags of shredded leaves to try and amend the soil. But you know, in that whole time I was there I never saw one earthworm. Not one. And it really made me think by the end, you know what's wrong with this soil? Why isn't it any better than it is? And I started to think, what was on this site before?" – Tammy

"Well you know how it is, and if you let it go just a little bit you have all these weeds and the soil is so full of clay and I was really surprised at how hard it actually was to pull weeds. Cause, I had never worked soil like this before. So, uh, it wasn't just all, just what was going on with me. This was just very different soil. And, uh I wasn't used to that, I was very surprised, so I over estimated was I was able to do, because I underestimated what I would have to do." – Pam

"At the beginning [of the season] there were tons of stones which is something to expect. But I didn't expect all the glass that was in my plot. I always work with my hands. I don't wear gloves so it was a little bit you know, intimidating because I didn't want to hurt myself." – Eve

The Garden Project's method of garden preparation has negative impacts on the experience of some gardeners. The Garden Project's "Community Garden Guidelines" (Appendix H) require all gardeners to begin planting their plot within two weeks of the plot assignment meeting or risk forfeiting their assignment. This policy ensures that gardeners take possession of the plot to combat the substantial growth of weeds that occurs in late spring. Individual gardeners do not have control over the timing of garden preparation. This creates significant difficulties for many gardeners requiring them to adjust their schedule to the needs of the garden typically with short-notice. Experienced gardeners who enjoy starting their own seedlings at home have no control of the timing of the gardening opening and risk starting their plants too early in the season. Experienced gardeners typically desire to extend the gardening season by starting early in the spring. These individuals have no control over the start of the garden season.

"Tomatoes, peppers, cucumbers, I had them all over the hood of my car getting the sun. We were told they [The Garden Project] didn't want to start giving the plots out because they didn't have as many people as they felt they needed. That was bad for me because many of them [seedlings] got root bound and stunted and they didn't do a good transplant like they normally would. That was one blow that was not good for us." – Helen

"Well, the most difficult thing is the timing. For example, because we didn't have anyplace to seed before, some vegetables must start early,

> early part of the year. The gardens sometimes start June or even early July so it's hard to do anything. So, if I can even make this plot around April then I can think about some more things." – John
>
> "Well, the plowing was hard. Because they plowed and I couldn't get in right away and by the time I got back to it, it was pretty weedy. In the process of trying to get the weeds out I ended up, like I said I didn't know what I was doing, I trampled the ground down. I was just walking back and forth. So, it was very hard... I started a week later but wasn't able to plant the whole thing. So I planted some after a week and that went well. Then I was back the next week and it was all weeds. I didn't realize I had to get in right away" – Iris

Plot size

Every garden plot at Foster Park, as well as most other community gardens in The Garden Project, measures approximately 25' by 25' (625 ft^2). It is unknown why this plot size was originally selected, but has been accepted as the standard size since the inception of the program. The use of standardized plots does have a practical benefit for the program's annual report to the City of Lansing. The City is one of The Garden Project's major financial contributors and in exchange for continued funding, The Garden Project must demonstrate that each plot produces an economically significant amount of food. A standardized plot size allows for easier accounting and reporting.

In the 2001 Gardener Survey, community gardeners were asked if they felt that the plot sizes were adequate. A majority of gardeners (84%) indicated that they were satisfied with the plot size while eight percent reported that plots were too large and another eight percent reported the plots were too small. Since the Gardener Survey is conducted at the end of the season, respondents most likely represent only those individuals who continued to maintain their plot throughout the season. This may not represent the actual views of all community gardeners, particularly those who became overwhelmed by the size of the garden plot early in the season.

Anecdotal evidence led The Garden Project's staff to question the suitability of the standardized 625ft^2 plots. As a result, the program began offering a variety of plot sizes at three new community gardens that opened in 2001 and 2002. The new smaller plot sizes ranged from 6' by 6' to 20' by 20' and were well accepted by gardeners, providing people with a variety of choices to meet their needs. The gardener interviews revealed that a number of individuals would prefer a smaller plot size. Three individuals chose not to return for a second season with The Garden Project in part because plot sizes were too large to manage. It must be recognized that gardeners possess varying levels of expertise and have unique expectations as to the amount of effort they have available to contribute to maintaining a garden.

> "I think it is a little intimidating and if that's the all or nothing size then that's going to be prohibitive to some people. At first I thought, "This is going to be a lot more work than I realized." Yeah, I mean once you first got there and actually see, yeah then if you picture yourself down on your knees weeding then it does sound like a substantial time commitment. I don't know how many people are typically involved but I was doing it by myself.... if you want a lot of people to participate, you have to bring down the intimidation factor. Part of it is if you see something big, you assume that it's for serious gardeners only. That eliminates a lot of people." – Faith
>
> "A half a plot I think would be more manageable for me. I couldn't do one, but I could probably do a half." - Nancy
>
> "I would be interested in a small plot I have to say." - Lily
>
> "Like the one lady said. She's Chinese, she's across the way there and she said that she's worked and she has a family and I take it that her husband left her. But she says, "if only I had a half a plot it would help me." – Rachel

Pests and Disease

One of the recognized drawbacks to community gardening is the lack of personal control over pests and disease. Foster Park is essentially a large contiguous garden

divided into individual plots. Gardeners only have control over their assigned plot but are nonetheless impacted by the pest control and the plant disease management techniques utilized by neighboring gardeners. This lack of control created added frustration for six gardeners who were forced to manage pests and disease perpetuated by other gardeners.

Insects appear to be the major garden pest with the Mexican bean beetle causing the greatest amount of crop destruction. Additionally, at least one woodchuck lives in and around the community garden. During the mid-summer of 2002, a woodchuck den was discovered in an abandoned plot located in the center of the Paradise garden. One gardener unsuccessfully attempted to capture the woodchuck in a live trap.

> "I'm babying those little guys [bean seedlings], well as much as I can, and last time I was over at the plot they were beautiful and they were blossoming. I thought, "Yes, two plants! I'll get at least ten string beans, wax beans." I went over there I think two days later and the leaves were like filter screens. Insects on them. I hadn't had any insects over there all year on any of my plants. I lost the two plants." - Helen

> "I grew beans this year for the first time which I loved. Although I totally lost them to the bean beetles. I got like three good weeks of beans. But the whole time I was picking the beetles were just totally defoliating them.... As I watched my beans being so totally decimated I was so ready to just spray them with whatever toxic chemical. It does make me think about that. Like I think, "Damn these things are hard to get rid of." – Iris

> "We had this insect that just devastated stuff. The first time we said, "Oh look there are some insects on this one. That looks like a ladybird." We were interested in this creature and then the next time we visited the plot we were like, "Aghhh!" It was too late to do anything you know. So I just could not believe it." - Lily

> "And the frustration was, I'd get everything in and things would be growing great. I put in all these tomato plants and all the sudden, I start to look around and I see some kind of disease, and I never figured out what it was. Some kind of a wilting thing would start creeping in and I'd go back and half my plants would be all wilted. Then I'd come back later that week and they'd all be wilted. So I think after two years, that first year

must have not been so bad, but then the last two it happened to all my plants. I just thought, "It just wasn't worth the work." I got nothing out of it." – Tammy

"All of my tomatoes have a bacteria or whatever it is that makes tomatoes turn brown and die. There's powdery mildew on my zucchini. It just seems like if something happens it just takes over the garden. Then I've read all this stuff about how you're supposed to dispose of the compost and don't leave it on the garden. Get rid of it so all these things don't happen again next year. I'm just imagining like, I'm sure nobody else does that. I'm not sure how many people come back." - Iris

6.4.2) Social Barriers

Despite the best intentions for the creation of a cohesive community of gardeners, significant barriers exist that have hindered the development of a sense of community. While there is a good deal of gardener-to-gardener interaction at the beginning of the season, by mid-summer people are rarely seen in the gardens. By late summer, weedy, neglected and abandoned plots predominate much of the garden. The apparent lack of commitment by others and the wasted garden plots discourage many gardeners from continued personal investment. Vandalism is another barrier experienced at Foster Park.

Lack of gardeners

Following the initial rush of spring planting activities, sightings of gardeners become quite rare. Visits to the Foster Park warehouse drop off dramatically by the first week of July and weedy and abandoned plots become noticeable. Extremely hot and dry summer weather may have discouraged many from frequent garden visits. On two occasions during the 2002 season, up to seven gardeners were witnessed working in their plots at sunset, presumably in an effort to beat the heat. Regardless of the reason, half of the study participants found the lack of people at the garden both unexpected and disappointing.

"Towards the end of the summer I didn't see anyone ever." - Eve

"There is a certain overtone associated with hardly anyone participating. It's sort of weird to go into such a large area. I mean there's something. I wouldn't say it really affected anything but I mean it would certainly be more.... a more vibrant experience to actually see people out there. It would just be a different atmosphere that would be more pleasant I think. Because, like I said, I almost never ran into people. But seeing people there and seeing the same one week after week would be quite pleasant I think." - Faith

"In the sense that I hardly ever see anyone over there. It's probably the hours that I go. Because I don't go in the evenings, usually I go in the mornings. But even on the weekends I go on Saturday or Sunday morning either people are in church or whatever. It's just weird not see people there... I never see the people around me. That whole row, I've never seen them. The guys who have plots along the road. Those guys I say "hi" to. That was only early in the season...Yeah, those are the only people I think I've seen." - Gina

"No, you know I almost never saw anybody. There was once or twice and I was there quite a bit, usually weekday evenings. I almost never ran into anybody. That, I found quite surprising although later in the season it became quite obvious that not very many of them [garden plots] were occupied." - Faith

On those occasions when several gardeners were in the garden at one time, there was a sense of frustration over the lack of personal interaction. These individuals value the community building possibility of a community garden but found the actual experience did not meet their expectations. Many individuals stick to their own garden plot and rarely make the effort to interact with one another.

"In the past two years I've met some pretty nice people in the garden but it's not as friendly as I thought there would be much more community." - Katrina

"You know there's a lot of potential for some kind of you know, sense of community in these types of gardens. I don't think the potential is quite realized here. At least not for me. You know and you can see some people when they come here, you can see they're sort of interacting with the volunteers and with you guys, the people that work here as if you were like a social service agency and they just come and they get their stuff and

they go and plant it and they weed it. They come and they weed their stuff and then they go home and they don't stay around to talk or anything. Um, and then there are some people that, that see it more as a community thing and they talk and they trade vegetables and things like that. A lot of times it seems to me foreign, foreign people a lot just tend to see this as a social service agency. I don't know exactly why that is. I think it would, I think it would be really cool if they would, but I don't know how to go about that." – Pam

"The one thing that I thought was disappointing was that there weren't always a lot of gardeners over here.... I didn't really feel like the community around it, in terms of the neighborhood are too into it. You know they're kind of like, who are you weird people?....It looked like at the beginning people were starting to plant some things. There was one family when we first started that was out there and we talked to, but never saw again." – Ben

"I felt like it really wasn't working like a community garden... people seemed at the same time to stick to their own self and just be working in the garden and water and stuff." - Quinn

Empty plots

At the beginning of the 2002 gardening season 38 of the 45 garden plots at Foster Park were assigned to individuals. However, a number of individuals either did not actually start to plant their garden or abandoned them within the first month. Some gardeners were frustrated by what they perceived to be either a lack of commitment by other gardeners or simply a waste of valuable gardening space. During the early summer of 2002, five of the empty plots were planted with excess seedlings for distribution through the Greater Lansing Food Bank.

"If I knew that so many of the plots were uncommitted then I would have tried to switch. Really, it would have made a huge difference... If it was full I wouldn't care and I'd say that it was nice that I got a plot. But if it wasn't full, I think it's probably to the benefit of the project to have people get what they want." - Faith

"I expected all the plots to be taken. I thought, "Oh, I'll never get in". – Gina

"The thing that bothered Rick and I was why, with all those gardens there and it's a nice open area there, why those gardens weren't filled right away?" - Rachel

"I don't know how many plots there were, maybe 25. I'd say maybe only 5 of us or even less kept them up for the full season. It was really frustrating, really, really frustrating. Because, I know...I probably, if it were my first year gardening and I didn't have something, you know, some knowledge that it can work, I would really be frustrated. I think, "I tend my garden, I think other people should tend their garden too." To show commitment I guess. Or else give me a good plot close to the water or something like that if those people aren't going to make good use of it." - Tammy

Weedy plots

Abandoned and neglected garden plots quickly become weed covered nuisances that further discourage gardeners. Mature weeds add to the total seed load in the garden soil making subsequent gardening attempts more challenging. The Garden Project has a policy that requires gardeners to keep their weeds under control however; this has been met with little success.

