

1998

Social and environmental restoration through therapeutic community gardens

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**SOCIAL AND ENVIRONMENTAL RESTORATION THROUGH THERAPEUTIC
COMMUNITY GARDENS**

A Thesis

Presented to

The Faculty of the Department of Environmental Studies

San Jose State University

In Partial Fulfillment

of the Requirements for the Degree

Master of Science

By

Jacqueline Chu

August 1998

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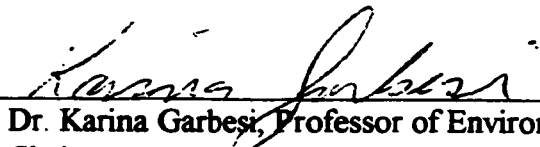
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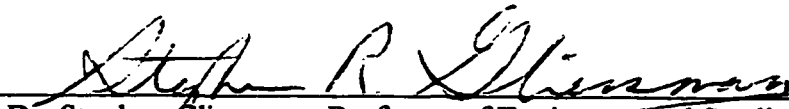
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ABSTRACT

ACHIEVING SOCIAL AND ENVIRONMENTAL RESTORATION THROUGH THERAPEUTIC COMMUNITY GARDENS

by Jacqueline Chu

This study examines the U.S. Community Supported Agriculture (CSA) shareholder model and the U.S. Socially Therapeutic Garden Project (STGP) model, with the objective of gauging the potential for combining the models to yield fiscally sustainable programs with optimal social and environmental benefits for participants, and the community. The work entailed a systematic analysis of the social, environmental, and economic structures of a sample of U.S. STGPs and CSAs, leading to recommendations for the design of a model CSA-supported STGP engaging youth at risk. Data acquisition and analysis involved a self report survey, personal interviews, and observation. Though typically understaffed, STGP survey respondents generally believed their projects to be achieving therapeutic success and fiscal sustainability. The CSA analysis found that projects demonstrated positive social and environmental features, but suffer from high shareholder turnover rates. It was therefore advised that STGPs not adopt the CSA model strictly to improve unstable economic conditions.

ACKNOWLEDGEMENTS

I would like to express my sincere gratitude to the following individuals:

Dr. Karina Garbesi, Dr. Stephen Gliessman, and Dr. Douglas Greer for their academic encouragement and counsel. Jered Lawson and Timothy Laird for their insight and the use of their data. The garden project staff members who were kind enough to respond to the survey. The garden project and Community Supported Agriculture staff and volunteers who hosted me during site visits. And to the board members of The University of California Sustainable Agriculture Research and Education Program for their financial support.

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CHAPTER ONE

INTRODUCTION

Importance

Sprouting from the decay of the urban environment, socially therapeutic garden projects (STGPs) are proliferating in cities throughout the United States. These social service motivated garden projects apply the care and nurturing of plants and soil as a vehicle for fostering social rehabilitation in a supportive and therapeutic setting. In contrast to community allotment gardens, STGPs are targeted for specific disenfranchised social groups and are customarily staffed with individuals from a range of professions, including horticultural therapy (see chapter 2, section 3), sustainable agriculture, psychiatry, sociology, and education.

Although a primary focus of these projects is the rehabilitation of their target groups, a range of benefits may also accrue in the local community. These benefits include: environmental restoration of the urban habitat, marked by improved ecosystem functioning, reduced contamination, and aesthetic enhancement (see chapter 2, section 3); improved community food security (see chapter 2, section 4); decreased crime and rates of recidivism (see chapter 2, section 4); and greater social cohesion. Furthermore, STGPs may play a major role in helping to establish social and environmental justice in the nation's poor inner cities (see chapter 2, section 4).

Background

STGP rehabilitative features are numerous and broadly ranging, from neighborhood beautification to social facilitation to crime reduction. However, despite their value in providing these and other beneficial services (see also chapter one), many STGPs in the U.S. seem to lack the fiscal security that is crucial to the overall sustainability of the movement. With a dependence on scarce public and private funding, the viability and sustainability of these projects may be threatened. Additionally, if ever more staff time is occupied with securing funds, their ability to maximize beneficial project features may be compromised (Frohardt 1993).

Another important model for small scale, community based agriculture has recently arisen. First appearing in 1985, Community Supported Agriculture (CSA) is burgeoning in the U.S., with the number of current CSA operations estimated at over six hundred (Lawson 1997). The rapid growth of the movement has been copiously documented in the “grey literature,” academic studies, and practical guides.

The CSA model entrusts economic viability to a mutually supportive partnership between producer¹ and a community of consumers (see chapter three, section A). A number of factors suggest a potential for the CSA model to offer fiscal sustainability for unstable STGPs. Among these factors are CSA’s guaranteed consumer base, and the model’s inherent flexibility.

¹ The terms producer, farmer, and grower will be used alternately throughout to indicate the main cultivator of food for a CSA project.

Thesis Statement

If properly designed, certain American STGPs could utilize the CSA model to achieve increased fiscal security while sustaining their therapeutic features and providing a multiplicity of community benefits.

Thesis Overview

This study is designed to determine the potential for combining the STGP and CSA models to increase the fiscal sustainability of the STGP model. This goal will be accomplished using the following methods: (1) implementation of a self report survey to STGPs operating in the United States, (2) examination of contemporary scholarly CSA works, (3) and interviews and participant observations of CSA producers and STGP staff, and target group participants. With the overall goal of determining the potential for combining the U.S. STGP and CSA models (fig. 1), this thesis has several related but subordinate foci: (1) to examine the operational structure of U.S. STGPs, (2) to determine the therapeutic proficiency and fiscal sustainability of U.S. STGPs that engage youth at risk, and (3) to develop recommendations for a model CSA-supported urban STGP engaging youth at risk.

The structure of the thesis is as follows: This chapter provides important background information and introduces the study objectives and design Chapter Two details the U.S. STGP, including its important social and ecological functions, its historical upbringing, and the challenges and obstacles to the sustainability of the movement. Chapter Three describes the principles and philosophies of the U.S. CSA model, provides

a historical perspective of the imported agricultural model, and characterizes the three seminal CSA works integral to the present study. Chapter Four outlines the study design, objectives and related hypotheses, and methodology. In Chapter Five, the findings of the self report survey are presented, and in Chapter Six, the interview and observational data are combined with that from the self report survey, to draw broader conclusions regarding the study objectives. Chapter Seven concludes with a discussion of the potential for developing a model CSA-STGP engaging urban youth at risk, including specific recommendations based on the research.

CHAPTER TWO

THE SOCIALLY THERAPEUTIC GARDEN PROJECT

Overview

In this chapter, the U.S. STGP movement is characterized in terms of its contributions to psychic rehabilitation, environmental restoration, and social and environmental justice, notably in the nation's poor inner city regions. Specific social and environmental issues encountered by at risk youth in poor inner cities are also discussed. The chapter concludes with an historical account of community gardening and presents hypotheses of the existing obstacles to the sustainability of the STGP.

Motivation

The six year anniversary of the Los Angeles riots² seems an appropriate time to reflect upon the condition of the nation's inner city and urban environs. Such tragedies might be avoided in the future provided the signs of social unrest and brimming rebellion, and the consequences of absolute despair and hopelessness are not forgotten. The 29th of April, 1992 began three days of rioting in the Los Angeles' South Central district, which resulted in fifty five deaths and more than 2,300 injuries. Today, vacant lots and burned buildings along the eighty block stretch of the city's Vermont Avenue are stark reminders of the violence and fury that was unleashed in the city.

² Referred to also as the Los Angeles race riots, the 1992 uprisings began in South Central Los Angeles—a generally low income region with a large minority population—following the acquittal of four white Los Angeles police officers who brutally beat an African American man named Rodney King, when he resisted arrest.

In South Central Los Angeles' Vermont Square, Helen Johnson has been turning empty lots into blooming gardens. Partly in response to the riots, she began working with a city improvements program, and then a movement to establish a series of parks and gardens on vacant lots in the area (Associated Press 1997). The local economy has begun to blossom along with her plants. A merchants' association has been formed, and, where a furniture store had been burned during the riots, a new building houses a bank and shops. Johnson's neighborhood bears testimony to the potential for community greening efforts to inspire the revitalization of degraded urban regions.

As Rehabilitation

1. Marginalized Urban Residents

The STGP presents profound rehabilitative implications for disenfranchised urban residents throughout the U.S. These community-based garden programs bring together individuals from a range of socially "at risk,"³ mostly urban populations to work toward common goals. These goals include growth and harmony in the garden. An emerging body of literature (Dotter 1994, Gross 1992, McCombe-Spafford 1994, Rice and Remy 1994, Weeks 1994) and numerous personal statements recounted here suggest that project participation can aid the psychological rehabilitation of residents in dysfunctional American cities. According to Patricia Hynes (1996, xv): "Community gardens create relationships between city dwellers and the soil, and instill an ethic of urban

³ For example, public offenders, delinquent or disadvantaged youth, homeless, and mentally and emotionally handicapped individuals.

environmentalism that neither parks nor wilderness--which release us from the industrial city--can do.” In these gardens, along with the plants, grow psychological empowerment, social integration, self esteem, competence, and connection to the larger natural world.

These gardens, whether in the midst of a bustling financial district, or among degraded inner city housing units, also improve the aesthetic quality and social cohesion of the neighborhood. They are a focus of community cooperation and activity; a place of peace and neighborhood security; a display of color, vitality, and pride; a source of fresh, nutritious food. As testaments to healthy human interaction, the garden oases that continually arise in formerly rubble strewn and devegetated areas of East New York are quickly abandoned by local thugs and drug dealers. According to Edie Kean, landscape designer for the non profit New York City urban gardening organization, Operation Green Thumb: “They stay out of the gardens because they’re bright places with lots of activity. Dealers are like roaches. They like dark, dirty places” (Hickey 1994, 51).