The Community Organizer is responsible for making monthly "weedy plot calls" to those gardeners who violate the policy. A majority of gardeners are difficult to contact and do not respond to telephone messages and postcards asking them to comply with the weed-free policy. Many of these individuals simply abandon their plot or refuse to remove the weeds. Weedy plots cause significant frustration for eight gardeners who maintained their plots by presenting both an aesthetic nuisance and a source of weed seeds that add to the workload of the conscientious gardener.

"The people would start out, get it planted and you'd never see them again. Then the weeds would get higher and higher.... I noticed a lot of people didn't try and do so much with their space. You know, they just dug a hole and put a tomato in it. I couldn't do that. I just couldn't do that. So maybe I should have lowered my expectation or something. But I

still had this goal in my mind of what I wanted to do and that that was my place to do it." - Tammy

"It does take a long time to clear out and like I said, I was next to weed patches so there's constantly things to clear out." – Faith

"It was tough when all the weeds sprung up and two of my neighbors never came and picked weeds so that was definitely one of my major complaints because I knew that there were tons of seeds coming over into my garden." - Eve

"I guess I was a bit frustrated well, I'm guilty too because of my schedule, people that don't keep up with weeding.... Yeah, well the one directly across from me, that nobody planted in is below the tree. That one got pretty crazy. I went over there and tried to pull out the big ones." – Gina

Although a handful of gardeners can effectively control the weed growth within their plot, weeds do represent a significant problem for most of the garden. This problem is exacerbated by the high turnover rate of gardeners, which discourages the use of soil improvement techniques that could reduce the weed problem and the heavy clay soil, which became extremely difficult to manage during the hot dry summers of 2001 and 2002.

"Well you know how it is, and if you let it go just a little bit you have all these weeds and the soil is so full of clay and I was really surprised at how hard it actually was to pull weeds. Cause, I had never worked soil like this before." – Pam

"I wish we could do more for the people in the way of the weeding and stuff. And if we could get control of those weeds I think that people would enjoy gardening more too. Because we went over there and there's a plot right next to that tree where we've got it full of flower plants now. But we had gone over there and this lady and her little girl over there. And she had one of these scythe like. Rick said you know, maybe it'd be better if we pulled them than to use that. But they couldn't because the ground was so hard with the clay. And the seed is there because they let them get so tall and I suppose they hate to do that." – Rachel

Two gardeners left the program due to their inability to effectively deal with the weed problem. Most significantly, one gardener, who relies upon emergency food

assistance, has decided not to return to the program in part due to the presence of a tenacious thistle variety that covers much of the Foster Park garden.

> "It was nice, all these tomato plants come up but then I have all these thistle plants. It's just like a fight you know? I try to get out there as much as I can and it's I'm just thinking I'll let somebody else have that and just spend whatever spare time I do have just volunteering." – Olivia

> "There were some weeds and what not but the rule was basically, I don't know what to what extent you had to weed in the garden but there was obviously a lot of weeding that could still be done after weeding all day. But you know every time if you didn't do it all you could come back. So, it was a challenge" - Quinn

Personal Safety and Vandalism

Although, there have been no reports of gardeners being assaulted in the garden, there was an incident in 2001 in which several gardeners were verbally threatened with physical violence. In the summer of 2001, a gardener with access to the warehouse telephone contacted the local 911 emergency center to report an act of intimidation by some neighborhood youths. In July of 2002, another 911 call was placed from the warehouse to report an incident in which a group of teenage boys threw fireworks into the occupied warehouse. Two gardeners indicated that they had some concerns over their personal safety while in the garden.

> "I don't know the area that well but it seems like there are a lot of gang member-looking people there. I'd always get there probably around 8:30 or 8:45 at night and I'd be running around and I'd really try to stay there until I couldn't see anything pretty much. Yeah, it's not a situation where I'd really want to be talking to people in the neighborhood. I mean, you just so often you have your back to everything else that's going on. I'd just prefer that." – Faith

> "I have challenges at Paradise. I know the neighborhood is not one of the better ones. I know the Police aren't cooperative when you need help.... The neighborhood is not what many of use would choose to move into. Um, you know, some drugs, some gangs." – Helen

Produce theft and vandalism is not an uncommon occurrence at Foster Park. While the Garden Project encourages gardeners to immediately contact the office to report any acts of theft or vandalism, it is suspected that only a fraction of these incidents are reported to the office. Most acts of theft and vandalism are reported second hand and well after the occurrence. The Garden Project discourages people from growing certain varieties of vegetables such as melons and pumpkins, which prove to be very tempting targets for vandalism. The program also encourages people to remain vigilant near the time of harvest and remove their produce in a timely manner.

The Garden Project has had difficulty finding support from the Lansing Police Department. During the summer of 2001, a police officer notified the Community Organizer that policing the gardens was, "not a priority for the department." The officer suggested that the program should build a fence around the garden to discourage theft and vandalism and that theft is to be expected in the neighborhood. During the 2002 season additional efforts were made to lobby the Lansing Police Department to provide greater support for the gardeners. This included a meeting with a Community Policing Specialist and a separate meeting with the Chief of Police and a Precinct Captain. Never the less, theft and vandalism continued to be an issue frustrating six gardeners, discouraging further personal investment in the garden.

> "The vandalism concerns me. I know that kids like to take shortcuts through the garden and I've seen them do it.... As long as they're not damaging things, I'm not gonna have a hairy on that but I had two sunflower plants... I don't know if they took a stick, a hockey stick but right where the head attaches to the stem they just broke it off and left it lying there. That bothers me. I go to a whole lot of labors to get that stuff growing in the first place. Especially with the long growers, I start them in the house. But to have them vandalized is a real concern... And when you're on disability, when you don't always get the kinds of food through other people that you would buy for yourself, to me gardening is that

important. To have other gardeners come in and take it or to have vandals damage it, that's a bridge I don't know how to get over." - Helen

"One time someone took my beets. Who steals beets?" – Nancy

"I knew that there would be vandalism but it doesn't make it any less heartbreaking when it happens....You know, we have so much produce that comes from things like tomatoes and whatever. So when it gets squashed or whatever, big deal. But some things are considered rare or precious. Their value goes up. So it's sad that I can't grow cantaloupes. Partly because of space constraints but also because of being in a public place... So even though I knew it [vandalism] was going to be there I guess I didn't realize it would bother me as much as it did. You hope that when you catch kids checking out the garden, you can gauge their interest. Sometimes you can and sometimes you can't. It's frustrating when you don't know who is this person or persons destroying the garden and why they're doing it." – Katrina

"You know, it's really frustrating when people come and steal or ruin your vegetables. It's even worse when they just, like they did with my pumpkins. I'm never going to forget that. But they threw everyone, everyone of my pumpkins. Which I grew and that's what I mean I plant things because I can't get them anywhere else. I grew pie pumpkins so that I could make pumpkin pies from scratch and those little creeps smashed all of my pumpkin....But you know, and I think about getting the police to help more. But it's not necessarily a good idea to take an adversarial stance with people in the neighborhood. You know make the garden something, make it something that local people in the neighborhood respected. Rather than something that people were calling the police on their kids because of." – Pam

While vandalism is a frustrating reality of community gardening, some gardeners accept that vandalism and theft will occur in a community garden and are not completely discouraged by it. Losing small amounts of produce, particularly if the thief eats them rather than simply destroying them becomes an accepted part of the community gardening experience.

"It [produce theft] just happened a couple of times where I'd thought you know, I'd come back in a couple of days but then they'd be gone. But that was within what I expected." - Faith

"I mean it's right out in the open and...it's not like an ideal insulated place.... this is community gardening which means that you're out in the community and there's going to be problems. And, I think that's healthy, that's good, um I know even the problems, there are good things that happen." – Andrea

"We definitely weren't expecting some of the produce to get taken but I guess that's just part of the you know, being in the neighborhood. That sort of thing is just going to happen." – Ben

"It's not what it could be [vandalism and theft], it's not ever real, real bad, I mean, but to be growing a crop in a community garden, you know people just don't respect like they should maybe totally. And there is some of that, that does discourage gardeners sometimes maybe in a community garden project.... There's gonna be some problems but to overreact to it, we do have some control over that. Over the years, I have tried to accept that as part of the elements too you know that you can't really control but you can have an attitude towards.... I'm more accepting of it now. The hardest thing to accept is, is vandalism, least hard, less hard thing to accept is people harvesting because there it's just, not totally wasteful and mindless." - Andrea

6.4.3) Organizational and Philosophical Barriers

The Garden Project is a hierarchical and bureaucratic organization. As a program of the GLFB, The Garden Project's Director reports to the Executive Director of the GLFB who in turn reports to the GLFB Board of Directors. (Appendix J) The GLFB's Board of Directors consists of approximately 30 volunteer members who act primarily in the role of financial and administrative oversight.

The Garden Project receives additional operational and planning support through an advisory committee consisting of staff and volunteers. The advisory committee, which is chaired by a member of the GLFB Board of Directors, began a strategic planning process in the summer of 2001. The purpose of this process was to re-examine the goals and direction of The Garden Project. As a result of this process, the committee recognized the existence of a significant conflict between the program and the GLFB

Board. This conflict results from philosophical differences between the Board and The Garden Project and is exacerbated by the limited fiscal and administrative authority of The Garden Project.

A student led strategic analysis of The Garden Project (Chiang et al, n/d) found that philosophically; the GLFB Board focuses on its mission to serve the community's emergency food needs and exhibits a general apathy towards The Garden Project. While the GLFB operates under a charity service delivery model that values quantitative measurements of success, The Garden Project and its advisory committee attempt to operate in a more collectivist manner, focusing on qualitative outcomes. This lack of continuity between The Garden Project and the GLFB marginalizes the program creating a sense of apathy. A significant communication gap and lack of understanding between The Garden Project and the GLFB Board of Directors further isolates the program from the resources of the Board, which has not taken any significant actions to further develop The Garden Project since the mid-1980s. As a result, there is a concern among Board members that resources directed towards The Garden Project negatively impact the operations of emergency food pantries whose operation are of higher value to the Board.

Members of The Garden Project's Advisory Committee acknowledged the philosophical tensions between The GLFB and The Garden Project:

> "I think that...if everybody [on the GLFB Board of Directors] had a chance, on a sheet of paper, to write this down, "Do we need a Garden Project?" I would not expect it to come back with unanimous support. My sense is that there are a number of Board members who have basically said, "Yeah, I understand what The Garden Project does." There would be others who said, "I don't really understand what they do."
>
> "The notion of helping people, helping people get out of poverty or learning how to fend for themselves isn't center stage [for the GLFB Board of Directors]."

> "Most of the people on the Board are folks who would define food security very, very narrowly from a welfare system model. Which is fine, which is fine but it's a tension. It's a real tension."

Two Foster Park gardeners expressed some understanding of the existence of this philosophical tension and remarked that there is little contact or understanding between gardeners and The GLFB Board of Directors and The Garden Project's Advisory Committee. Both individuals commented on the fact that they have never seen the Board visit the gardens; although they feel it would be beneficial for them to do so and feel alienated from the decision-making process. One gardener commented on his only experience with a member of the Advisory Committee.

> "She seemed like a "know-it-all" and a little too snooty you know. She's on the advisory board you know, helping these poor ignorant gardeners. She was yeah, a little bit high society, not too much but enough so you notice."
> - Darren

Chiang et al (n/d) found that the GLFB relinquishes little financial autonomy to either the professional Directors of the GLFB or The Garden Project, further limiting the program's effectiveness. For example, two Board members must sign all checks, regardless of the amount, limiting the Director's ability to effectively respond to the operational needs of the program. While the GLFB provides approximately fifty percent of The Garden Project's annual expenses, the program's ties to the GLFB have been a mixed blessing. The Garden Project maintains its non-profit status thanks to its relationship to the GLFB allowing it to pursue significant sources of in-kind donations and grants. However, in 2002, the GLFB's financial assets well in excess of an eighteen-month operating reserve made the program ineligible for some financial grants that could

help The Garden Project to fulfill some of its basic needs such as solving the barriers to gardening outlined earlier in this section.

Two Foster Park gardeners expressed concerns over their lack of control over the program's resources stemming from the organizational structure. When these individuals began gardening at Foster Park they made significant personal contributions of their time to the improvement of the gardens. However, they were discouraged from further participation by what they perceived to be a squandering of resources.

> "It's [The Garden Project] like the old M.A.S.H. episode where they needed an egg incubator to diagnose the old germs and treat people in the field and they called this supply office and this guy in Seoul or whatever and they ask for an egg incubator and the guy says sorry we can't get you any. So they go down there and the guy's actually got three of them sitting on the shelf. And he's like, "We need an incubator." And he says, "No I only got these three here." And they say, "Well why don't you just give us one?" And he says, "Well if I gave you one, I'd only have two left."…. You know you got all this equipment and I'm willing to do this stuff and I took it as a sign not to be volunteering so much. So, I'm thinking you know, I'm just gonna stick to my own garden." - Darren

CHAPTER 7:

CONCLUSIONS AND RECOMMENDATIONS

7.1) Introduction

The purpose of this study was to explore and understand the effectiveness of a self-help community gardening program, specifically the Foster Park Community Garden. The central research question is: ***Does participation in a "self-help" community gardening program lead to empowerment of the individual?*** The sub-components of this research question include:

- Does participation have an impact on food access and diet?
- What are the benefits from community gardening?
- Is empowerment a perceived benefit?
- Are there barriers to participation?
- What is the role and nature of skill development in the empowerment of participants?
- Does the community garden fulfill its "self-help" mission, designed to assist unemployed and low-income families in growing their own food.

7.2) Impact on Food Access and Diet

Does participation have an impact on food access and diet? While there are a few exceptions, the Foster Park gardeners are low-income residents with 64% of households earning less than $21,050 per year. Four of the twenty Foster Park gardeners interviewed currently rely upon emergency food assistance programs to supplement their diet. This is consistent with a 2001 survey of gardeners that found roughly 20% of participating households had at one time received emergency food from a food bank. Of the Foster Park gardeners, one individual was receiving Food Stamps at the time of the interview while the other three were receiving food assistance through a community food pantry. One additional gardener received Food Stamps a decade prior to joining the program.

Three of these gardeners learned of the opportunity to participate in community gardening through promotional material distributed at a targeted social service agency.

It is generally assumed that low-income people are not highly educated and that income levels are related to educational levels. This is not true for Foster Park gardeners where 80% of study participants have attained, a Bachelor's degree. Half of these individuals hold additional graduate or professional degrees. While many of these individual's limited incomes can be attributed to their current full time enrollment in college programs, several individuals apparently make conscious decisions to accept low-paying jobs or live lifestyles that de-emphasize the traditional importance of economic security.

7.2.1) Diet Quality

Community gardening's most important food-related benefit is its contribution toward the improvement of diet quality. This qualitative improvement includes increased access to fresh vegetables, increased control over dietary choices and increased vegetable consumption. Gardening also allows individuals to select specific vegetable varieties and control the method of production consistent with their personal values and ethics. Gardeners are overwhelmingly concerned with the importance of organic and locally produced foods, which are often unavailable or unaffordable. Community gardening provides a readily accessible source of fresh vegetables regardless of economic status. In turn, this increased accessibility and personal control encourages gardeners to eat more vegetables in season than would be consumed if purchased through commercial sources.

7.2.2) Economics of gardening

Gardening has been touted as providing an economic benefit to participants by increasing food self-sufficiency and thus decreasing personal expenditures on food (Ball, 1983; Berman, 1997; Blair et al, 1991; Naimark, 1982; Patel, 1991). While Foster Park gardeners often agree that community gardening affords them greater access to relatively unaffordable types of produce and can contribute significantly to one's overall food budget, they do not generally view this as a major motivation to garden. This supports previous work by Dunnet and Qasim (2000) and Patel (1996) suggesting that the economic impact of gardening is merely a "fringe" benefit. Quality rather than quantity is the focus of the food-related benefits of gardening with not a single gardener claiming to be motivated for reasons related to food self-sufficiency. Iris, a Foster Park gardener, best sums up the role of community gardening in improving food access and diet. "I wouldn't go hungry without the garden but it makes my diet a lot better."

Community gardening at Foster Park does not appear to play a substantial role in reducing personal dependence upon emergency food relief. The four Foster Park gardeners who rely upon emergency food relief including food pantries and Food Stamps do find community gardening helpful in improving access to quality foods, but it does not decrease their need for food assistance.

7.3) The Benefits of Community Gardening

What are the benefits from community gardening? Foster Park gardeners derive a variety of benefits from community gardening. These are classified as: food-related, psychological, recreational and social. While most gardeners enjoy multiple benefits, a

majority of gardeners cite access to fresh, quality produce as the primary motivation to garden. This supports previous studies by Armstrong (2000) and Patel (1996) indicating that access to fresh food is the primary benefit of community gardening. This study also suggests that the primary motivation for gardening appears to change over time. Although not the focus of this study, there is some evidence to support Kaplan and Kaplan's (1989) finding that beginning gardeners tend to be motivated by the more tangible outcomes of gardening such as the economics of food production while more experienced gardeners derive greater enjoyment from the less tangible psychological and recreational benefits of gardening.

Community gardening is about much more than growing quality food. Foster Park gardeners' gain a number of psychological benefits from gardening that promote good mental health. These benefits include a sense of accomplishment or pride emanating from the gardening experience, relaxation, stress relief and the enjoyment of the aesthetic qualities of gardens. For some, gardening is an important part of the individual's personal identity and provides a valuable outlet for creative energy. For others, gardening plays a significant role in allowing people to "walk their talk" by providing an outlet for people to actively express their personal convictions regarding the importance of local, organically produced foods. While only a fraction of Foster Park gardeners were initially motivated to join to experience these psychological benefits, several gardeners reported that the psychological benefits became the primary motivation for continued participation.

Most Foster Park gardeners view gardening as a form of recreation rather than simply an effort to produce food. As a form of recreation, gardening provides several

benefits by providing people with a commitment to spend time outdoors away from their everyday stresses and a time to enjoy the nurturing aspects of tending plants and interacting with the natural environment. Gardening is also considered an important, low-cost form of physical exercise that contributes to a healthy lifestyle.

As the term "community gardening" implies, it is an activity that takes place within a social context. Foster Park gardeners experience a number of positive social benefits including meeting new people, sharing food and gardening experiences with others and the development of a sense of community and ownership of the garden and surrounding neighborhood. Several gardeners expressed that their experience with community gardening allowed them to feel more at ease within the neighborhood and relieved their concerns over personal safety.

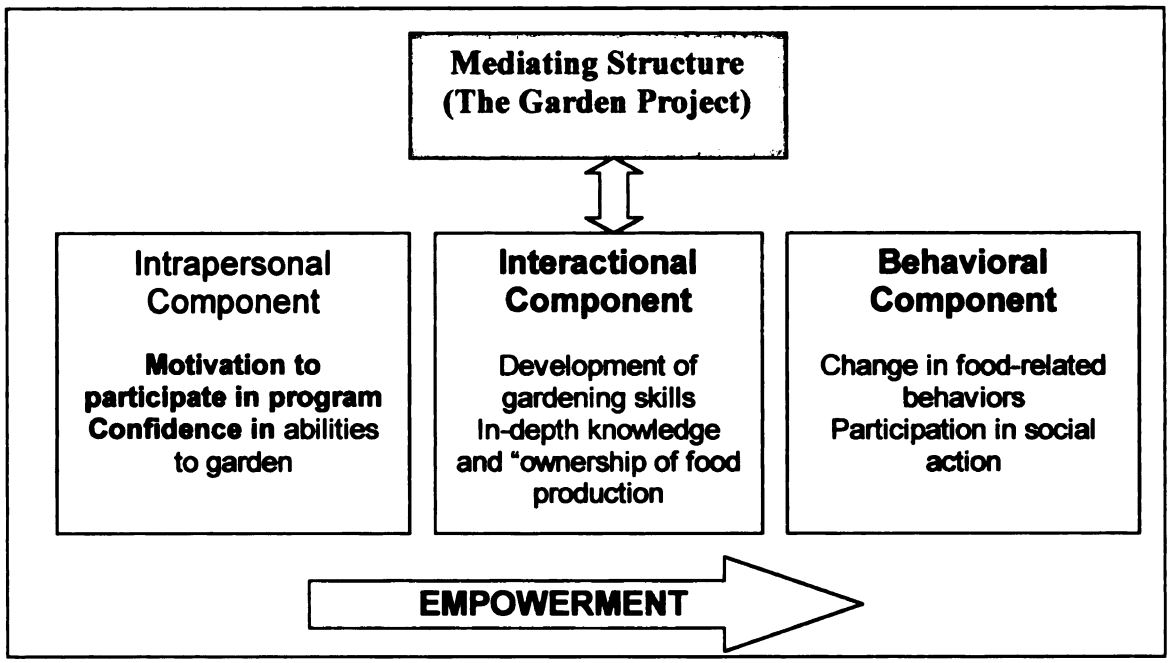
7.4) Gardening and Empowerment

Is empowerment a benefit of community gardening? The primary organizational goal of The Garden Project is to provide people with the opportunity to become actively involved in the improvement of their nutritional, social and economic condition. This "self-help" aspect of The Garden Project's Mission is akin to the phenomenon of personal empowerment described by Hungerford and Volk (1990), Speer and Hughey (1995) and Zimmerman (1995). As described in Chapter 3, this study employed a synthesized model of personal empowerment based on the work of Zimmerman (1995) and Hungerford and Volk (1990) (Figure 4).

A majority of Foster Park gardeners report that their experience with The Garden Project helped them to *feel* a greater sense of control over some aspect of their life.

Whether people perceive a greater degree of control over their access to fresh food, increased control over social interactions or a greater sense of personal well-being, participation in gardening does result in some significant quality of life improvements.

Figure 4: Personal Empowerment through Community Gardening (adapted from Zimmerman 1995; Hungerford & Volk 1990)



However, empowerment must include an actual change in an individual's relative level of social power through some form of social action. This study has not demonstrated that community gardening provides a situation in which social power is increased. While The Garden Project provides opportunities in which people can develop a perception of control and thus psychological empowerment, it does not provide opportunities that are truly conducive to the empowerment of individuals.

Membership in organizations that provide the opportunity for social action and change represents the keystone that transforms the psychologically empowered into the personally empowered (Breton, 1994; Rissel, 1994; Speer & Hughey, 1995). Maton and Salem (1995) and Prestby et al (1990) recognize that the design, structure and operation

of potentially empowering organizations must provide individual members with opportunities for skill development and access to the decision-making process. In this study, The Garden Project acts a mediating structure through which individuals gain the opportunity to enter into the potentially empowering activity of community gardening. As a mediating structure, the purpose of The Garden Project is to provide individuals with access to resources, information and opportunities for skill development – a key component of the empowerment process. This is expressed by the program's distribution of a broad spectrum of gardening supplies to participants. The Garden Project provides a necessary step in the empowerment process by creating the opportunity for individuals to experience the Interactional Component of the empowerment process. Without The Garden Project, motivated individuals could not move beyond the Intrapersonal Component and continue the empowerment process.

The Garden Project distinguishes itself from the charity-based emergency food distribution efforts of the GLFB by assisting people to help themselves. While the program provides people with resources and opportunities to garden and produce their own food, it does not provide an opportunity for the people to take control of the program's administration or resources. Instead, the program is reliant upon continued funding and support from the GLFB. Should the GLFB decide to discontinue The Garden Project, the Foster Park Community Garden would most likely not survive.

While The Garden Project provides the opportunity for individuals to gain a psychological sense of empowerment, it does not provide an opportunity for social action and change. Without this social action, personal empowerment cannot occur. The Garden Project fails to empower individuals by not providing opportunities for social

action and failing to provide appropriate resources and information tailored to meet the needs of its members. These shortcomings are the result of the organizational assumptions and the structure of the program emanating from these assumptions.

7.5) Impediments to Empowerment

Are there barriers to participation? What is the role and nature of skill development in the empowerment of participants? The design and structure of the organization and its interaction with individuals determines whether or not the empowering potential is realized. The key aspects of an empowering organization are:

1. the provision of resources and opportunities for skill development consistent with the needs of individuals,
2. individual control over the decision-making process, and
3. development of a cohesive community capable of creating social change.

7.5.1) Resources and Skill Development: Meeting the Needs of Individuals

The Garden Project was developed around the GLFB's Self-Help Statement, which asserts that self-help activities are a set of educational experiences. The educational aspect of the program is expressed by the development and delivery of formal, gardening-related workshops, educational literature, a demonstration garden, lending library and access to knowledgeable staff and volunteers. While the program places a great deal of emphasis on formal educational experience, Foster Park gardeners obtain a majority of their gardening knowledge through non-formal aspects. Only six of the twenty gardeners interviewed had attended a workshop sponsored by The Garden Project and only one individual identified the newsletter as an educational resource.