The psychological therapeutic benefits of nurturing flora often transcend the level of the individual, initiating meaningful relationships among otherwise detached urban inhabitants. At Project Eden, the site of a former inner city “bad lot,” one community gardener attests to the quality of neighborhood improvement that has resulted: “The block is so much better maintained now. And we aren’t just people passing on the street anymore. We all eat dinner outside in the summer; we’re family now, with camaraderie and a sense of purpose” (Hickey 1994, 52). Others corroborate the critical importance of maintaining and restoring green and open spaces in urban districts. According to Jane

Weissman of Operation Green Thumb, “Once a garden has been a success, you go on to tackle other community problems—success breeds success—it empowers people” (Ableman 1993, 122).

2. Horticultural Therapy

It has long been recognized that the therapeutic benefits of growing plants transcends the physical aspects of nutrition and exercise. The San Jose Mercury News reports that in the Journal of Rehabilitation, Diane Relf writes that “[b]efore psychiatry became a science, work in the garden was prescribed as a curative for ills of the mind” (Villagran 1991, 4[D]). Horticultural Therapy, now a formalized discipline, is described by the American Horticultural Therapy Association as, “a process utilizing plants and horticultural activities to improve the social, educational, psychological, and physical adjustment of persons thus improving their body, mind and spirits.” Groups for whom horticultural therapy has proven to be beneficial include the physically and emotionally disabled, psychiatric patients, the elderly, substance abusers, public offenders, and the socioeconomically disadvantaged.

Early in the century, institutions for the physically and mentally ill and felons introduced therapeutic programs based on gardening and horticulture. Research has shown that restorative effects may be sustained even during non interactive relationships with the natural world. For example, Ulrich’s (1984) study revealed that surgical patients in rooms with exposure to a natural setting had shorter postoperative hospital stays and took fewer analgesics than those whose windows faced a brick wall.

Just as community gardens in the poor inner city appear immune to vandalism and theft, prison garden rows also receive tender care. Cathrine Sneed Markum, founder of the San Francisco County Jail's horticulture project recounts a typical transformation in the garden: "I've had these big bad tough guys say to me, 'Oh Cathy, this is girl's work. I don't want nothin' to do with these plants.' And two weeks later this same macho giant with the tattoos and the tracks down his arm is out there saying, 'Hey, don't step on my babies!'" (Ableman 1993, 118). An Iowa State Prison inmate wrote, "these plants had a strangely soothing effect on our participants. When tempers did start to flare due to tension of constant confinement, a couple of hours work in the garden made pacifists of potential battlers" (Neece 1979, 39-40).

As Restoration

1. Restoring Natural Ecosystem Functioning

With the sustained migration of the world's peoples to cities, urban restoration, in terms of improving urban ecosystem functioning, regional biodiversity, and the physical and social community setting, becomes increasingly important. Community-based sustainable agricultural activities can help improve urban soils, restore native plant species, put idle and under utilized areas into productive use; reduce urban waste and the public cost of waste management; and provide fresh, nutritious foods.

Researchers are currently developing technologies that would allow metropolitan centers to operate as primarily closed loop systems, converting the consume-dispose open

loops into consume-process-reuse closed loops (Smit and Nasr 1995, 20) (fig. 2).

Utilizing food waste and other wastes to produce fresh food offers multiple benefits to urban regions, such as reducing food cost and improving food quality, improving environmental conditions, creating jobs, and reducing municipal management costs. Urban agriculture can also help control the public health risks produced by the outbound side of open loop systems.⁴ Potential contaminants and disease agents may be significantly reduced with the systematic recycling of liquid and solid wastes. A recent United Nations sponsored study on urban agriculture (UNDP, 1996) indicates that these systems have been effective worldwide: In Khartoum, about one fourth of the city's garbage is consumed by farm animals; in Calcutta, sewage feeds three thousand hectares of lagoons, which produce six thousand tons of fish annually; and in the state of California, two hundred wastewater reclamation plants save nearly 800,000 cubic meters of water a day, using treated effluent for agricultural purposes.

2. Neglected Urban Space

STGPs are frequently located on neglected (*e.g.*, abandoned, underutilized, and dilapidated) urban lands. They make productive use of dangerous, abandoned, and underused lands and they rehabilitate many decayed inner city areas. Most urban and rural districts in the U.S. contain a number of vacant and underused areas that could support small scale agriculture. These areas include sloped surfaces not suited for development,

⁴ Toxic and heavy metals contamination of urban soils is an important health issue in urban agriculture. A large portion of urban gardeners are forced to plant raised beds to avoid this threat. However, this problem may be diminishing in countries where lead additives in gasoline have been banned.

idle public lands like roadsides and park space, university and school grounds, roof tops, and various living spaces. With ample public effort and opportunity, many of these areas could be restored and developed into urban havens.

The San Francisco League of Urban Gardeners' (SLUG) latest garden project is located in South San Francisco's Double Rock community, which had "long carried the stigma of being one of the most dangerous and disenfranchised communities" (Prager 1996, 14) in the city. Labeled the "Killing Zone" by the San Francisco Examiner in 1994, it had the highest murder rate in the city. The garden site is adjacent to the Double Rock public housing development, where buildings are dilapidated and ignored.

Once SLUG forces were established there—local teenagers and young adults training in garden maintenance and landscaping skills—the environment was drastically improved. "I felt a serious sense of achievement, says Delvin Tobie, a Double Rock resident and youth program coordinator. "The feedback from the community was incredible. People didn't believe we would do anything positive. . . But when the project was complete, the feedback was outstanding. People we hadn't seen for years came out and said, 'Thank you—that is beautiful!' And nobody has come out to mess with it" (Nuru and Bloom 1996, 4).

As Social and Environmental Justice

i. Community Food Security

Ironically, inner city poor are subject to some of the most expensive food in the U.S. The past few years have seen a restructuring of the supermarket industry, marked by their abandonment of low income communities (Fisher 1996). Those with the most restricted access to motorized transportation now reside the farthest away from the large market chains that can offer fresher, more affordable foods. Therefore, inner city inhabitants have been left with little choice but to patronize fast food restaurants, local convenience stores, and “Mom and Pop” markets—those whose products are usually limited to highly processed and packaged foods, at inflated prices.

With the dwindling of government support for food assistance programs, it becomes increasingly crucial for populations in need to develop local, self sufficient food systems. Nationwide, local food policy councils are foregoing transient charity based and federally funded approaches to hunger, and working with communities to develop sustainable food systems. Their work has spurred the community food security (CFS) movement, and the genesis of the Connecticut- and California-based Community Food Security Coalition.

The California Sustainable Agriculture Working Group’s working definition of CFS is, a local food system that: (1) ensures all people have access at all times to nutritionally adequate and culturally appropriate food from non emergency sources; (2) fosters community empowerment and social justice; (3) is locally based and community

controlled; and (4) promotes environmentally sound and sustainable practices. This approach considers the environmental implications of food production, the welfare of the grower, the food preferences of individuals and different cultural groups, and the potential of a well-conceived food system to empower a community and support the local economy.

Community food security advocates have empowering community goals: to stop the flight of large supermarkets from the poor inner city, to improve contact between farmers and the local community, and to bolster grass roots community agricultural and food production enterprises. The credibility of the movement stems partly from its linking of established community based entities such as food policy councils, anti-hunger organizations, environmental groups, farmers' markets, community gardens, and small scale agricultural operations.

Despite the world's estimated eight hundred million urban farmers, the full economic and social benefits of localized urban agriculture remain largely unrealized because, in general, governments world wide have not encouraged or attended to them. With the world's poorest urban households spending as much as ninety percent of their income on food, engaging in urban agriculture could make possible the ability to fulfill other principal needs, such as health care and housing. Additionally, the development of regional, self sufficient food systems brings increased employment opportunities to a community, enhancing the local economy.

Since 1978 the nonprofit Hartford Food System has lead an effort to establish community food security in Hartford, Connecticut. This city has been confronted with

many of the typical problems that aggravate urban food insecurity: a twenty four percent overall poverty rate; a place among the ten poorest cities in the nation; only two supermarket chain stores serving the entire city; and other forms of urban blight such as congestion, crime, lead pollution, and an excess of waste handling facilities (Wheeler, Wiley and Winne 1995). Today, as a result of Hartford Food System facilitation, local community gardens, a new Community Supported Agriculture (see chapter three) project, and a direct farmer-to-school marketing program are operating and contributing to the self sufficiency and empowerment of the local community. Although STGPs may only make modest contributions toward establishing community food security in the nation's cities, cultivating healthful foods in a cooperative environment may accomplish a great deal, in terms of educating, training, and ultimately empowering a community.

ii. Environmental Justice

The poor inner city environment is among the most blighted on earth. Frequently located near heavy industry, freeways, incinerators, and waste disposal sites, they are in general devegetated and possess poor air and water quality (Bullard 1994, U.S. EPA 1992, U.S. President 1994). Perhaps as serious as the degradation of the land itself, is the degradation of the psychological relationship between the community and nature. This relationship is the foundation of understanding that human welfare depends upon the well being of the earth—the understanding that fosters the commitment to stewardship.

It is now widely acknowledged that the environmental movement has in the past neglected the problems of the poor and minorities who disproportionately occupy the

nation's inner cities.⁵ In 1994, President Clinton signed an Executive Order that directs Federal Agencies to incorporate environmental justice principles as part of their day-to-day operation by identifying and addressing "disproportionately high and adverse human health and environmental effects of programs, policies and activities on minority populations and low-income populations." (U.S. President 1994, 859).

Social and environmental ills in the poor inner city are inextricably linked. The degraded physical environment inevitably breeds despair and alienation, which may in turn breed hostility toward the environment and society. Consequently, environmental improvement programs operating within the poor inner city should emphasize a comprehensive approach of simultaneously addressing environmental and social concerns.