Foster Park gardeners gain most of their skills through non-formal, experiential sources of information, through the practice of trial and error, observation and conversations with other gardeners. These methods of skill development are highly valued by gardeners because they can occur at any time, suit the specific needs of the gardener and are unstructured. Some gardeners believe that "book learning" has limited value focusing instead upon learning from others in the garden.

While the participants in this study view their experience with The Garden Project favorably, most gardeners experience some degree of frustration in the program. The level of frustration varies between individuals ranging from slight annoyance for some, to complete frustration in others causing them to abandon their garden plot. These frustrations represent significant potential barriers to participation in the program, which may ultimately inhibit the organization from fulfilling its empowerment mission.

The Foster Park Community Garden experiences a gardener turnover rate of approximately 60%. Unfortunately, relatively few of the disaffected gardeners participated in this study making it somewhat difficult to understand the high degree of gardener turnover. The frustrations expressed by the study participants can however, shed some light onto the barriers that discourage participation. These can be described under two categories: lack of resource control and lack of community development.

Furthermore, the rigidly defined rules of participation create additional hardships for some Foster Park gardeners. Limited water access and the limited window of time in which gardeners are required to begin planting, requires that individual gardeners alter their personal schedule to meet the demands of the garden rather than using the garden on their own terms. This is a significant issue given that Foster Park gardeners possess

different levels of commitment to gardening and pursue gardening for a variety of purposes.

Foster Park gardeners also lack control over the size of the individual garden plots. By providing only one plot size, The Garden Project fails to recognize the differing skill levels and commitment of individual gardeners. This limits gardening to those individuals who are willing and able to use an entire plot. While some skilled and experienced gardeners find the present plot size acceptable, several gardeners found that they were unable to maintain their plot and as a result left the program.

The limitations of the resources provided by The Garden Project resulted in one Foster Park gardener who represents the program's target population, leaving the program. Olivia, a Foster Park gardener, works two jobs, relies upon emergency food assistance, does not own an automobile and rents a home near the garden. Olivia has been an avid gardener since childhood and enjoys community gardening at Foster Park because it gives her the opportunity to work with the soil, enjoy fresh produce and contribute to her community. During the past two gardening seasons, Olivia has made significant contributions of her time as a volunteer at the Foster Park warehouse distributing seedlings to gardeners. Regardless of her dedication to the program and her enjoyment of gardening, the quality of soil, the omni-presence of weeds and the large plot size finally caused her to leave the program.

During this study, numerous gardeners expressed their great dissatisfaction with the quality of resources provided by The Garden Project. Poor quality soil, limited access to water, excessively weedy plots, insect and mammalian pests, acts of vandalism and theft of garden produce make growing vegetables an even more difficult and uncertain

proposition than would normally be expected in a home garden situation. While members of The Garden Project's Advisory Committee have acknowledged these concerns, the scope of these problems has not been fully addressed. Providing quality resources that meet the expectations of gardeners and allow gardeners a greater chance for success, especially those possessing few gardening skills, is an essential and practical first step in helping to ensure some degree of gardener success.

7.5.2) Individual Control over the Decision-Making Process

Ultimately, The Garden Project's failure to supply the correct quantities and qualities of resources is tied to the fact that individual gardeners are not included in the decision-making process. Without the direct input of gardeners, program staff and advisors are placed in the difficult situation of guessing which resources are sufficient and meaningful to gardeners.

The ability of an organization to positively influence the empowerment of its members is tied to the assumptions or belief systems upon which the organization is built (Maton & Salem, 1995; Jamison, 1985). This belief system includes the ideology and values of the organization, which in turn influence the development of policies and procedures that determine the actions taken by the organization.

The assumptions on which an organization is based are only as good as the information available to the decision-makers. Program development that does not include intended beneficiaries would find it extremely difficult to provide a true community service. It is therefore highly desirable to involve those whom the program serves in the design, operation and evaluation, and eventually, the control over an empowerment initiative.

7.5.3) Community Development and Social Change

Access to the decision-making process and the selection and control over resources is tied to the development of a community of individuals with the power to create social change. Personal empowerment is not an endeavor resting entirely within individuals. It includes interaction between the individual and mediating structures or communities in which the individual is embedded. Zimmerman's (1995) model of the process of personal empowerment is useful as far as illustrating this basic process, but it must be made clear that empowerment cannot occur within a social vacuum.

The creation of communities of individuals who control the decision-making process and resources is the key to creating empowered individuals. Communities create the power to educate and motivate members through mutual involvement in the program. Organized communities can also create the changes necessary to serve their true needs rather than the perceived needs of a third party. If the structure of the social environment and the rules for participation are developed and administered by a third party, the creation of empowered individuals is unlikely.

Foster Park gardeners consistently noted the lack of a sense of community. This lack of community discourages participation and ultimately personal empowerment in three ways. First, gardeners are generally interested in the social aspect of community gardening. Several gardeners cited that meeting people who share similar interests in gardening is a major motivation to join The Garden Project. Unfortunately, most individuals find the gardens relatively devoid of other gardeners. This lack of a shared community between gardeners is further exacerbated as neighboring gardeners lose interest in the program and fail to maintain their plots. Being surrounded by unkempt

plots is an unpleasant and inhospitable environment that discourages neighbors from continuing participation and investment in building the garden.

The second problem arising from a lack of community is that it limits the power of individuals to become involved in social change, a basic tenet of personal empowerment. Organizing individuals behind a belief or cause is the most effective way of creating social change. Without a cohesive and organized community improvements in the social condition of people (empowerment) is unlikely to occur (Speer & Hughey, 1995). Instead of a community of individuals working together to improve and secure the future of the garden, Foster Park resembles a group of isolated individuals working on their own plot for largely personal benefit all the while wishing they could bond with other gardeners. An entire garden of individuals working together could demand access to water and work together to find solutions to many of the practical barriers to gardening which stem from a lack of control over the decision-making process.

Finally, the lack of community undermines the empowerment of gardeners by squandering the educational potential of gardening. Skill development is recognized as a critical component in the empowerment of individuals (Zimmerman, 1995). This requires that individual have access to relevant information that is delivered in a manner consistent with the needs of the individual. While The Garden Project places a high degree of organizational emphasis on the delivery of formal education programs, most skill and knowledge development in Foster Park actually occurs through informal channels including conversations between individual gardeners. Without the active development and promotion of a cohesive community of gardeners who know one

another skill development through these informal gardener-to-gardener channels is inhibited.

Although not directly related to the operation of The Garden Project, home ownership and the transient nature of college students may have an important impact upon the rate of gardener turnover. Thirteen of the twenty Foster Park gardeners interviewed rent a house or apartment with a majority of these individuals enrolled in a college program. Eight of the gardeners involved in this study had ended their participation in community gardening activities at Foster Park (Table 5). Two of these "non-continuing" gardeners remain involved in the program at other garden sites. The stated reasons for leaving the program included the lack of community, large plot sizes and concerns over soil quality and water access. Additionally, three gardeners moved away from the immediate neighborhood. The Foster Park gardeners who left the program were generally motivated to join because of the gardening's community development potential.

7.6) The Garden Project's "Self-Help" Mission

Does the community garden fulfill its "self-help" mission, designed to assist unemployed and low-income families in growing their own food? The original goal of The Garden Project was to empower individuals to improve their social, economic and nutritional condition. This was to be accomplished through the distribution of resources and educational support necessary for individuals to grow their own food which in turn leads to increased levels of food self-sufficiency and a reduction in personal dependency upon emergency food assistance programs. However, few of the program participants

actually received emergency food assistance and none expressed an interest in attaining personal food self-sufficiency. Instead, community gardeners participated in the program as a means of increasing access to high quality fresh foods as well as a number of additional psychological, recreational and social benefits.

Table 5: Reasons for Leaving The Garden Project

Gardener	Motivation to Join	Reason for Leaving
Ben	Community building, fresh, organic food	Lack of community involvement, purchased home away from neighborhood
Faith	Recreation and relaxation	Plot was too large, lack of community involvement
Nancy	Fresh produce	Due to health problems, plot size and water access became problems
Olivia	Interaction with nature, community building	Plot was too large. Too many weeds.
Quinn	Interaction with nature, community building	Lack of community
Tammy	Community building	Poor soil quality and water access. Lack of community
Left Foster Park but have remained involved in the program		
Gardener	**Motivation to Join**	**Reason for Leaving**
Crystal	Fresh produce	Health problems, purchased home away from neighborhood.
Lily	Community building, sharing garden experience with children.	Moved away from neighborhood.

The Garden Project is effective in reaching a largely low-income population. However, despite low-incomes, participants are not generally dependent upon emergency food assistance. Given that a majority of gardeners are not seeking to reduce reliance upon emergency assistance, the program's major emphasis on increasing food self-reliance and its focus on producing large quantities of food appears to be misguided. Instead of focusing on quantity, community gardeners are overwhelmingly interested in

improving access to high quality foods that supplement household food consumption and improve the quality and enjoyment of food.

The organizational emphasis on the production of large quantities of food and the personal economic benefits of gardening influenced the design of the physical garden environment and rules for participation in the program. These factors proved to be detrimental to the program by discouraging broad participation in community gardening by marginalizing all but the food-related benefits of gardening.

7.6.1) Program Evaluation

While The Garden Project focuses its efforts on fulfilling its "self-help" Mission, it does not currently incorporate program evaluation into its operations or administration. When asked how The Garden Project's success is measured, one member of the Garden Project's Advisory Committee responded, "I assume The Garden Project is successful unless shown otherwise." This lack of clear evaluation criteria makes it difficult to determine the program's true impact upon the community it serves and whether or not the organization is fulfilling its Mission (Appendix I). When The Garden Project was first established, the program set specific measurable outcomes such as the provision of 15 community gardens on 20 acres of land and the delivery of 50 workshops to 800 families. However, the organization did not establish any mechanism or criteria by which these specific goals were to be evaluated. Without a formal evaluation the organization cannot determine the appropriateness and practicality of these goals.

7.6.2) Organizational Assumptions

An organization's assumptions shape its view of members, their needs and problems and sets into motion the policies and actions taken to serve its members

(Jamison, 1985; Maton & Salem, 1995). Through document reviews and the researcher's observations while an employee of The Garden Project and member of The Garden Project's Advisory Committee, a number of organizational assumptions have been identified. These assumptions, which are based primarily upon The Garden Project's Mission Statement and the Self-Help Statement, are expressed by the program policies and actions (Table 6). While these assumptions reflect the beliefs of the program's planners but do not necessarily reflect the actual observable conditions and experiences of program participants.

The fulfillment of the Mission can also be analyzed from the perspective of the program's Self Help Statement. This statement asserts that a self-help activity is essentially a set of educational experiences that are pertinent, practical and experiential in nature. As such, the experience must be meaningful in the eyes of those whom the program serves. This belief is still strongly engrained in the organizational culture. As one member of The Garden Project's Advisory Committee stated, "You start with people where they're at not where you want them to be." Despite the personal dedication of program staff and advisors towards the goal of providing a meaningful experience for gardeners, the program fails to meet the needs of many individuals. This failure is due to the lack of resources allocated for and directed at gaining a greater understanding of the needs and desires of gardeners. Without such an understanding, the program fails to serve its full potential, alienating some gardeners and most likely prohibiting some new members form joining.

Table 6: The Garden Project: Assumptions and Realities

Organizational Perspective	**Participant Experience**
Assumption	**Conclusion**
Gardeners represent low-income households with some degree of dependence upon emergency food assistance.	Foster Park gardeners generally do represent low-income households. Twenty percent of study participants are to some degree dependent upon emergency food relief.
Participation is motivated by the desire to increase household food self-reliance.	Although many Foster Park gardeners are initially motivated for to grow fresh food, overtime other less tangible benefits are discovered. These additional benefits tend to become the primary motivation for continued participation. None of the Foster Park gardeners were motivated to garden as a means to improve household food "self-reliance". Instead, gardeners participate for a range of benefits including, improvements to diet quality, access to recreational opportunities, improved physical and psychological health and social interaction.
Community gardening is an effective strategy for decreasing dependency upon emergency food relief and improving food self-reliance.	Community gardening does not play a significant role in decreasing dependency upon emergency food. However, it does play a limited, yet important role in improving food self-reliance.
The Garden Project assists people in improving household food access through the provision of gardening resources and education that meet the needs of participants.	Foster Park gardeners generally agree that the program provides ample resources that make gardening accessible and affordable. For two gardeners, the resources and support provided by the program makes community gardening more attractive than home gardening. However, the resources and educational support provided by The Garden Project do not meet the needs of many participants. The selection and quality of resources offered to participants may discourage participation and inhibit the program from fully serving its Mission.
Growing one's own food empowers individuals to improve their nutritional, economic and social condition.	Community gardening at Foster Park plays a role in the perception of empowerment but it fails to truly empower individuals. Empowerment is inhibited by the organizational constraints arising from incorrect assumptions of the needs and motivations of participants.