Because the poor and minorities often suffer most from environmental degradation and inequality, their potential to benefit from the healing effects and environmental improvements associated with raising plants may be the greatest. The community garden experience can engender a range of rehabilitative and empowering behaviors in the nation's inner cities. A study by the Trust for Public Land (1994) cites marked reductions in inner city crime rates when adequate parks and recreational activities are available. Philadelphia provides a poignant example: After local police and volunteers there cleaned up vacant lots and planted gardens, crime decreased by ninety percent in the precinct. Thus, the issue appears not to be whether these gardens contain therapeutic value and a range of community benefits, but whether they can be sustained, and thus able to continue

⁵ On 2 March, 1997 a comprehensive listing of Environmental Justice literature compiled by M. Meuser and A. Szasz was located at the following website: <http://gate.cruzio.com/~meuser/El/project.html>

to heal our urban wounds.

iii. Youth at Risk

Inner city youth at risk are prime candidates for STGP participation. In a society that has consistently marginalized its socioeconomically disadvantaged youth, and judges them without providing them opportunity, the STGP offers hope, facilitating meaningful relationships between youth and society and between youth and the natural world.

Based on the results of projects discussed herein, with project involvement, these young adults often experience social integration, environmental awareness, a sense of self worth and responsibility, and educational and life skills training. Assuming that social rehabilitation and adoption of an environmental ethic occur, the risk factors may be eliminated. Consequently, these youth may develop into mature, fully functioning adults with the potential to offer a lifetime of social, environmental, and educational services to their communities.

Many inner city youth are disabled by their decayed surroundings, and, if left there too long, they may become active perpetrators of that decay. They may react to threatening, alienating social climates by defacing, vandalizing, or simply neglecting their physical surroundings. Crimes committed by and against youth are rising at an alarming rate. Current trends indicate that the juvenile arrest rate for violent crimes could double in the next fifteen years, according to a 1996 report by the U.S. Department of Justice. Contrary to the impression people often have about such crimes, the report indicated that crimes by and against juveniles peak at three p.m. and again at six p.m. "Maybe some of

these communities with curfews at night will look at these numbers and realize that instead of having curfews starting at eleven p.m.—when the crimes are dropping—they should put more resources into giving kids something to do when they're in the most danger, after school," said one of the report's authors (U.S. Department of Justice 1996, 19).

According to a report by the Carnegie Corporation's Task Force on Youth Development and Community Programs (Carnegie Corporation 1992, 19), "Fully one fourth of our nation's youth face serious risk of not reaching productive adulthood, and another 25 percent are at moderate risk. Poverty is a major, though not the sole, contributor to these statistics". Providing the opportunity to develop positive behaviors is the foundation of most efforts to prevent youth crime and violence. Effective crime prevention strategies include comprehensive approaches that provide opportunities for education, mentoring, conflict resolution training and safety, engage youth and their families, and are community based and integrated (Carnegie Corporation 1992).

Decades of research also demonstrate that delinquency prevention is cost effective. According to one conservative estimate, the average cost of incarcerating a juvenile for one year is close to \$34,000 (Cohen 1994). Others put the figure between \$35,000 and \$64,000 (Camp and Camp 1990). In addition, the total cost of a young adult's (age 18 to 23) serious, violent criminal career is estimated to be \$1.1 million (Cohen 1994). Therefore, well conceived STGPs that captivate and engage disenfranchised youths could have profound and far reaching beneficial impacts.

According to the Carnegie Task Force, in national surveys and focus groups

American youth revealed a concrete desire for well structured activity. “They want more regular contact with adults who care about and respect them, more opportunities to contribute to their communities, protection from the hazards of drugs, violence, and gangs, and greater access to constructive and attractive alternatives to the loneliness that so many now experience” (Carnegie Corporation 1992, 11). Because forty percent of the average U.S. schoolchild’s waking hours are “discretionary”⁶ (Carnegie Corporation 1992, 10) it makes sense to provide youth with positive outlets. Asked what kinds of facilities they wanted during non-school hours, teens said that safe parks and recreational centers were most important. Because teens living in low income neighborhoods are more frequently without adult supervision (Carnegie Corporation 1992, 33), they rely to a greater extent on public facilities than their counterparts from more affluent regions. Community based therapeutic garden projects can offer many attractive features to these youth, including safe open space, recreational activity, positive interaction with adult mentors, and an array of occupational training opportunities (*i.e.*, from bookkeeping and project management to horticulture and landscaping).

Some of the most persuasive arguments for strengthening community youth programs come from the field of formal education. “For many individuals—including adolescents—learning is enhanced when education is offered in real-life settings outside the classroom” (Carnegie Corporation 1992, 37). A number of STGPs across the nation offer inspiring models. At the San Francisco League of Urban Gardeners’ (SLUG) Urban

⁶ Not committed to other activities such as eating, school, homework, chores, or working for pay.

Youth Farm, teens from an adjacent low income housing development acquire paid internships that offer skills training in areas such as landscaping, sustainable horticulture, business management, and nonviolent conflict resolution. As Joshua Bloom, SLUG's Director of Youth and Economic Development attests, the teens gain much more than a steady salary at the youth farm: "The teens in the program plant a seed, they plant a plant, and they see it grow. It's about teaching pride and responsibility. If you care for the plants, they thrive" (Bicho and Nuru 1995, 5). Project participation often results in increased self esteem, as well as elevated civic responsibility and increased status of youth in the community. They become providers for the community, with a well grounded commitment to its well being.

Community Gardening Historical Perspective

The community gardening concept dates back to the English land enclosure acts of the late eighteenth century that gave small "allotment gardens" on the edge of towns to tenant farmers who had lost their right to cultivate the property of large landholders (Hynes 1996). In the U.S., the phenomenon of community gardening has, over the last century, been transformed from one of philanthropic aid to vigorous self help. During Detroit's 1893-1897 economic depression, Mayor Pingree urged the owners of the city's vacant marginal lands to allow urban unemployed to cultivate their properties. When their harvests were realized, cities throughout the nation implemented similar garden projects for the urban poor. During the First and Second World Wars, Americans maintained their own "liberty gardens" so that commercially grown produce could feed the Allied Forces.

After World War II liberty gardens were renamed “victory gardens,” which in 1944 produced an estimated forty four percent of the fresh vegetables consumed in the nation (Hynes 1996, xii). Each of these efforts waned after a few years existence, as they could not compete with the return of cheap and plentiful commercial food, the forces of real estate development, or city “beautification” programs. The residential garden plots of middle America were gradually replaced by a different aesthetic of chemically treated lawns and immaculate landscaping.

The new ethic was expressed in 1974, when Philadelphia Green was founded with the express philosophy of self help and reciprocity between the organization and the gardener. By 1994, Philadelphia Green had assisted low- and middle-income urban neighborhoods with establishing more than two thousand community gardens (Hynes 1996, xiii). The Massachusetts Gardening and Farm Act of 1974 was created to enable urban gardeners and farmers to cultivate vacant public land. By 1995, three thousand households had produced approximately one and a half million dollars worth of food in Boston’s 120 community gardens. Currently, the Philadelphia based American Community Gardening Association estimates that 250 to 500 citywide community gardening programs exist in the nation.

Present Challenges and Obstacles to Sustainability

Despite the commitment and hard work of project staff and participants, STGPs can perform less like perennial plants than fragile, unrooted transplants. Not unlike community-based allotment gardens, a substantial portion of STGPs in the U.S. appear to

lack the fiscal sustainability that is essential to the survival of the movement. Without continuity and stability, their ability to accomplish critical therapeutic goals will be significantly constrained.

Two circumstances appear to commonly limit the economic sustainability of the STGP. These circumstances are: (1) when the overall functioning of a project is dependent upon the work of one, or an insufficient number of individuals, and (2) when the number of funding sources contributing to a project is too small. Referring to community greening efforts, writer Tony Hiss (1992, 101) observes, “Usually they’ve been the work of some local genius; and if the genius moved, or died, or found other projects, the garden would wither.”

As with many other grassroots community organizations, STGPs appear often to operate with a minimum, or shortage of personnel. The Carnegie Task Force declared that “Recruiting, training, and retaining mature, dedicated, top-quality adult leaders—both paid and pro bono—is a constant challenge to these organizations” (Carnegie Corporation 1992, 70). Problems maintaining adequate staff will inevitably compromise project efficiency, as well as morale.

Socially therapeutic garden projects can also lead a precarious existence due to their reliance on ever more scarce institutional funding and charitable aid (American Community Gardening Association 1992, 11; Nuru and Bloom 1996, 1; Lawson and McNally 1995; Prager 1996, 1; Weeks 1994;). Rivera (1995, 3) provides this explanation: “Our priorities in foreign affairs, along with a realignment of domestic preferences, have

sharply reduced support for community-based human services as well as the resources necessary to provide training for people to work in these services.” Regardless of the particular explanation, the reality of the future appears to be that most STGPs will be confronted with limited funding source availability.

With substantial governmental budgetary cuts, the STGP must compete with increasing numbers of community-based organizations for project funds. Consequently, STGPs rely on tenuous support from too few funders. Personnel instability, combined with precarious funding conditions constitute a serious threat to the sustainability of the STGP movement in the U.S.

CHAPTER THREE

THE COMMUNITY SUPPORTED AGRICULTURE MODEL

Overview

The following chapter details the theoretical framework of the Community Supported Agriculture (CSA) model, and presents the hypothesis that CSA has the potential to improve the fiscal sustainability of U.S. STGPs. The historical origins of the CSA model are also discussed. Last, three contemporary notable works on CSAs are described in terms of their value to the present study.

Theoretical Framework

It is the transient nature of United States' STGPs that necessitates a sustainable model for their support. The burgeoning Community Supported Agriculture (CSA) model has the potential to provide fiscal self reliance and stability to tenuous STGPs, as well as a complementary and well conceived social and environmental framework. Community Supported Agriculture is an economic and philosophical approach to small scale agriculture based upon an enduring relationship between a group of shareholders and an unfixed number of skilled growers. Contrary to what its name implies (that the community supports the CSA program), CSA involves a mutually supportive relationship between growers and community members, part of which involves sharing the risks and benefits inherent in agriculture.

In the CSA model, a farm's operating budget is secured prior to the planting

season—when operational costs are the most demanding—through the purchase of harvest “shares” by community members. Theoretically, growers benefit by being spared both the burden of maintaining a market for their goods throughout the harvest season, and potential financial ruin due to crop damage and loss. Among the benefits to consumers are knowing precisely where and by whom their food is cultivated, accessibility to fresh, nutritious food, and closer ties to the agricultural process.

Most CSA farms incorporate the social, environmental, and economic principles of sustainable agriculture: producing food without synthetic chemical inputs; promoting the health and fertility of soil; linking consumers to nature and food production; providing nutritious foods to local consumers at competitive prices; fostering social cohesion and participatory decision making among community members, as well as between growers and the community; and promoting self sufficiency in the local economy. Shareholders typically make weekly visits to their CSA sites to collect baskets filled with an array of freshly harvested produce. Across the nation, variations of this general CSA framework exist to accommodate a range of geographic and community factors. The model’s flexibility is generally regarded as one of its desirable attributes.

Today, a number of organizations in the nation offer CSA support and information⁷ and CSA is the topic of an increasing number of scholarly and professional reports. Like the STGP, CSA is a relatively new phenomenon. Therefore, much of the reporting on them comes from the “grey” or “popular” literature.

⁷ For example, the Bio-dynamic Farming and Gardening Association in Kimberton, Pennsylvania, whose home page is at <http://www.biodynamics.com/>

Problems of understaffing and reliance on too few personnel are unlikely in the CSA model, due to the mutually supportive relationship between CSA growers and the community of consumers. Shareholders may perform a wide variety of project tasks, depending upon the individual needs of a given project. Typical shareholder responsibilities include providing organizational support, such as forming a “core group” of members who work to establish and maintain the CSA and may also help with bookkeeping, recruiting new members, coordinating CSA events, writing newsletters, and offering other professional services. Community Supported Agriculture members may also help with “on farm” demands, such as planting, weeding, harvesting, and preparing and distributing shares. The CSA model’s democratic structure encourages group solidarity and cooperative responsibility.

The CSA design also avoids the reliance on too few funding sources. The model requires a broad based pledge of fiscal support prior to annual program operations. Theoretically, as long as the established terms of the producer-consumer agreement are met, the CSA operation should function successfully, and sustainably.

The therapeutic garden and the CSA operation exhibit parallel social and environmental features. Both foster a sense of cooperation and community, support the vital connection between humans and nature, and contribute to environmental restoration through plant cultivation. Complementary features, coupled with the inherent flexibility of both models indicate the potential for a viable alliance.

Additionally, the CSA model might offer multiple benefits for STGPs that engage

engage urban youth at risk. With youth as promoters of local CSAs, important relations would develop between them and adult mentors, and the community. Moreover, youth would serve important roles as local food producers and land stewards, elevating their status within the community.

CSA Historical Perspective

The concept of CSA originated in the 1960s in Japan and Europe. In 1965 the first community-farm partnership began in Tokyo's Setagaya ward, when a neighborhood group formed to provide a stable market for a local farmer who had adopted his ancestral organic farming methods. The community operation eventually evolved to support fourteen other farms and four hundred consumer families. Farmers deliver their products to the central farm where the bulk is divided among the member households. After all production costs are paid by members, the costs were still ten to fifteen percent below conventional prices (Lawson 1992, 12). According to Groh (in Lawson 1992, 12), approximately 200,000 families in Japan have participated in this relationship with farmers.

Inspired by community-farm partnerships in Europe, the first two U.S. CSA-style projects were created in 1986. The Temple-Wilton Community Farm was established by Trauger Groh and a group of Wilton, New Hampshire community members and farmers (Groh and McFadden 1990, 44). Groh's experience in helping to establish a community supported farm in North Germany provided a working framework. The farmers drafted a budget, each member family pledged what they could afford in monthly installments, and some members made their land available to the farmers. On two hundred acres, produce,

milk, and meat were provided for sixty three families.

While living in Switzerland in the early 1980s, an American named Jan Vander Tuin studied the community-farms operating in the country and then helped to establish a similar program in Zurich: the Co-operative Topinambur (Groh and McFadden 1990, 50). Upon his return to the U.S., Vander Tuin shared with Great Barrington, Massachusetts community members and farmers a model based upon a foundation of mutual support. The Great Barrington CSA Garden was developed with a long list of ideals, among them “respect for the workers as well as the earth, plants, animals, environmental limits, and cycles of nature. . . commitment to use organic and Biodynamic⁸ methods, to be energy conscious, to maintain decent working conditions, *to emphasize the therapeutic value of agricultural work* (emphasis added), and to support community control of land” (Groh and McFadden 1990, 55).

The CSA concept has been firmly established in the U.S. over the past decade. From 1986 to 1994, some 450 CSAs were established throughout the U.S. (Boone 1995, <http://www.sarep.ucdavis.edu/sarep/conference/csa/csacnf.html>). According to most estimates, there are more than six hundred CSAs operating in the U.S. today.

Notable Works

With the proliferation of U.S. CSA farms and gardens since the late eighties has

⁸ Biodynamic agriculture was developed in the 1920s by Rudolph Steiner, an Austrian scientist and philosopher. According to the Kimberton, PA Bio-dynamic Farming and Gardening Association, Inc. “Biodynamic growers seek to improve the health and vitality of soil, plant and animal through working with the health-bearing forces of nature.”

come a commensurate production of CSA “grey” literature, ranging from farm brochures and newsletters, to academic theses and guide books. All combine to form an informative and inspirational, if informal, account of this unique agricultural model. Contributions from each category must be examined to gain a balanced understanding of the U.S. CSA movement.

The following works provide the most useful reference material for the present study, because they contain systematically captured data: Jered Lawson’s senior thesis, “Community Supported Agriculture: Farming that Works! (1992);” Timothy Laird’s Master’s Thesis, entitled “Community Supported Agriculture: An Emerging Agricultural Alternative” (1995); and the report, “Increasing Shareholder Retention in Southeastern CSAs” by Deborah J. Kane and Luanne Lohr. These works offer a complementary combination of scholarly and contemporary CSA information.

Jered Lawson’s impressive senior thesis, “Community Supported Agriculture: Farming that Works!” (1992) depicts his scholarly and practical investigations of the CSA model emerging in the U.S. Lawson implemented a self report survey to CSAs throughout the U.S. and his thesis details findings from fifty respondent CSAs, with an emphasis upon comparing CSA economic, social, and environmental philosophy and practice. Lawson then implemented his knowledge and findings by introducing the CSA model to The Homeless Garden Project in Santa Cruz, California. The paper describes in detail the process of introducing CSA to the project’s existing therapeutic structure.

A seasoned CSA farmer himself, Timothy Laird presents a wealth of practical

information and advice in his Master's Thesis. Laird's thesis was "written ultimately for people interested in CSA: for CSA farmers who want to see how other CSAs have overcome obstacles and strengthened their farm; for people (farmers and non-farmers alike) who are considering beginning a CSA"(Laird 1995, 4). His study contains his findings from a comprehensive self report survey investigation of seventy three of the nation's CSAs. This survey was comprised of seven sections: general information, farm membership, organization and operation, decision making, finance and marketing, community building, and goals and objectives. Each section focused on specific issues experienced by Community Supported Agriculture practitioners.

Though Lawson's work is informative and complete, Laird reported his survey findings more comprehensively. He reports statistics on U.S. CSAs and provides qualitative descriptive and anecdotal data to support them. Laird's study provides the framework for identifying current factors associated with the successes and hindrances of the nation's CSA programs, and was therefore essential to the present study.

Laird's survey data revealed that a prime concern of CSA producers was low member (shareholder) return rates. Kane and Lohr, in their study entitled "Maximizing Shareholder Retention in Southeastern CSAs" hypothesized that unrealistic expectations lead to high turnover rates among new shareholders. With telephone interviews and a self administered questionnaire, they acquired a range of pre-and post-harvest data directly from 196 first time shareholders.

The researchers found that their new member respondents "possess[ed] a fairly

accurate general impression of the agricultural aspect of CSA” (Kane and Lohr 1997, 3). For example, an understanding that shareholders share the risk of crop failures. Despite this, their findings uncovered a discrepancy between shareholder pre-and post-season expectations and opinions, most markedly in the areas of share price, share value, and share content. Kane and Lohr’s study was an important source of data for the present study because it includes shareholder perspectives of the CSA experience, which have been the focus of much speculation. These seminal CSA works, along with data gathered from interviews and participant observations, will provide the basis for substantiating a profound small scale agricultural movement, and gauging the utility of uniting it with the U.S. STGP model.

CHAPTER FOUR

STUDY DESIGN

Overview

This chapter begins with justification for the analytical component of the present work. The justification is followed by a list of specific objectives and hypotheses, and a description of the primary methodologies used to conduct the analyses.