This failure to understand the needs of gardeners is expressed in the type and quality of resources that the program extends to the community. Foster Park gardeners generally perceive the resources and the environment provided by The Garden Project to be of low quality. Furthermore, the organization exhibits a "one size fits all" approach to the allocation of resources, which fails to recognize the range of expectations and motivations that gardeners possess. While a handful of experienced gardeners have proven to be successful, many individuals find the task of gardening beyond their personal capabilities and commitment.

7.6.3) Empowerment Agenda

Despite a stated emphasis on the personal empowerment of participants, there is little indication that community gardeners actually experience an increase in social power. This case study illustrates the importance of program design upon the empowerment of participants. Programs espousing an empowerment agenda must provide appropriate and meaningful resources and opportunities for skill development. Providing these resources requires that program participants are actively involved in the decision-making process. Most importantly, organizations advocating an empowerment agenda must provide opportunities for social action in which participants eventually gain control over the initiative's resources and decision-making process. By doing so, the individuals can attain a real increase in social power and self-determination.

Rather than arriving at a yes or no conclusion as to whether The Garden Project fulfills its Mission, this study finds that the program fulfills its Mission on a limited scale, failing to meet its full potential as an agent of empowerment.

7.7) Policy Recommendations

The Garden Project is a valued community asset that no doubt makes the Foster Park area a better place to live and has the potential to empower residents. Despite the best intentions of the program and the dedication and commitment of staff, advisors and volunteers, The Garden Project fails to fully serve its Mission. Fortunately, the program has made recent attempts to improve the program by re-examining the program's Mission and role within the community. Through this process, the program has begun to address many of the issues raised in this study. As one member of The Garden Project's Advisory Committee explained, "Often times in one size fits all models, that fits certain people really well but it forces other people away. So the question is...who is being turned away? Who is being disabled and how important are those people in relationship to your core Mission?... If we are losing people because you know, what's happening is these garden plots are basically being propagated by people who are really [avid gardeners] then that means a lot of people are being left behind. That's disabling not enabling and that's a major problem. Especially if the people being disabled are in the target population."

7.7.1) Resource Improvements

The first practical step in improving the conditions at Foster Park is to improve the gardening experience by focusing on the provision of quality physical resources. Providing ready access to water through water taps placed in strategic garden locations would produce immediate benefits for all gardeners. This is one improvement that gardeners have been asking for and by providing this resource the organization can show its commitment to current and potential gardeners.

The soil at Foster Park is of poor quality. Improving soil through the application of organic matter such as finished compost would also improve gardener satisfaction. As with providing water taps, an improvement in soil quality would illustrate a real commitment to the improvement of the gardens and the success of its gardeners. Additionally, the provision of a variety of garden plot sizes and configurations including raised beds for those with physical limitations would benefit both current gardeners and provide opportunities for new gardeners to join. If The Garden Project's role is to provide people with resources, it should provide quality resources that facilitate gardeners achieving their goals.

7.7.2) Profiling the Needs of Gardeners

Providing pertinent, practical and meaningful services to the community is one of the basics tenets of The Garden Project and GLFB. As outlined in this study, an understanding of the needs, expectations and motivations of participants cannot be taken for granted. Instead, organizations striving to meet a specific goal must base their decisions on the collection and analysis of credible data.

Most significantly, The Garden Project has little knowledge of the needs of those members of the community who choose not to use the program. It is unknown how many community members could benefit from participation and whether their lack of participation is due to a lack of knowledge of the program's existence or if specific unidentified barriers prohibit participation.

The Garden Project currently relies upon the use of an end-of-season satisfaction survey as a means of profiling the experiences and needs of participating gardeners. While such a survey provides important data, it is unknown how accurately the data

represents the views of gardeners. The major weakness of the end-of-season survey is that it is mailed to gardeners in October. Those individuals dissatisfied with the program are generally removed from the mailing list prior to receiving their survey. Therefore, these individuals most likely do not participate and most likely see little value in expressing their concerns.

This research project, relying primarily upon the use of in-depth personal interviews with community gardeners, has revealed a number of unexpected results. This suggests that The Garden Project does not fully understand the needs of gardeners. As a result, it must take steps to complete a more comprehensive survey of gardener needs and expectations. Such a research project should rely upon a variety of data collection methods and seek universal participation. In the long term, The Garden Project should place a high-priority on developing and incorporating systematic data collection efforts within the normal operations of the gardens. Such a system must be open to all participants in a manner that promotes full participation and encourages individuals to lodge complaints.

7.7.3) Gardener Education: Developing Motivated Gardeners

This research project focused on the second phase or "interactional component" of the personal empowerment concept. As such, it assumes that an individual participating in the program has previously attained the first phase or "intrapersonal component" of empowerment prior to initiating The Garden Project's registration process. This study found that all participants had attained a prior exposure gardening, generally during childhood. The empowerment model suggests that individuals who

have not attained the first phase of empowerment are not likely to participate in an empowering opportunity.

In order to expand community access to the potentially empowering benefits of community gardening, The Garden Project should promote the development of the first phase of empowerment by introducing individuals, particularly children to gardening. The Garden Project currently provides material support for numerous local elementary and intermediate school gardens. The organization should continue to provide this support as well as seek out new opportunities to introduce people to the benefits of gardening. These activities fall well within the organization's educational mission.

7.7.4) Organizational Change

Creating the conditions necessary to empower individuals requires more than simply providing quality resources. The organizational power structure and decision-making process must also undergo a fundamental change. Operationally, The GLFB and The Garden Project must embrace a less hierarchical command structure and instead grant greater autonomy to staff and community gardeners. The current structure provides few opportunities for gardener input into program development and administration (Appendix J). This structure also places a significant distance between the decision-making bodies and the community gardeners. As a result, the accountability of the decision-makers is reduced while at the same time the knowledge of gardener needs and expectations is reduced. This disconnect has created the current rift between the organizational assumptions and the actual experience of individual gardeners.

The Garden Project's basic mandate is to provide an educational experience that is pertinent and practical. Opening leadership to a broader segment of individuals will

help to ensure that the gardening experience meets the needs and expectations of participants. An important first step towards this goal is to require significant gardener representation on the GLFB Board of Directors and The Garden Project's Advisory Committee. Democratic representation on these bodies would ensure greater public accountability for this vital community resource.

Ideally, the control and organization of community gardens should be neighborhood-based rather than promoted and supported solely by an outside agency. Partnerships with existing community organizations or the creation of new neighborhood groups capable of providing garden leadership are more conducive to creating opportunities for personal empowerment. The Foster Park Community Garden would be better served by an organization comprised of those individuals who directly benefit from the participation. Grassroots organizations have proven to be more flexible and able to meet the needs of individuals, thus supporting the empowerment process (Barr, 1995; Pottharst, 1995).

The goal of increased participant control of the garden and its resources is to reduce the reliance upon an "outside" organization and improve individual accountability over the successes and failures of the garden. In such a scenario, the GLFB and The Garden Project accept an advocacy role using the substantial financial and professional resources of these organizations to support the physical needs of the gardeners (quality soil, water access, seeds, tools, etc.). Additional support would take the form of leadership development and the facilitation of garden-based organization as well as promotional activities throughout the community. Neighborhood control is certainly no guarantee of garden success or an improvement of the current conditions. However, the

successes or failures of the garden are more directly the result of the efforts of those involved in the initiative, rather than an outside organization with little direct accountability – a truly empowering situation.

If the GLFB is to fully support the benefits of community gardening, it must make a stepwise change in its philosophy towards food access. Rather than simply ensuring access to sufficient quantities of food required to reduce hunger and malnutrition, it must work to ensure universal access to high quality foods. The GLFB has been successful in ensuring a readily available supply of emergency food to the community. It now has the opportunity to take the next step by ensuring that all members of the community have access to quality food. Fresh, organically produced and locally grown foods are often unavailable to low-income residents. This study has shown that community gardening is an effective tool in improving access to these foods, which in turn improves nutrition and diet.

Ultimately, The GLFB Board of Directors is responsible for addressing the mismatch between program objectives and the actual gardening experience. As the governing body and financial basis of the Garden Project, the Board must be willing to provide both leadership and financial resources in support of the empowerment objective. Without the support of the GLFB Board of Directors, The Garden Project has little chance in meeting the needs of local community gardeners and the program will continue to under serve the community.

7.8) Future Research

Qualitative case studies often raise more questions than they answer. The purpose of this case study was to provide an initial investigation into the empowering potential of community gardening, a topic that has received little in the way of scholarly research. While the study addresses the issue of empowerment as well as provides useful insights into the personal experience of community gardeners, it has also opened the door for future research opportunities that could not be properly addressed within the scope of this study.

Future research opportunities should focus on the following areas:

- How do GLFB Board Members, The Garden Project staff, volunteers and donors define empowerment? How do these individuals perceive that the program does or does not promote the empowerment of participants? Such research would compliment this current study by providing an understanding of the degree to which organizer and participant perceptions match.
- What are the similarities and differences in the experiences of gardeners at the other 17 community gardens administered by The Garden Project? Each garden administered by the program is believed to possess a unique blend of physical resources and serve a diversity of individuals. A comprehensive study of all gardens in the Lansing could help to uncover the necessary ingredients for a "successful" garden. Such a study could benefit The Garden Project in its efforts to develop new gardens and determine the resources required.

- What role does home gardening play in The Garden Project's empowerment agenda? This study focused solely on the community gardening program and did not address the experience of the approximately 100 households who receive home gardening assistance through The Garden Project.
- Why do people leave The Garden Project? This important question was not fully addressed by this study. A greater understanding of why people leave the program and whether the turn-over rate is related to the organization and operation of the gardens or simple a function of a mobile population or other individual factors has significant implications for the future management of the program.
- How does the community gardening experience of refugee families compare to that of native-born Americans? The Garden Project has served a large Southeast Asian community since its inception. Additionally, the Lansing area is home to growing numbers of African and Middle Eastern refugees who could potentially benefit from participation in the program. Even within the program, little is known about the experience of these individuals.
- What is the true "target population" of The Garden Project? From an organizational standpoint, The Garden Project has assumed to serve unemployed and low-income household, which are generally believed to have lower educational levels. This study found that Foster Park gardeners are generally more highly educated than typical neighborhood residents. It is unknown what if any factor the garden's proximity to Michigan State University has on attracting educated gardeners. Conversely, the presence of

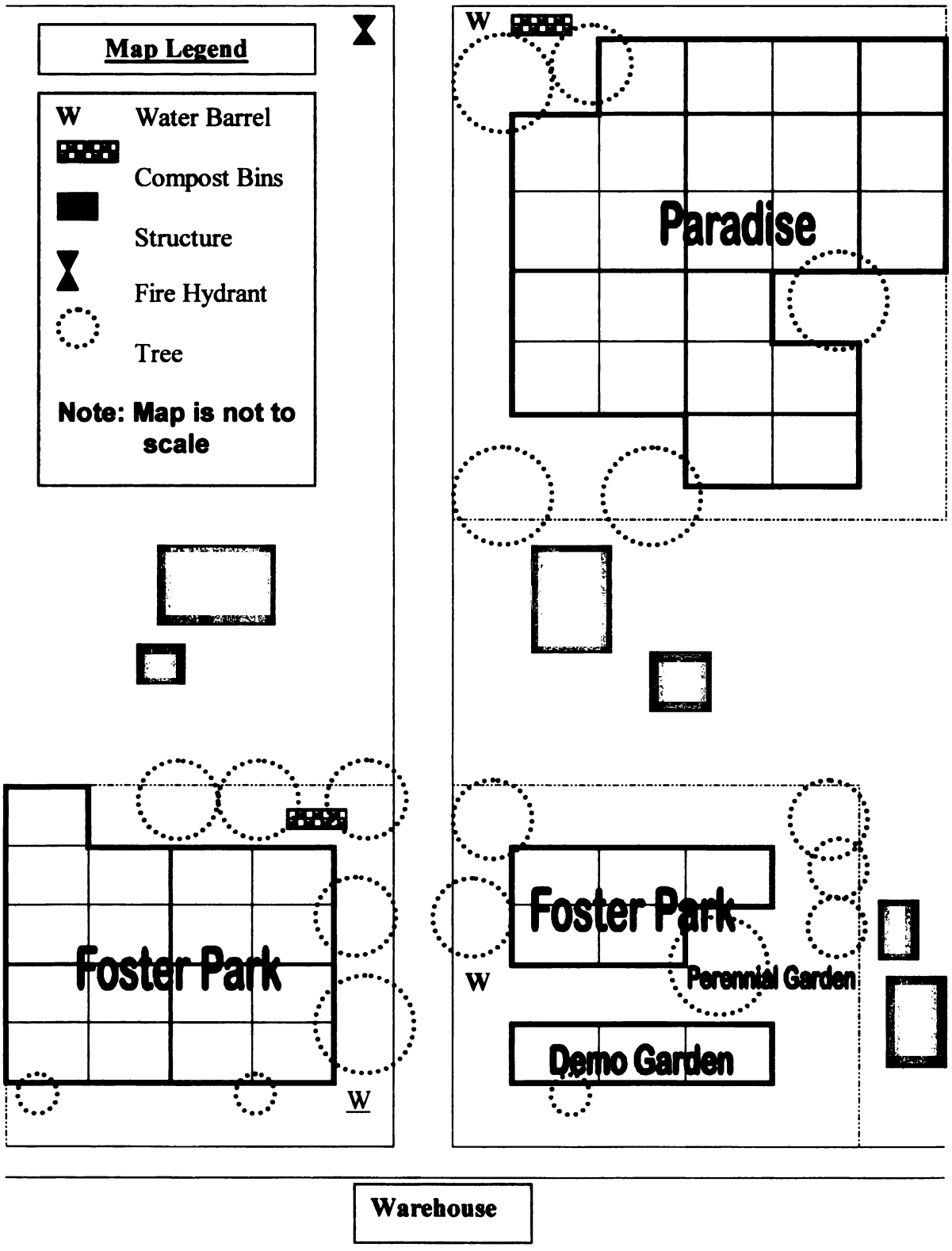
so many highly educated gardeners may be a symptom of a poor local economic situation in which an education does not ensure food and economic security.

- An in-depth analysis of the policy recommendations outlined in Section 7.7 of this chapter. Should The Garden Project implement these recommendations, a study documenting the change process and its outcome would provide an important "next step" for this study. Such a study would help to validate or reject the conclusions of this study.

The Garden Project provides an accessible and interesting opportunity to examine community gardening, community development, organizational structure and the phenomenon of empowerment. Additionally, the organization has developed and maintained a strong working relationship with multiple research and support units at Michigan State University. This provides a fertile ground for further community-based and practical research that meets the needs of both institutions. It is hoped that this research project has provided a useful and important starting point to inspire further research with the goal of assisting The Garden Project and Greater Lansing Food Bank in fulfilling their missions by serving the true needs of the community.

LIST OF APPENDICES

APPENDIX A: Garden Map



The Garden Project
2002 Registration for Home and Community Gardeners

Please print!

Name _____ Home Phone _____ Work Phone _____

Address _____ City _____ Zip _____
E-mail Address _____ County _____

Do you live within: ___ Lansing city limits ___ East Lansing city limits ___ Lansing Township ____ Meridian Township

Did you garden with The Garden Project last year? *(Circle one number)* 1. Yes 2. No	Lansing: East Side ____Clifford Park ____Caesar Donora Park ____Potter Park ____Foster Park ____Paradise Garden
Are you a beginning gardener? 1. Yes 2. No	Lansing: Central ____Oak Park
Are you an organic gardener? 1. Yes 2. No	Lansing: South Side ____Henry North School ____Our Savior Lutheran Church ____Risdale Park
Do you want rototilling service **at your home**? (Low to moderate income households only.) There is a $5.00 transportation fee for this service. *Please do not send money; pay when your garden is tilled.* 1. Yes 2. No	East Lansing/Meridian Township ____Lilac Street plot number____ ____Towar Avenue Other Site Please indicate _____
Where would you like to have a community garden plot? There is more information about the locations of gardens in *Garden Notes*, attached. *(Please check your first choice.)*	Would you like more than one plot? Second plots will be available if space permits to experienced gardeners only. (First plot is free; additional plots are $5.00 each. Please pay at the plot assignment meeting.) 1. Yes 2. No
Lansing: North/West Side ____Airport ____Otto Middle School ____MLK/Oakland Avenue	Do you have any physical handicap and/or need special consideration in the location of your plot? 1. No 2. Yes Please explain

The Garden Project could not function without the help of many volunteers. There are a variety of opportunities to share your skills with the project.	How many persons live in your household? _____
Please check the volunteer task(s) that you are interested in working on: ____Seed packaging ____community garden coordinator ____construction projects (do you have construction skills and/or tools) ____mailings (help with the folding and labeling of newsletters and invitations, 2-3 hours during weekdays) ____demonstration garden (help design, plant, weed, water and maintain demonstration garden in Foster Park) ____office support (We need volunteers to help make telephone calls, computer data entry) ____warehouse support (The Garden Project operates a warehouse located in Foster Park where we distribute seeds, plants and tools to gardeners. We need help sorting seeds, assisting gardeners with finding plants, set-up and clean-up of displays, general housekeeping duties, etc.)	What is the **yearly** gross income for your household? Add together the yearly incomes for all persons over 18. *(Please check one)* ____$0 to 19,800 ____$19,081 to $22,650 ____$22,651 to $25,450 ____$25,451 to $28,300 ____$28,301 to $30,550 ____$30,551 to $31,700 ____$31,701 to $32,850 ____$32,851 to $35,100 ____$35,101 to $36,200 ____$36,201 to $37,350 ____$37,351 to $40,750 ____$40,751 to $45,300 ____$45,301 to $48,900 ____more than $48,900
____ harvest dinner (In September we will be having a potluck dinner to celebrate the harvest. We need volunteers to help with the set-up and clean-up) ____ other **We are required to report the following information to the agencies which provide financial support for The Garden Project. It is for statistical purposes only, and will remain completely confidential.**	What is your racial/ethnic group? ____White ____African American ____Hispanic ____Native American/Eskimo ____Asian/Pacific Islander ____Other_____
Please take a minute to fill out this section completely. Thank you. Is your household: *(Please check one)* ____single female with or without children ____single male with or without children ____married or unmarried couple with or without children	*Optional:* Tax deductible contribution to The Garden Project. Amount enclosed: $_____ Thank you!

APPENDIX C:
Postcard

Dear _____,

Michigan State University is conducting a study of the value of community gardens. For this study, we are contacting all those who are current or former community gardeners at either the Foster Park or Paradise Community Gardens. We are equally interested in speaking with people who enjoyed their gardening experience as well as those who did not.

As someone who has gardened at these locations, we would like to interview you as part of this study. An interview typically takes 30-60minutes. It would be conducted by Bob Kirkby at your residence at a time and place convenient for you.

We need to complete our gardener interviews by the end of October. If you are interested in participating in the study please contact Bob at 887-4660 (daytime or evening). While we hope that you will be willing to participate in the study, any participation is voluntary and all information would remain confidential. To show our appreciation, each person interviewed will be entered into a lucky draw for a cash prize of $100 to be awarded November 6th. We expect to interview 20-30 people in total for the study.

Thank you for any assistance you can provide to our study.

Bob Kirkby (phone: 887-4660)
MSU Researcher

Dr. Jo Ann Beckwith
MSU Principal Investigator

APPEDNIX: D
Interview Guide

Name:
Date:
Start Time:
End Time:
Location:

1) How did you first get involved in community gardening with The Garden Project?
2) What did you hope to gain from community gardening?
3) What types of gardening experience did you have before community gardening?
4) After participating in community gardening for one season, why did/didn't you return for a second season?
5) Has the gardening experience met your expectations?
    a. If yes, in what way?
    b. What were the benefits?
    c. If not, why?
    d. Were there any unexpected benefits?
6) Did your experience with community gardening help you to develop any new skills?
    a. If so, what types of skills did you acquire?
    b. How important were these skills?
    c. Where/from whom did you acquire these skills?
    d. Have these skills made gardening more rewarding?
    e. Was there anything that you wish you'd have known before you started gardening?

f. Are there any other skills or other potential benefits that you would like to have gained from The Garden Project? If yes, what are they?

7) In what ways could The Garden Project be improved to allow participants to get more out of the gardening experience? Are there specific barriers (time conflicts, transportation, etc.)?

8) Are you familiar with the term, "empowerment"?

   a. What does it mean to you?

   b. Have you been empowered in any way from your experience with The Garden Project?

   c. If yes, in what way?

   d. If no, why not?

9) Were you motivated to garden as a means of getting enough food to eat?

   a. If yes, how important is gardening?

10) Did your diet of how you think about food change as a result of your community gardening experience?

   a. How important was it?

   b. If food security is an issue:

      i. Have you ever had trouble getting access to food?

      ii. Does gardening play a role in getting food?

      iii. If yes, how important is it?

      iv. How else do you stretch your food budget (Food Stamps, food pantries, etc.)?

      v. Have you ever applied for or received Food Stamps?

11) "Here is a hypothetical question. If you were hired to promote the benefits of community gardening, which benefits would you promote as being the most important and why?"

12) "Please indicate (yes or no) if you have gained any of the following from community gardening?

    a. Improved gardening skills?

    b. A greater sense of community?

    c. A different view of food or food production?

    d. A sense of empowerment?

        i. Follow-up as needed.

13) "Would you like to add any other comments?"

APPENDIX E:
APPROVAL OF A PROJECT INVOLVING HUMAN SUBJECTS

University Committee on Research Involving Human Subjects (UCRIHS)
Ashir Kumar, MD, Chair
202 Olds Hall, Michigan State University
East Lansing, MI 48824-1046
PHONE (517) 355-2180 FAX (517) 432-4503
E-Mail - UCRIHS@msu.edu
WEB SITE - http://www.msu.edu/user/ucrihs/

Office Hours: Mon.-Fri. (8:00 A.M.-Noon & 1:00-5:00 P.M.)

DIRECTIONS: Please complete the questions on this application using the instructions and definitions found on the attached sheets. If not attached, these materials are available at http://www.msu.edu/user/ucrihs/ucrihs_instruction_form.htm.

REQUIRED	
1. Responsible Project Investigator: (MSU Faculty or staff supervisor)	
Name:	Jo Ann Beckwith
Social Security #:	
Department:	Resource Development
College:	ANR
Academic Rank:	Assistant Professor
Mailing Address:	310A Natural Resources East Lansing, MI 48823
Phone	(517) 432-7733
Fax:	(517) 355-8994
Email:	Beckwi21@msu.edu

I accept responsibility for conducting the proposed research in accordance with the protections of human subjects as specified by UCRIHS, including the supervision of faculty and student co-investigators.

SIGN HERE: _____

Note: Without signature, application can not be processed

IF APPLICABLE	
2. Secondary Investigator: (**Students Must Provide Student ID#**)	
Name:	Robert Kirkby
Student ID#: or SS#	A26921534
Department:	Resource Development
College:	ANR
Academic Rank:	Graduate Student
Mailing Address:	1928 Roberts Lane Lansing, MI 48910
Phone:	(517) 485-8898
Fax:	
Email:	Kirkbyro@msu.edu

Additional Investigator Information	
3. Name:	
Student ID#: or SS#	
4. Name:	
Student ID#: or SS#	
5. Name:	
Student ID#: or SS#	

UCRIHS Correspondence: Copies of correspondence will be sent to the primary and secondary investigators only. If you would like additional investigators to receive correspondence, please provide further address information on a separate page.

6. Title of Project: Learning and Personal Empowerment Through Community Gardening: A Case Study of the Foster Park Community Garden

7. a. Have you ever received Preliminary Approval for this project? No [X] Yes [ ]

b. Is this application a Five-Year renewal? No [X] Yes [ ]

c. Do you have any related projects that were approved by UCRIHS? No [X] Yes [ ]

If yes, list IRB numbers _____ _____

8. Funding (Complete a or b).

****All funded FULL REVIEW research must submit two (2) copies of the grant application.****

X a. none

_____ b. Source(s): _____

List any source of project funding above whether it is through MSU or paid directly to one or more of the investigators. Please provide 2 complete copies of your grant application materials (if any) with your UCRIHS submittal.