Justification

Although the number of Socially Therapeutic Garden Projects appears to be increasing steadily in the nation,⁹ factors of success and sustainability have been neither comprehensively evaluated nor optimized. Characterization of the movement (and related movements, such as the community garden movement in the U.S.) has been limited to studies of programs in restricted geographic regions, and to individual case studies (*e.g.*, Bloom 1995; Flagler 1994; Frohardt 1993; Gross 1992; Lawson and McNally 1995; McCombe-Spafford 1994; Weeks 1994). A review of the existing literature coupled with data from participant involvement suggest that with a concentration on short term viability instead of long term sustainability, a significant portion of U.S. STGPs falter. Three primary conditions appear to impede fiscal sustainability: (1) understaffing, (2) reliance on the achievement and effort of an insufficient number of personnel, and (2) reliance on the economic support of an insufficient number of funding sources.

⁹ This hypothesis is based on the author's observations in recent years of (1) STGP growth in Northern California's San Francisco Bay Area and (2) the increase in STGP grey literature.

The United States CSA model appears to possess a number of features with the potential to increase the fiscal sustainability of U.S. STGPs, while maintaining their therapeutic features and providing a multiplicity of community benefits. Additionally, participation in a CSA-supported STGP could offer a range of important benefits to urban youth at risk in the U.S.

Following is a list of the specific objectives and hypotheses that direct the research and analysis.

Objectives and Hypotheses:

Objective 1: Examine factors that compromise the sustainability of U.S. STGPs.

Hypothesis 1: STGPs are typically understaffed.

Hypothesis 2: STGP operations typically rely on one or a few key personnel.

Hypothesis 3: STGPs typically rely on one or a few funding sources.

Primary Methods: Survey of U.S. STGPs, personal interviews with STGP staff, participant observations.

Objective 2: Determine potential for U.S. CSA model to improve sustainability of U.S. STGPs while maintaining other therapeutic program benefits.

Hypothesis 1: The U.S. CSA model can improve the fiscal stability of United States STGPs.

Hypothesis 2: The U.S. CSA model can complement certain social U.S. STGP features.

Hypothesis 3: The U.S. CSA model can complement certain environmental U.S. STGP features.

Primary Methods: Survey of U.S. STGPs, analysis of seminal CSA works, personal interviews of STGP and CSA staff, participant observations of CSA and STGP operations.

Objective 3: Determine ability of U.S. STGPs to achieve socially therapeutic program goals and to provide social and environmental benefits for their communities.

Hypothesis 1: Most U.S. STGPs successfully achieve their therapeutic program objectives.

Hypothesis 2: Most U.S. STGPs contribute social benefits to their communities.

Hypothesis 3: Most U.S. STGPs contribute environmental benefits to their communities.

Primary Methods: Survey of U.S. STGPs, personal interviews of STGP staff, STGP participant observations.

Objective 4: Pending the outcome of objective 2, and using the results of investigation in objectives 1, 2, and 3, develop recommendations for a model CSA supported STGP for urban youth at risk in the U.S.

Method

Research Tools

i. Self Report Survey:

Data were collected using a 7-page self report survey designed for this study (Appendix A). The survey consisted of seven sections: general information, creation of project, project staff, additional project support, primary project participants (PPPs), non staff involvement, and economic factors. A question of open ended format was included at the end of each section, soliciting additional information pertaining to the relevant topic.

ii. Personal Interviews:

STGP interviewees were comprised of staff and participants. Community Supported Agriculture interviewees were growers. To increase the author's recall of information, a hand held tape recorder was used during some of the interviews.

Interviewee names and interview dates are listed below.

a. Socially Therapeutic Garden Projects:

1. Interview with Mohammed Nuru, Executive Director, San Francisco League of Urban Gardeners (SLUG). San Francisco, CA. 24 September, 1996.
2. Interview with Aleyne Larner, Director, and John Colon, student owner, Food From the Hood. Crenshaw High School. Los Angeles, CA. 5 March, 1997.
3. Interview with John Colon, Site Supervisor for SLUG's Saint Mary's Urban Youth Farm. San Francisco, CA. 24 May, 1997.
4. Interview with Tom Pirkle, Coordinator, Palo Alto Homeless Community Garden Project. Palo Alto, CA. 4 June, 1997.
5. Interview with Darrie Ganzhorn, Director, Santa Cruz Homeless Garden Project. Santa Cruz, CA. 23 November, 1997.

b. Community Supported Agriculture Projects:

1. Interview with Dru Rivers, grower, Full Belly Farm. Guinda, CA. 18 February, 1997.
2. Interview with Andy Scott, grower, Hidden Villa. Los Altos Hills, CA. 30 May, 1997.
3. Interview with Steve Moore, grower, Moore Ranch. Carpinteria, CA. 17 February, 1997.

iii. Participant Observation:

Several CSA farms and STGP projects were visited. Additionally, the researcher was a volunteer coordinator at the East Palo Alto Community Garden from March 1995 to June 1996, and a CSA volunteer and shareholder at Hidden Villa CSA in Los Altos Hills, California from March 1995 to November 1996.

iv. Self Report Survey Development

To test the self report survey, a draft was developed in January, 1997. Melanie

Mintz, CSA coordinator for the Homeless Garden Project in Santa Cruz, California, completed the draft survey, and offered detailed recommendations and criticisms pertaining to survey development.

Each of the seven sections contained in the survey was of mixed format, *i.e.*, yes/no (dichotomous), ranking (Likert), and open ended questions. Open ended questions were deemed valuable for their ability to capture qualifiable information not possible with the ranking and multiple choice formats. The survey was intended to accommodate both respondents with time only to exercise check or fill in the blank options, as well as the respondents willing to offer more detail than what could be gleaned from the standardized option format. The mixed format offered the opportunity to gather both quantitative and qualitative data, to test specific hypotheses, and, through the open-ended questions, to potentially discover new issues not included by the investigator in the structured portion of the survey.

Self Report Survey Implementation

The survey sample was composed of directors and/or coordinators of seventy one STGPs throughout the U.S. Potential participants were identified with the help of colleagues and personal contacts, and with information obtained from the 1996 and 1997 American Horticultural Therapy Association Annual Membership Directory and Resource Manual. Throughout the month of February 1997, the directors/coordinators of potential respondent organizations were called, to verify their existence and to gain permission for survey release to them. Approximately sixty contacts were made. Those STGP

director/coordinators who agreed to participate were placed on a survey mailing list.¹⁰

Self report surveys were distributed by mail to the sample group throughout the month of March 1997. Survey packets included an introductory letter addressed to individual project directors/coordinators describing the investigator and the purpose of the research (Appendix A), and a stamped, self addressed return envelope. The introductory letter emphasized that the investigator was a current community garden volunteer staff member and potential project director interested in maximizing the social and environmental benefits and economic viability of therapeutic gardening, and that survey findings were to be made available to respondents. Participation was voluntary and the introductory letter guaranteed participant anonymity in a formal confidentiality statement. It was requested that surveys be returned within three weeks of receipt. Those who had not returned surveys after five weeks received telephone requests for a response.

¹⁰ Occasionally an STGP's director/coordinator could not be reached on the phone, but other staff were able to confirm the appropriateness of the project for survey participation.

CHAPTER FIVE

RESULTS OF SELF REPORT SURVEY

Overview

The results of the thesis are presented in this and the following chapter. Because the self report survey was the primary method for collecting qualitative data, this chapter is devoted entirely to the survey results. In the following chapter the results of the personal interviews and participant observations are discussed and integrated with the self report survey results to draw conclusions regarding the study objectives.

From 2 March through 1 May, 1997, 19 of the 71 distributed surveys were returned. From this group, two surveys were not used due to insufficient information, leaving a total of 17 complete surveys for final analysis—a 24% response rate. The number of surveys was too small to report statistically significant findings, however, they provided valuable information that is representative of the target population.

From April 1 through April 3, a list of ten post survey questions were sent by facsimile transmission to the seventeen survey respondents (Appendix C). Questions covered topics of economics, environmental impact, and social features. Ten responses were received, a 59 percent response rate.

The survey analysis is divided into 5 categories: (1) General Organization, (2) Personnel, (3) Social Goals, (4) Environmental Features, and (5) Economic Factors. The data, for the most part, support the hypotheses established in the “Present Challenges and Obstacles to Sustainability” section of Chapter 2: for U.S. STGPs, overall functioning

is dependent upon the work of one, or an insufficient number of individuals; they are generally reliant upon one or a few funding sources. However, the survey produced conflicting results regarding which circumstances compromise the economic sustainability of the STGP.

Survey results are presented in the following manner: the first section contains data directly related to the thesis statement, and the second section contains survey data useful in the broader characterization of the STGP.

Survey Findings

1. General Organization:

With regard to consumption of the gardens' harvests (n=16), responses were placed into 4 categories: (1) clients and/or staff, (2) donated, (3) local community members, and (4) retail consumers. For 69% (n=11) of the projects, consumers were clients and/or staff (fig. 14). The majority of responding STGPs (7/10) were located in urban areas.

2. Personnel:

The survey statistics for project staff showed the respondent group to be sparsely staffed. Of those projects responding (n=16), the smallest number of full time staff employed was 0, and the largest number was 4 (fig. 3). The average was a mere 1.4. Ten of the 16 projects (62%) employed just one full time staff member. Surprisingly, part time staff constituted an even smaller force, ranging from 0 to 4, but averaging 0.7 persons,

because 62% of projects reported no part time staff. More telling were the responses to the question asking respondents to rate on a 10-point scale their opinions of the staffing situation in terms of number—“understaffed” versus “overstaffed” (fig. 4). Only 2 of 17 responses fell into the “overstaffed” half of the scale, one of these only marginally so.

Directors/respondents reported that staff were well qualified (fig. 15), a stable presence (fig. 16), and functioned fairly well as a unit (fig. 17). It was also reported that staff operated largely with mutual respect, rather than competing for authority. This result would be expected given the respondent STGPs small staffs.

Apparently essential to the operation of certain STGPs is the informal help provided by volunteers and others, such as professionals and specialists in the community. Local professionals appeared to be a stable and necessary presence, but volunteer presence was divided, with some reporting very stable and essential cadres of volunteers and others reporting a precarious, non committal work force. The responses to the question, “Please approximate the percentage of the project’s total labor hours contributed by volunteers” were variable, ranging from 0 to 75% (n=16), but 88% reported that 30% or less of the labor was provided by volunteers (fig. 5).

Respondents consistently indicated that they received only intermittent assistance from local professionals, based on the “Additional Project Support” section of the survey. Nine respondents were served by a therapist or counselor, 9 by a carpenter, 9 by an accountant, 5 by a social worker, 5 by a grant writer, 4 by an agricultural extension agent, 3 by a nutritionist, and 1 by a CSA farmer. Most respondents did not indicate whether

their additional project support were paid or not for services rendered.

3. Social Goals:

The projects that participated in the survey fell mainly into either of two loosely defined categories: those that engage socioeconomically disadvantaged groups (*i.e.*, “at risk” populations, n=9), and those that engage youth and adult mental health patients (n=7). Two projects listed PPP groups that do not fit into either of the categories mentioned. One of these projects worked with adult female felons, and the other with university and public school students. That the range of PPPs is somewhat limited for responding projects is interesting, because surveys were mailed to programs that serve a broader range of groups, including homeless, substance abusers, AIDS patients, and females in shelters.

Because the survey solicited only a brief description of project PPPs, it is not known whether, or to what extent, characteristics of these two groups overlap. Responses to the question, “Please describe the type(s) of skills and/or occupational training that the PPPs receive in the program,” (fig. 6) however, revealed different staff foci with regard to PPP rehabilitation. The respondent groups that engaged the socioeconomically disadvantaged youth and adults generally answered with lists of specific horticultural and/or vocational skills, whereas the respondents that worked with mental health patients generally emphasized building physical stamina and improving concentration in PPPs. The following response was given by the garden coordinator of a program that serves urban youth at risk and their families, and is representative of

responses within the group: “Composting, soil prep(aration), greenhouse and nursery management, plant ID [identification], growing/harvesting vegetables, organic pest management and fertilizing, transplanting, irrigation system installation, direct marketing and selling.” The responses of individuals from programs that engaged mental health patients tended to emphasize fewer specific horticultural and practical job skills than the former group: “Pretreatment readiness skills: ability to participate and follow instructions;” “Hand-eye coordination, building physical stamina, attention to detail;” “Motor skills, anger control, self esteem, horticultural skills, job skills.”

Interestingly, there were no apparent differences between the two categories of programs with regard to their prioritizing of social/therapeutic objectives. Asked to rate from a list the social/therapeutic objectives of the project (fig. 7), respondents chose “to foster self esteem” as their most frequent first choice (9/17). The survey stated that, “items of equal importance may be assigned the same number;” despite this, each time a respondent chose more than one option as the number one social/therapeutic objective, self esteem was among those primary objectives. The second most popular first choice was split evenly among three options: to provide occupational skills (5/17), to teach life skills (5/17), and to foster connection to the land (5/17). The option most often given the lowest rating was “contribute to local food security” (6/17).

Respondents gave their projects high ratings on ability to attain therapeutic goals (n=17). On a 10-point scale where “1” indicated “unsatisfactory” and “10” indicated “excellent,” the average was 8.0 and the range 5 to 10. Respondents believed that their

Primary Project Participants (PPPs) benefited from their involvement with the projects, notwithstanding the paucity of staff members. There did appear to be a slight positive correlation between high ability ratings and age of project.

4. Environmental Features:

The results strongly suggested that the STGPs that engaged socioeconomically disadvantaged groups contribute to improving the environmental quality of their communities. Three of the respondent projects were located on former prison courtyards, and one had been the site of a burned out apartment building that had been filled with abandoned cars and foul smelling garbage. In a newspaper article, the founder of a respondent STGP states: “People used to smoke crack here in burned-out cars. . . They’d throw rotten vegetables over the fence, meat from the markets, furniture. . . it was a horror! You couldn’t open your windows to get fresh air because of the smell. You couldn’t sit on your stoop--the rats would come and join you.”

Post survey questions (Appendix C) indicated that 5 of 10 gardens (50%) were visible from the street. This corresponds closely with the proportion (9/17) of projects sited on secured grounds (53%). Apparently, gardens that do not have institutional security issues were much more likely to improve the aesthetic environment of their communities. Those respondent STGPs that did report security regulations do not function in a conventional community setting. However, it is likely that as a result of their work, some enhancement of the PPPs’ aesthetic environment occurs. Post survey questions also revealed that 5 of 10 (50%) of gardens were open to the public, including

all of the STGPs that operated in institutional settings. Eighty percent (4/5) of the projects visible from the street were also open to the public.

Three of the 10 responding projects used some chemicals in their gardens; all three asserted that they used them sparingly, and only on non edible plants. This is consistent with findings in the community gardening literature: the majority of community gardening projects advocate and practice low input sustainable agricultural methods, (Ableman 1993, Haynes 1996) many employing the french biointensive¹¹ systems.

5. Economic Factors:

The results of the economics data were variable with regard to the study's hypothesis that the fiscal sustainability of U.S. STGPs is compromised due to a reliance upon too few funding sources. In short, the results revealed that the nation's STGPs were operating with very few full time staff members (and even fewer part time staff).

However, the data were inconsistent with regard to project economic stability.

Reports of project operating budgets ranged broadly, from \$150.00 to \$200,000. There did not appear to be a correlation between project age and size of budget. Two respondents reported that their 1996 budgets were calculated as a part of larger programs. These results were not considered.

¹¹ The biointensive method is popular with U.S. community and commercial gardeners alike. Developed by John Jeavons in the late 1960s, it combines aspects of Rudolf Steiner's biodynamic techniques with practices espoused by Alan Chadwick, a British horticulturalist who taught organic gardening techniques in Santa Cruz, California. The beneficial results of biointensive practices include improved soil structure and fertility; increased energy efficiency, and improved crop yields. Jeavons describes the history and theory of the system in his book, "How to Grow More Vegetables Than You Ever Thought Possible on Less Land Than You Can Imagine (fifth edition, 1995)."

It is possible that some respondents also reported budgetary sources with regard to larger programs without indicating so, and therefore only general trends were studied. By far the largest portions of project budgets were derived from “government grants or subsidies,” followed by “donations/gifts.” Two STGPs reported deriving substantial portions of their operating budgets from products produced on site [flowers (60%) and nursery plants (45%)], offering some promise for CSA financing, and 2 other projects from non government grants or subsidies (constituting 50% and 55% of their operating budgets).

In response to the question, “The project’s annual operating budget has been generally:” (“decreasing,” “staying the same,” or “increasing”—fig. 8), all but 1 of the respondents reported that their operating budgets were staying the same (n=8) or increasing (n=7). These results suggest that the STGPs enjoy reasonably good financial circumstances. The number of funding sources contributing to project operating budgets was considered along with the trend in budget size. The number of funding sources ranged from 1 to 5 and averaged 2.8 sources. However, when funding sources that contributed 5 percent and less were discounted, the range became 1 to 3, and the average 2.0 sources.

Asked to name the categories of funding their projects have received in the past, respondents listed a wide variety of sources: “United Way,” “gardening and environmental grants,” “community greening,” AHTA [American Horticultural Therapy Association] grant,” “NGA [National Gardening Association] grant,” “educational grant,”

“gang prevention,” “youth employment,” “youth entrepreneurship.” However, only 9 (53%) of the 17 respondents answered this question, perhaps indicating an attempt to “protect” funding sources.

The largest portions of project operating budgets were allocated to “staff salaries” and “inputs” (n=14). In response to the open ended question, “Which areas of the budget are currently the most problematic?” staff salaries was the most common answer (n=5). This finding is not surprising, given that it was one of the two largest portions of STGP operating budgets.

In response to the question, “How would you rate the project’s current financial status?” (fig. 9) 11 of the 16 respondents (69%) indicated “reasonably stable” (options were “unstable,” “reasonably stable,” and “very stable”). Perhaps problems securing staff salaries for STGP budgets prevented respondents from choosing the “very stable” option (n=1). It is also possible that these projects manage consistently to meet budgetary demands, but only when salaries were kept low.

In response to the question, “Are you currently meeting budgetary requirements?” (n=14), 10 (71%) STGPs responded “yes” and 4 (29%) responded “no.” Approximately the same proportion of STGP respondents who reported that their projects’ current fiscal status was “reasonably stable” (11/16=69%), reported that they were currently meeting budgetary requirements (7/10=70%). However, of the 13 who reported either “very stable” or “reasonably stable,” only 8 also answered that they were meeting budgetary requirements (4 reported that they were not meeting budgetary requirements, and one did

not respond).

The most common response to “The project’s main source of funding is:” (fig. 10) was “no difference” (n=8), followed by “becoming increasingly difficult to obtain” (n=5). Three respondents chose the option, “becoming less difficult to obtain.”

Ability to procure main source of funding was examined with several other factors to identify possible correlations. These factors were project age, number of funding sources, number of formal project staff, and STGP type.

In the first case, the expectation was that “old” projects would report increasing difficulty obtaining funding more often than “young” STGPs. This result was not strongly supported in the data (fig. 11), with 3 “old” STGPs and 2 “young” STGPs reporting increasing difficulty obtaining main source(s) of funding.

The “becoming less difficult to obtain” respondents (n=3) fell into the “young” project category (dates of inception: 1992, 1992, and 1995). This may indicate that the younger projects were more easily obtaining project funding than older projects. However, two of these data points were only marginally “young.” Therefore, it is possible that the mid-aged STGPs were the most successful at procuring funds. Further investigation will be necessary to determine whether project age (or “stage”) is a significant factor in determining ability of a project to obtain funds.