If applicable, MSU Contracts and Grants app. and / or acct. #(s) _____ _____ _____

9a. Are you using a FDA approved drug/device/diagnostic test?
No [X] Yes [ ]
If yes, please enclose a copy of the package insert.

b. Are you using a FDA approved drug/device/diagnostic test for a non-FDA approved indication?
No [X] Yes [ ]

10. Has this protocol been submitted to the FDA or are there plans to submit it to the FDA? No [X] Yes [ ]
If yes, is there an IND #? No [ ] Yes [ ] IND # _____

11. Does this project involve the use of Materials of Human Origin (e.g., human blood or tissue)? No [X] Yes [ ]

12. When would you prefer to begin data collection? May 1, 2002

Please remember you may not begin data collection without UCRIHS approval.

13. Category of Review. Circle a,b, or c below and then specify sub-category for a. and b. (See Instructions pp. 6-8).

a. This proposal is submitted as EXEMPT from full board review.
Specify sub- categories: _____

b. This proposal is submitted for EXPEDITED review (Note: Includes audio/videotaped protocols).
Specify sub-categories: 7

c. This proposal is submitted for FULL Board Review.

14. Is this a Public Health Service funded, full review, multi-site project for which MSU is the lead institution? No [X] Yes [ ]
If yes, do the other sites have a Multiple Project Assurance IRB that will also review this project?
[ ] No. Please contact the UCRIHS office for further information about meeting the PHS/NIH/OPRR regulations.
[ ] Yes. Please supply a copy of that approval letter when obtained.

15. Research Category
Check all categories that apply

[ ] Education Research	[ ] Gene Transfer Research
[X] Survey/Interview	[ ] Fetal Research
[X] Audio/Video Recording	[ ] Medical Records
[ ] Oral History	[ ] Stem Cell Research
[ ] Internet-based	[ ] Medical Imaging
[ ] Analysis of Existing Data	[ ] Oncology
[ ] International Research	[ ] Phase 1 Clinical Trial

16. Project Description (Abstract): Please limit your response to 200 words.

The contemporary American food system fails to meet the needs of a significant proportion of the population. In response to this failure a number of alternative food production and distribution systems, including urban community gardens have been developed. A central feature of many community gardening programs is the role of creating social and economic change by which those individuals adversely affected by the shortcomings of the contemporary food system can regain some degree of control over the quantity and quality of the foods they eat.

Empowerment theory suggests that individuals may gain control over important life domains such as food choices through a process of learning and skill development. This process leads to a "critical awareness" of the individual's role within the larger system that allows for positive and educated behavioral changes. These educated behavioral changes result in an empowered individual that understands his or her rights and responsibilities and the repercussions associated with behavioral choices.

This study will examine the sources and methods of knowledge and skill

development as experienced by participants in an urban community gardening program. Through the use of in-depth participant interviews, this study will lead to a greater understanding of the individual's learning experience. A careful collection of participant experiences will aid community gardening programs in meeting the needs of participants and ensuring the development of empowered citizens.

17a. Procedures: Please describe all procedures and measures you will use in collecting data from human subjects. This pertains both to prospective and retroactive (i.e.pre-existing data) research procedures. Investigators should carefully consult the instructions to correctly complete this question. Also indicate below if data collection includes audio or image recording.

This study will be based upon in-depth personal interviews with the subjects. Each subject will be interviewed for approximately one hour. The interviews will be one on one with the secondary investigator performing all interviews and data recording. Both parties will mutually agree on the location and date of the interviews. Additional follow-up interviews may also be requested. Upon consent of the subject, the interview will be recorded on audiotape for the purpose of creating a full written transcript following the interview. Interview transcripts will be coded using content analysis. The purpose of these interviews is to gain a first hand account of the gardener's experience and to translate this experience based upon existing research literature on the phenomenon of empowerment. The final research report is expected to contain un-attributed subject quotes to support the research.

The semi-structured in-depth interview will use the following list of questions as an interview guide:

- How and when did you first get involved with the Garden Project (GP)?
- What types of gardening experiences did you have before joining the GP?
- How often do you use the community garden?
- When you first joined the community garden, what benefits did you hope to get out of it?
- What benefits, if any, have you drawn from the community garden.
- Are there any specific skills or knowledge that you learned through the GP?
- Have you experienced any disappointments or frustrations with the GP?
- Have your experiences with community gardening changed the way you think about food?

These questions are intended to develop an understanding of the individual's motivation for participation in community gardening and what if any impacts participation has had on the individual.

17b. Does your investigation involve incomplete disclosure of the research purpose or deception of subjects? [X] No [ ] Yes
If yes, be sure to include copies of your debriefing procedures for subjects. (See the UCRIHS Instructions p. 9).

18a. Subject Population: Describe your subject population. (e.g., high school athletes, women over 50 w/breast cancer, small business owners)

The study population will include individuals who participated in community gardening at the Foster Park Community Garden located in Lansing, Michigan and live within the immediate neighborhood.

These individuals will be identified using gardener registration data obtained from the Garden Project. This data shows that the average household size of potential informants is 2.6 and the average annual per capita income is $10,769. Of these households, approximately 69% are white, 11% African American, 6% Hispanic, 8% Asian/Pacific Islander, and 6% other or no response.

No minors will be involved in this project.

b. The study population may include (check all categories where subjects may be included **by design or incidentally**):

Minors	[ ]	
Pregnant Women	[X]	
Women of Childbearing Age	[X]	
Institutionalized Persons	[ ]	(<—Note: Includes prisoners)
Students	[X]	
Low Income Persons	[X]	
Minorities	[X]	
Incompetent Persons (or those with diminished capacity)	[ ]	

c. Expected number of subjects (including controls) 40

d. How will the subjects be recruited? (Attach appropriate number of copies of recruiting advertisement, if any. See Table 4, p. 18 of UCRIHS instructions)

The subjects will be recruited in the following manner. Subjects who participated in the Foster Park Community in 2001 will be contacted by telephone. This telephone call will inform the potential subject of the purpose of the study and will seek permission for a personal interview. Individuals that cannot be contacted via telephone will receive a postcard via U.S. mail containing the same information. The postcard will ask the potential subject to contact the researcher for more information or to schedule an interview.

Telephone Script:
My name is Bob Kirkby. I am a graduate student a Michigan State University conducting a community gardening research project. The purpose of this research is to

better understand why people participate in community gardening and what types of experiences people have in the garden. You are being contacted because your experiences are very important.

I would like to schedule a time to interview you about your community gardening experiences. The interview will last approximately one hour and I may have some follow-up question to ask you at a later date. I can make arrangements to meet with you at a time and place of your convenience. Your participation in this study is completely voluntary.

Do you have any questions?

Would you like to participate in this study?

[if the subject agrees to participate, schedule the interview.

Postcard:

Dear _____

My name is Bob Kirkby. I am a graduate student a Michigan State University conducting a community gardening research project. The purpose of this research is to better understand why people participate in community gardening and what types of experiences people have in the garden. You are being contacted because your experiences are very important.

I would like to schedule a time to interview you about your community gardening experiences. The interview will last approximately one hour and I may have some follow-up question to ask you at a later date. I can make arrangements to meet with you at a time and place of your convenience.

Your participation in this study is completely voluntary.

Please contact me if you are interested in participating in this study or have any questions.

Bob Kirkby
310A Natural Resources
Michigan State University
East Lansing, MI 48823
Phone: 485-8898
E-mail: kirkbyro@msu.edu

e. Are you associated with the subjects (e.g., they are your students, employees, patients)? [X] No [ ] Yes

If yes, please explain the nature of the association and what measures you are taking to protect subjects' rights, including safeguards against any coercion.

f. If someone will receive payment for recruiting the subjects please explain the amount of payment, who pays it and who receives it.

g. Will the research subjects be compensated? [X] No [ ] Yes.
If yes, provide details concerning payment, including the amount and schedule of payments including any conditions. In addition, this information must also be explained in the consent form. (See Instructions item 6, p. 14)

h. Will the subjects incur additional financial costs as a result of their participation in this study? [X] No [ ] Yes. **If yes**, please also include an explanation below and in the consent form.

i. Will this research be conducted with subjects who reside in another country, or
who reside in the U.S. but in a cultural/ethnic context different from traditional
U.S. society/culture?
Note: This may include ethnic groups/sub-cultures/ and other non-mainstream minorities, and would include non-English language speakers.
[X] No [ ] Yes.

(1) If yes, list the country(s) below, if applicable:

(2) If yes, will there be any corresponding complications in your ability to minimize risks to subjects, maintain their confidentiality and/or assure their right to voluntary informed consent as individuals?
[ ] No [ ] Yes.

(3) If your answer to i-(2) is yes, what are these complications and how will you resolve them?

19. How will the subjects' privacy be protected? (See Instructions p. 11)

Confidentiality of the research subjects' identities will be maintained. The name of each subject will be coded with an alias. A master list of the identities will be maintained electronically on a password-protected computer and in paper form in a locked file cabinet. Only the research investigators will have access to this and any other data collected in the study.

Interview audiotapes and written transcripts will likewise be maintained in a separate password-protected computer and a file cabinet. Audiotapes will be erased following written transcription. Written transcripts of the interviews will be retained for a minimum of 3 years in a secure file cabinet. These transcripts will identify the subjects only by their alias.

20. Risks and Benefits for subjects: (See Instructions p. 11.)

Participation in this study poses very little risk to the subject. Individuals will voluntarily provide information on their community gardening experiences. A potential risk may be the identification of subject comments in the final research product. This could potentially include negative comments about the community gardening experience or negative comments regarding others in the community. This risk will be managed through the careful protection of subject confidentiality outlined in Section 19.

The benefits of subject participation in this study include the potential improvement of the community gardening program. This study may assist program staff in improving the community gardening program through an enhanced understanding of the needs and beliefs of participants. This may include improvements to gardener education programs and gardening facilities that will result in enhanced enjoyment and greater community involvement. This research may also benefit other community gardening programs by providing important insights into the needs of urban gardeners and provide a method of discovery for other researchers in the field of community development.

21. Conflict(s) of Interest (See Instructions p. 12 & Table 3, Item 5, p.15)

a. Have you or will you or a member of your immediate family receive, from the sponsor of the research, financial or other forms of compensation?

__X__ No _____ Yes

b. Do or will you or a member of your immediate family have a vested interest in the company/agency/firm that is to sponsor the research (answer "no" if there is no sponsor for the research.)

__X__ No _____ Yes

If the answer to either 21a. or 21b is yes,

(1) Describe the relationship between you or a member of your immediate family and the sponsor of the research.

and (2) Include a statement in the consent form addressing potential conflicts of interest (see Table 3, Item 5, p. 15) or state below why you believe such a statement is not necessary for the protection of human subjects.

c. Are you submitting FDA form 3454 or 3455 (Conflict of Interest)?

__X__ No _____ Yes

If yes, please enclosed two (2) copies with this application

22. Consent Procedures (See Instructions pp. 12-14)

The research subjects will be notified of the voluntary nature of their participation beginning with the initial contact. Most individuals will be contacted via telephone. During this contact, the potential subject will be informed of the purpose of the research project. This initial contact will also stress the voluntary nature of participation (See 18d).

Immediately prior to the interview with the subject, the researcher will again explain the purpose and intent of the research. The subject will be provided with the attached informed consent form. This information will be read aloud to the subject for clarity.

Subjects who agree to participate will sign the informed consent form and will be reminded that they can withdraw from the study at anytime without penalty.

CHECKLIST: Check off that you have included each of these items. If not applicable, state N/A:

[ ] Completed and **signed application**

[ ] The correct number of copies of the application, **instruments** (e.g., surveys, interview questions, questionnaires, etc.), and **measures** according to the category of review (See Instructions, Table 4, p.18)

[ ] Copy(s) of **consent form** (or script for verbal consent) and debriefing document, if applicable

[ ] Two copies of **grant application for FULL REVIEW projects**, if applicable

[ ] Two copies of FDA form 3454 or 3455 (Conflict of Interest), if applicable

[ ] **Advertisement**, if applicable

[ ] One complete copy of the **methods chapter** of the research proposal (if available)

APPENDIX F

Learning and Personal Empowerment Through Community Gardening:
A Case Study of Foster Park Community Garden

The purpose of this study is to determine the Garden Project's impact upon the neighborhoods that it serves. This study relies upon information provided by community gardeners.