With regard to the number of funding sources factor, it was hypothesized that STGPs with more existing sources would report less difficulty obtaining main source(s) of funding than those with larger numbers of sources. This result was supported by the data

(fig. 12). Again, percentages of 5 and less were omitted, so that the largest number of funding sources reported by an STGP was 3. The 3 that indicated their projects' main source of funding was "becoming less difficult to obtain" possessed more than one existing funding source (2, 3, and 3). All STGPs that indicated that funding was "becoming more difficult to obtain" (n=5) had 1 main funding source. Of these, 3 reported that the largest portions of their program budgets were from "government grants or subsidies" and "donations/gifts." It may be that the ability to procure funds depends to a large extent on the flexibility, or creativity that might increase projects' ability to identify varied sources of funding. It is also possible that funding becomes easier to procure once primary or matching funds are established.

A hypothesis that projects with fewer formal staff members (full and part time STGP staff) would report increasing difficulty obtaining their main source(s) of funding more often than those with more staff was supported (fig. 13).

Finally, it was anticipated that the ability to secure a main source of funding would vary between the STGPs that engaged at risk groups and those that engaged mental health patients. The latter group was often associated with mental health institutions or other umbrella organizations. Therefore, its methods and ability to secure funding were expected to differ from that of the former STGP type. The results of these analyses did not support the hypothesis. Of the 5 respondents indicating that funding was becoming "more difficult to obtain," 2 were mental health related STGPs and 3 were "at risk" group related STGPs. Of the 3 that indicated funding was "becoming less difficult to obtain," 1

was a mental health related STGP, and 2 were “at risk” group related STGPs.

In response to the question, “Does the project currently have one or more primary funding sources without which the project could not operate?” there were 10 “yes” responses and 4 “no” responses (n=14). Not surprising, given the finding that budgetary sources contributing more than 5 percent ranged only from 1 to 3.

Respondents who answered in the affirmative to the above question were asked how long into the future their main source(s) of funding was guaranteed. Twelve months was the maximum length of time that respondents were guaranteed funds. Further, half (n=5) of these STGPs indicated that eventual fiscal self reliance was expected by their funder(s).

A correlation was observed between funder expectation to attain fiscal self reliance and STGP type. Projects that were required to achieve fiscal self reliance (n=5) were all at risk group STGPs. Of those that were not required to achieve fiscal self reliance (n=5), 3 were mental health related STGPs, 1 was an at risk group STGP, and 1 fit into neither category.

The most common responses to open ended question, “How will (or has) self reliance be attained?” were sales of value added products,¹² nursery plants, and fresh flowers. Three STGPs were currently engaged in sales of garden products. These sales activities constituted 5%, 12%, and 25% of their total operating budgets.

Seven respondents (n=15) indicated that “some” or “all” of their project PPPs

¹² Garden products become “value added” when they are modified to increase market value. Examples include jams jarred with fresh garden fruits, and wreaths twined from a garden’s flowers.

were paid for their efforts (fig. 18). Of these, 5 were the socioeconomically at risk STGPs and 2 the mental health STGPs. Thus, only 7 responses were given to the question asking for what type of work PPPs received pay, but all 7 indicated some type of horticultural or gardening activity. Six of those respondents who either indicated that “none” or “some” of their PPPs were paid also indicated that benefits were received by PPPs in lieu of pay. These benefits were distributed as either food and/or other garden products, (n=4) or as special privileges (n=2). For those projects in which PPPs were paid, wages ranged from \$1.25 per hour to \$6.00 per hour. For two projects, credit and points were substituted for cash payments.

Responses related to site permanency had important ramifications for project sustainability. Only 1 of the projects owned the land on which it operated (n=16). The rest of the projects operated on land owned by local, state, or federal governments, or by a private land owner (fig. 19). Of the 15 respondents who indicated that their projects did not own land, only 10 indicated the amount of rent paid per year (fig. 20). Only one of the projects reported paying more than \$1.00 annually.

CHAPTER 6

DISCUSSION AND CONCLUSIONS

Overview

This chapter integrates the results and findings from the self report survey, personal interviews, and participant observations to answer the study objectives (1-3) detailed in Chapter 4. Each section is structured as follows: the objective, along with its relevant hypotheses and primary methods are presented, and a discussion follows, indicating whether or not the hypothesis was supported by the analysis. Objective 4 findings are deferred until Chapter 7, where recommendations are made for developing a model CSA-STGP engaging urban youth at risk. The last section of this chapter, the efficacy of the project design is evaluated.

Objective 1: Examine factors that compromise the sustainability of U.S. STGPs.

Hypothesis 1: STGPs are typically understaffed.

Hypothesis 2: STGP operations typically rely on one or a few key personnel.

Hypothesis 3: STGPs typically rely on one or a few funding sources.

Primary Methods: Survey of U.S. STGPs, personal interviews with STGP staff, participant observations.

Objective 1, Hypotheses 1 and 2 Results and Discussion:

With the average number of full time and part time staff for respondent projects a mere 1.4 persons and 0.7 persons respectively, the hypotheses (1 and 2 above) that: (1) United States STGPs are typically understaffed, and (2) they rely on the efforts of one or a few key personnel, were supported. The comment of this respondent illustrates particular

issues associated with understaffing and concentrated control: “Funded staff work way more hours per week than they are paid. This is a real problem with projects such as ours, requiring a very specific personality with huge dedication to the project.” Conditions such as these would threaten the sustainability of any work environment, making them vulnerable to staff loss through “burn out.”

Supporting the hypothesis that the well being of many United States STGPs depends upon the work of one or a few principal personnel, one veteran garden project staff member related during a personal interview the disruptive impact of the departure of their project’s well connected and tireless director of six years. Notwithstanding the hard work and best intentions of the new director, their STGP was “in crisis” for nearly a year (anonymous information, at the request of the interviewee). Unable to endure the loss of one staff member, the sustainability of this “model” project can be questionable at best.

It became apparent during a number of STGP site visits, that problems related to understaffing can be associated with project underfunding. A case in point is the two year old Palo Alto Homeless Community Garden Project. This quarter acre plot has been cultivated using biointensive gardening techniques, resulting in an abundance of color and life. The program is one of a few in the city with a comprehensive strategy for improving the lives of the homeless population, but, according to project coordinator Tom Pirkle, “money is really tight right now. I can only afford to hire eight gardeners at six dollars an hour, for fifteen hours per week” (1997). Tragic, when the project has enough work to employ fifteen local homeless people. The Homeless Community Garden Project is caught

in an irksome “Catch 22” situation. Pirkle would like to procure institutional grant monies to fund more garden staff positions, but between training and supervising homeless ‘clients’, and making personal deliveries of garden products to homes in Palo Alto and beyond, he only periodically has time to draft grant proposals.

Ironic is the fact that the Homeless Community Garden Project’s sustainability is perpetually insecure when it is located in one of California’s most prosperous municipalities. The Homeless Community Garden Project operates directly across the street from Stanford Shopping Center, reported in the Palo Alto Weekly News dated 23 February 1994 as one of the top ten “super regional” centers in the country, and where the nonhomeless resident’s average household income is \$73,000.

It seems logical that the problem of understaffing could be avoided if STGPs were more practical about the number of staff they require when funds are being solicited. But, the limitations of available funding and the number of funding sources may preclude such a sensible strategy. When subjected to budgetary cuts resulting from these conditions, or when competing with the STGP population for donor funds, STGP staff may elect to reduce the number of staff as a cost cutting or labor efficiency measure.

It may be that the projects are using the services of local professionals, volunteers, and other nonformal staff extremely efficiently, and they therefore endure. The no-cost assistance of agricultural extension employees and master gardeners should not be underestimated. Because the viability of the STGP relies to such a great extent on the growth of plants, their services can be essential to incipient projects.

Survey reports of work contributed by volunteers varied broadly. Participant interviews and observations, revealed that not only did volunteer resources differ from project to project, but frequently within individual STGPs. Variables such as school, parental obligations, and weather conditions typically make this type of assistance inconsistent. Senior citizens are a more reliable source of volunteer support, and are known to be well supplied with gardening knowledge and skill as well.

Another economically efficient approach might be to establish an internship program with a local university. An advantage of this strategy is that students can commit large blocks of working hours during off school periods, *i.e.*, spring, summer, and winter recesses. But, project staff should be aware that coordinating volunteer help can be complicated, as this respondent indicated: “Diverse groups with specific, limited interests do not interrelate well, *i.e.*, Orchid Society, Bonsai Society, Student Clubs (Environmental), seniors, grammar school, 4-H, Girl Scouts, etc. All motivated by special interest areas.” A broad diversity of tasks are typically involved in creating and running these projects, such as administration, soliciting funds, training PPPs, and maintaining the garden site. Hence, it is possible that relying on often haphazard volunteer and contractual assistance may hinder the operational efficiency of STGPs.

Responding to the solicitation of additional commentary regarding staffing, one respondent wrote, “Low budget makes it difficult.” It must be also be considered, however, that with ample staff, may come an increase in personnel problems. For example, results might include higher staff turnover rates, a decreased ability to function

as a cohesive unit, and a greater number of power struggles.

To summarize, the Personnel section data indicated that the responding projects were minimally staffed. Also, most respondents believed that their projects were understaffed. Therefore, increasing the number of formal project staff in many cases appears to be a desirable option. The results of the economics section suggest that small staffs are dictated by small budgets, although the present data did not clearly indicate the reason(s) for such sparse staffing.

Objective 1, Hypothesis 3 Results and Discussion:

The hypothesis stating that the sustainability of United States STGPs is compromised by their dependence upon too few funding sources was not supported by the survey data. While the 2.0 average number of funding sources (not including those accounting for less than 5% of the annual operating budget) was low, the data did not clearly indicate that sustainability was seriously threatened as a consequence, *i.e.*, budgets were largely “staying the same,” current financial status was for the most part “reasonably stable,” and the majority of STGPs reported that they were meeting budgetary requirements.