You are being asked to participate in this study because your community gardening experiences are critical for an understanding of the impact of the Garden Project upon the local community. This study will also be used to fulfill the researcher's thesis requirement of a Masters degree in Resource Development from Michigan State University.

Your participation in this study is strictly voluntary. You may refuse to participate or refuse to answer any question. You may discontinue your participation in this study at any time without penalty. Your voluntary participation in this research project will require approximately one hour.

For the purposes of this study, you are being asked to submit to an interview. I would like to record this interview on audiotape to assist with the collection of data. The tape recordings will be used solely for the creation of a written transcription of the interview. The tapes will be securely stored in a password protected computer and a locked filing cabinet. This information will be available to only the researcher. Your name will not be identified in any report of research findings. You may choose not to have this conversation recorded on tape. If you agree to have this interview recorded you may request the tapes be erased at any time. Your privacy will be protected to the maximum extent allowable by law.

Your assistance in this study is very much appreciated. If you have any questions about the study, please contact me:

Bob Kirkby
Graduate Student
310A Natural Resources
Michigan State University
East Lansing, MI 48824
Phone: (517) 485-8898 E-mail: kirkbyro@msu.edu

If you have questions or concerns regarding your rights as a study participant, or are dissatisfied at any time with any aspect of this study, you may contact – anonymously, if you wish:

Ashir Kumar, M.D.
Chair of the University Committee on Research Involving Human Subjects (UCRIHS)
202 Olds Hall, Michigan State University
East Lansing, MI 48824.
Phone: (517) 355-2180 Fax: (517) 432-4503
E-mail: ucrihs@msu.edu

My signature below indicates that I voluntarily agree to participate in this study.

_____ _____

Signature Date

	Informant																			
Registration Process	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**	**P**	**Q**	**R**	**S**	**T**
Recruited by friend				X	X	X				X		X		X			X			
Flyer or sign	X		X			X							X		X				X	X
MSU Extension							X											X		X
Newspaper								X												
Agency referral									X											
Other		X									X									
Prior Gardening Experience	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**	**P**	**Q**	**R**	**S**	**T**
Family garden - childhood	X		X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Friend's garden -adult				X	X				X										X	
Farm experience										X			X						X	
Community/allotment gardening	X								X	X		X		X						
Community Supported Agriculture		X																		
Formal Training																				
Agriculture-related degree				X																
Master Gardener			X															X		X
Educational Sources	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**	**P**	**Q**	**R**	**S**	**T**
Improved Gardening Skills?	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X
Formal																				
Workshops	X		X		X		X		X											
Newsletter															X					
Staff					X							X		X						
Demonstration Garden																		X		
Pamphlets												X							X	
Books/Magazines							X	X				X				X		X	X	
Informal																				
Trial and Error	X			X	X		X	X								X			X	
Observation	X	X	X		X		X							X		X		X		
Conversation	X		X	X	X			X	X			X	X	X			X	X		
Friends/Family				X			X									X				
Benefits - Resources	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**	**P**	**Q**	**R**	**S**	**T**
General garden resources	X		X	X		X	X		X		X	X		X	X		X	X	X	
Educational Support	X																X		X	
Motivational Support												X								
Need Space	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Food	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**	**P**	**Q**	**R**	**S**	**T**
A different view of food or food pro	X					X	X		X			X	X			X	X	X	X	
Applied for Food Stamps	X			X				X							X					
Improved diet		X			X	X	X	X	X					X		X	X			
Increased control over food choices	X			X		X		X				X				X	X			
Increased control over production	X	X	X		X		X	X			X								X	
Increased control over variety/taste					X	X	X				X						X			
Abundance	X					X	X			X	X	X								
Food attitudes	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**	**P**	**Q**	**R**	**S**	**T**
Local food			X		X		X	X	X										X	
Organic food			X				X	X	X			X						X	X	
Fresh food		X	X		X			X	X			X		X				X		
Skeptic of food system	X	X	X		X			X				X		X					X	

Psychological Benefits	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**	**P**	**Q**	**R**	**S**	**T**
Sense of accomplishment		X	X	X	X			X	X		X	X	X				X	X	X	X
Relaxation/Meditation	X	X			X	X		X	X		X						X	X		
Personal identity	X				X				X	X		X	X	X						
General Mental Health	X							X			X	X								
Creativity/Aesthetics	X								X		X					X	X			
Recreational Benefits	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**	**P**	**Q**	**R**	**S**	**T**
Outdoor Commitment					X	X	X		X											
Nurturing Plants	X				X					X	X	X			X					X
Connection with Nature	X										X	X				X				
Physical Health									X			X	X	X				X		
Social Benefits	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**	**P**	**Q**	**R**	**S**	**T**
Meeting People	X	X	X	X	X				X	X	X	X	X	X	X	X	X	X	X	
Sharing Food				X	X	X		X	X	X		X	X				X			
Sharing Experiences	X			X	X				X		X		X					X	X	X
Sense of Community	X		X	X	X				X		X	X	X	X	X	X	X	X	X	X
Ownership in neighborhood	X				X				X											X
Ownership in plot	X				X					X				X						X
Empowerment	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**	**P**	**Q**	**R**	**S**	**T**
Sense of Empowerment?	X	X	X	X	X	X	X		X	X	X	X	X		X	X	X	X	X	X
Nutritional Empowerment	X	X	X					X			X		X			X			X	
Social Empowerment				X						X		X			X			X	X	X
Psychological					X				X			X								
Felt empowered before gardening			X	X	X			X				X		X		X				
Barriers	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**	**P**	**Q**	**R**	**S**	**T**
Water Access		X	X		X	X	X	X	X			X	X	X		X		X	X	X
Soil Quality					X									X		X				X
Soil Preparation					X			X	X	X										
Plot size						X						X		X				X		
Pests & Disease							X	X	X	X		X								X
"Didn't see anyone in garden"		X			X	X	X	X			X					X	X		X	X
Empty plots						X	X	X										X		X
Weedy plots					X	X	X								X	X	X	X		X
Personal safety						X		X												
Theft & Vandalism	X	X						X			X					X				X

2002 Community Garden Guidelines

General Guidelines:

- Plant your garden as soon as possible after plots have been assigned. This is important in order to get a good start on the growing season, and also to prevent weeds from getting out of hand.
  (Two week planting deadline:_____)
- Wear your ID card when you are in the garden. Persons without an ID card may be questioned by other gardeners. You may get enough ID cards for each household member who will be working in the garden. Non-gardeners are permitted only when accompanied by a registered gardener.
- Keep your plot weeded throughout the summer. Gardeners with plots that have not been weeded for several weeks will be notified. If for any reasons you cannot take care of your plot throughout the summer, please call The Garden Project office.
- Gardeners are responsible for keeping the pathways around their plots clean-weeded and trash free.
- At the end of the gardening season, remove all string, stakes, fencing and miscellaneous supplies. **Clean-up deadline for this season is October 14, 2002.**
- Please report any vandalism, theft, or unusual behavior to your site coordinator(s) and/or The Garden Project office.
- If you are gardening in an organic section, no synthetic chemicals (i.e., pesticides, herbicides, etc.) may be used.

Neighborliness:

- It is requested that gardeners be considerate and not grow tall plants (like corn or sunflowers) in a location that will shade neighboring gardener's plots.
- Please do not litter at the gardens. Take your trash home with you when you leave the garden. The gardens need to be kept clean so that we can continue to use the land.
- Please respect other people's plots. Do not walk in them unless invited. There are pathways throughout the garden for the convenience of gardeners.

Garden plot reassignment/loss of gardening privileges:

- Any plots that have not been planted two weeks after the assignment date and after a reminder call will be reassigned.
- You may risk losing your gardening privileges for the next year if:
  - you abandon your plot at any point during the gardening season
  - you do not harvest your vegetables in a timely manner
  - your plot is not cleaned by the fall clean up deadline
- Any gardener caught taking vegetables from other gardener's plots will lose his/her plot and forfeit any future gardening privileges.

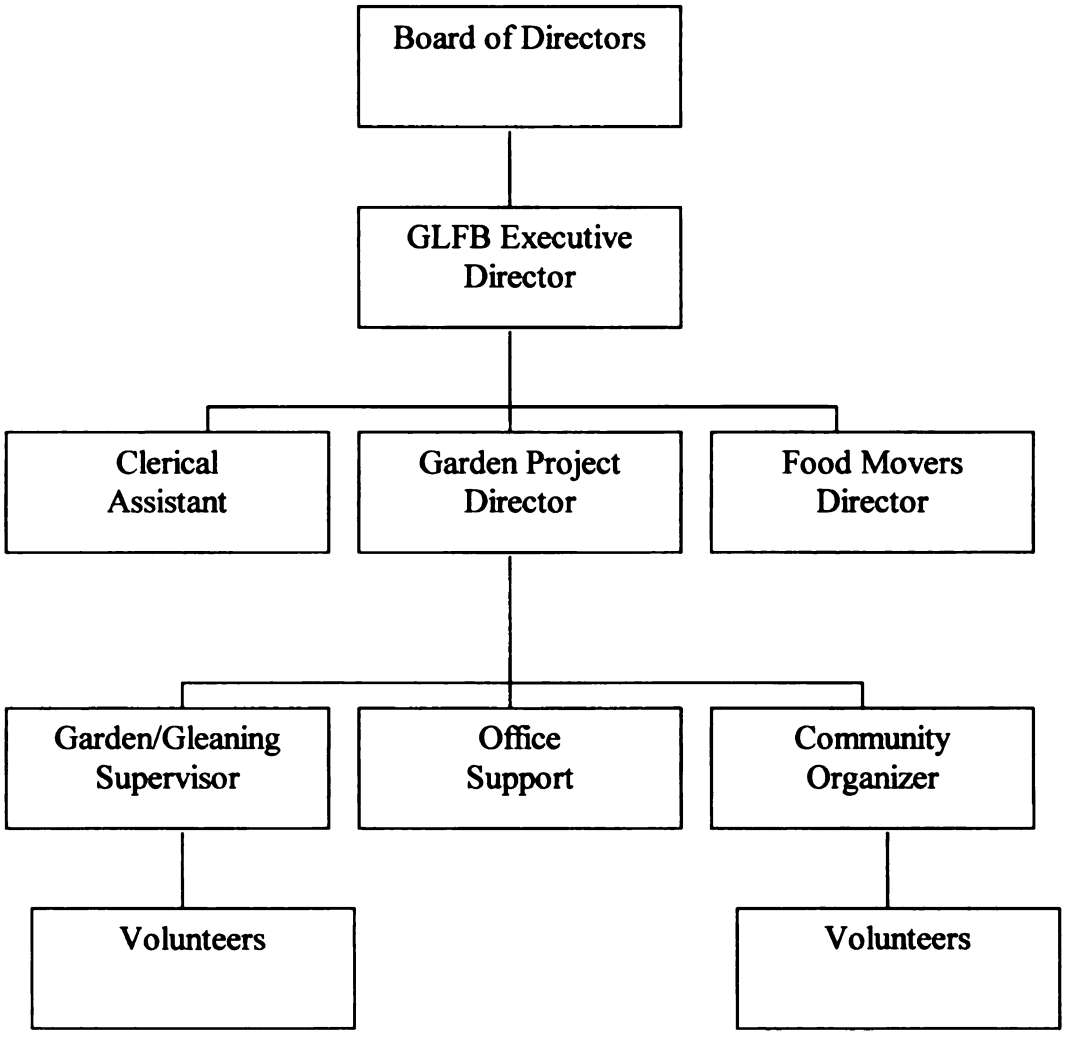
If you have any questions or problems, contact your garden's volunteer coordinator

_____, or call The Garden Project office at 887-4660.

APPENDIX I:
Garden Project Mission Statement

The Garden Project is dedicated to improving the food self-reliance of people throughout the Greater Lansing area. This is accomplished by providing access to fresh and nutritious food, primarily through community and home gardens. The Project is committed to providing land, services, and educational support so that gardeners can grow, harvest, prepare and preserve their own vegetables and fruits. The Garden Project is unique in that it gives people the opportunity to grow their own food. Through self-help efforts, the Project enables families to take an active role in improving their own nutritional, economic, and social condition. Without such efforts, relief would take the form of a food or cash handout.

APPENDIX J:
Greater Lansing Food Bank Organizational Chart



APPENDIX K:
FY2002 POVERTY THRESHOLD GUIDELINES
UNITED STATES HOUSING AND URBAN DEVELOPMENT

Persons in Household	1	2	3	4	5	6
Poverty Threshold (Annual household income)	$21,050	$24,050	$27,050	$30,050	$32,450	$34,850

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