In contrast to the survey findings, personal interviews unveiled funding difficulties due not only to decreased funding, but as a result of the precarious nature of the nonprofit agency’s financial structure. In 1996, a reputable California STGP was forced to suspend its operations due to the untimely loss of its primary funder (reported anonymously). When after several weeks the project resumed operations, both tension and low morale

were in evidence among the staff and PPPs.

The survey as well as interviews and observations indicated that governmental agencies were overall the most generous and faithful funders of STGPs. Providing support to STGPs for relatively low cost social and educational services in communities that are often deprived makes good economic sense. A fundamental problem for STGPs is simply that government sponsorship of nonprofit social improvement programs continues to dwindle unabated in both number (of funding sources) and size (of grants).

It is unclear whether funding scarcity is always to blame for an STGP's paucity of funding sources. It is possible, for example, that respondent projects merely solicit a few high value awards instead of larger numbers of sources as a matter of efficiency.

However, it is also possible that as a result of funding scarcity, fewer staff exist to solicit funds and write grant proposals.

It does in fact appear that a fairly large number of funding source options were available to the surveyed STGPs. It is not altogether clear why only 9 of 17 respondents listed the types of funding they have received in the past. The possibility that respondents were "protecting" their valuable sources was considered. Both Cathrine Sneed (1997), creator of the San Francisco based Garden Project, and Darrie Ganzhorn (1997), director of the Santa Cruz Homeless Garden Project, stated during interviews with the researcher that most of the institutional grant monies solicited for their projects are designed to serve as "start up funds," rarely to be awarded more than one time. This situation does not merit parsimonious treatment of funding resources. It seems more likely that the sources

of donations and gifts (the second largest source of budgets, after government grants or subsidies) were those that were not listed on surveys. Reasons for not listing such sources might be to protect donor privacy, or to preserve these funding sources. In which case, funding diversity would be the important issue.

Despite their reports that securing staff salaries was the most problematic area of budgets, the fiscal viability of respondent STGPs does not appear to be seriously threatened. Staff salaries typically constitute the larger portions of nonprofit organizations' program budgets. Perhaps STGPs are minimally staffed as a method of ensuring sufficient salary rates. If staff salaries must be made secondary to inputs—so that basic inputs can be provided—STGP staff may be forgoing equitable compensation, not unlike many of the nation's teachers and small scale farmers in the nation. In fact, STGP staff often fill both of these roles within programs.

Further study is necessary to determine the number and types of STGP funding sources—according to project size and project type—required to achieve sustainability. Ideally, the number of funding sources supporting operational STGPs would be compared to those that proved to be unsustainable (*i.e.*, those no longer in operation). However, there are problems associated with data collection for the latter group. The process of locating these projects would in itself be a daunting task, let alone contacting former staff members willing to be interviewed.

The survey data did not reveal particular methods for guaranteeing the procurement of project funding. This fact is illustrated in the responses given to the open

ended question, “If securing budgetary funds has been successful in the past, to what main factors do you attribute this success?”:

“Lots of leg work. Grant writing and finding time to solicit donations.”

“Persistence.”

“Luck.”

Santa Cruz Homeless Garden Project director, Darrie Ganzhorn, regards fiscal success as a matter of “just being able to juggle all the time” (1997).

Especially when a project’s objectives include the attainment of financial self sufficiency, the ability to self promote cannot be underestimated. Urban municipalities often offer a broad range of economic opportunities. These opportunities may come in the form of public and private donors, educational and social service grants, philanthropic societies, advisory groups, and potential consumers.

Another “Catch 22” predicament presents itself to newly formed STGPs in the process of soliciting institutional funding: with fewer and fewer public and private funding options, new STGPs must indirectly compete with similar projects that have established themselves as reputable and productive. Given such circumstances, projects are forced to invent alternative revenue generating schemes (the purpose of which may also be to impress potential funders or to regain past funders). Features such as farmers’ markets and value-added products sales can provide a financial boost, however, as revenue generation becomes a higher priority in the garden project, the ability to develop or

maintain other beneficial features, therapeutic goals in particular, may decrease. For example, with a focus on production in addition to process, community participation may no longer be maximized¹³ (Frohardt 1993). Perhaps the ideal situation involves striking a balance between the marketing of garden products and the solicitation of charitable funds.

The findings of this section warrant further investigation into STGP fiscal sustainability. While 69% and 70% (respectively) of respondents reported that their current financial status was “reasonably stable” and that they were currently meeting budgetary requirements, only 61% (8/13) of respondents who reported that their current financial status was either “very stable” or “reasonably stable” also maintained that they were meeting budgetary requirements. It appears that certain respondents were either very optimistic with regard to their economic conditions (*i.e.*, they believed their projects to be stable even though they might not have been satisfying budgetary requirements), or that they did not believe meeting budgetary requirements a precondition for enjoying a stable economic status. “Stable but starving” is an undesirable situation suggesting at minimum, substantial project vulnerability.

Although the analysis of STGPs did not indicate that the movement was clearly fiscally unstable, certain findings suggested that economic stability could be improved by adoption of the CSA model. First, the majority (10/14) of STGPs indicated that they possessed “one or more primary funding sources without which the project could not

¹³ This may appear to contradict the notion of CSA supported STGPs, however, CSA philosophy emphasizes the community-farm relationship of mutual support (*i.e.*, theoretically, shareholders help to alleviate on-farm economic problems).

operate.” Furthermore, all STGPs for which funding was “becoming more difficult to obtain” (n=5) were operating with only one main source of funding. Largely government grants and/or subsidies, these crucial STGP funding sources are increasingly scarce and difficult to sustain. Therefore, alternative diversified and stable sources should increase fiscal security and ultimately, sustainability. The following section examines whether CSA can provide these economic conditions for insecure STGPs.

Objective 2: Determine potential for U.S. CSA model to improve sustainability of U.S. STGPs while maximizing other therapeutic program benefits.

Hypothesis 1: The U.S. CSA model can improve the fiscal stability of the U.S. STGPs.

Hypothesis 2: The U.S. CSA model can complement certain social U.S. STGP features.

Hypothesis 3: The U.S. CSA model can complement certain environmental U.S. STGP features

Primary Methods: Survey of U.S. STGPs, analysis of seminal CSA works, personal interviews of STGP and CSA staff, participant observations of CSA and STGP operations.

Findings pertaining to the CSA model, derived from analyzing the works of Lawson, Laird, Kane, and Lohr, and through personal interviews and participant observations, will now be examined. Appraisals such as Laird’s motivated this investigation: “CSAs are a new twist on agricultural cooperatives’ goal to create financial stability for farms. Unlike traditional cooperatives, which focus primarily on economic factors, CSAs also address social and environmental issues within agriculture” (1995, 113).

Objective 2, Hypothesis 1 Results and Discussion:

The hypothesis that the U.S. CSA model can improve the fiscal stability of U.S.

STGPs was not supported. The funding diversity that is a characteristic of shareholder participation was not adequately stable to recommend the application of CSA to unstable STGPs. Despite the economic ideals of the CSA model, U.S. CSAs encountered economic duress sufficient to present an encumbrance to the movement as a whole. Findings were that, generally, CSA growers were constantly striving to increase shareholder commitment in terms of recruitment, membership renewal, and operational support, and that they were obtaining unsatisfactory salaries and employment benefits.

The financial concern most often mentioned by CSA growers in Laird's study was "number and price of shares." Fifty six percent of Timothy Laird's respondents reported difficulty obtaining adequate membership (1995, 35). Kane and Lohr claim that "rates of 30-50% turnover are not uncommon for many CSAs in the U.S." (1997, 1). The average annual shareholder renewal rate reported by Laird's respondents was 67% (1995, 34). Andy Scott of Hidden Villa CSA in Los Altos Hills, California reported only a 30 to 40 % return rate during the CSA's fourth year of operation; he would like to see this rate increase in subsequent years (1997). Even the nation's most renowned CSA projects report rates of renewal similar to Laird's average: At the 1995 Western Region CSA Conference, Full Belly Farms' Dru Rivers reported a 20 to 30 % turnover rate per month, and Steve Moore of Moore Ranch reported a 20 to 25 % annual turnover rate (13 November 1995). This was despite the fact that both farms have long waiting lists for shareholder participation.

Convenience was a chief factor in determining shareholder satisfaction with their

CSA project. Laird's survey respondents rated the "inconvenient" response as the number one reason why members did not rejoin (Laird 1995, 36). During the course of the three day Western U.S. CSA Conference (12-14 November 1996) a number of growers remarked that shareholders valued convenience to the extent that their commitment to the CSA operation was compromised. In Laird's words, "People do not want to hear that they may pay the same [as for commercially grown produce], if not more, for food that is inconvenient (*i.e.*, in season, out of the way, unwashed)" (1995, 35).

The following examples illustrate the importance of convenience for modern consumers, and the resulting economic ramifications for CSA. As mentioned in Chapter 3, despite fairly realistic initial conceptions of the agricultural model, much of the promise of shareholder dedication waned by the end of the first harvest season in Kane's and Lohr's study. When new shareholders were interviewed the spring prior to the harvest season, they "expressed an apparent willingness and desire to try different vegetables, that is, vegetables other than the ones they were used to eating" (1997, 5). However, post season interviews produced complaints like the following: "Freshness was definitely there, but when I said I wanted variety I really meant within the things I was used to eating" (1997, 5).

Many shareholders have also been displeased that all of their food needs were not met by their CSA. According to a shareholder from Kane's and Lohr's study, "I thought the share in the CSA would take care of my fruit and vegetable purchases for the whole season. . . Unfortunately, I consistently supplemented the share with additional purchases

at the store.” (1997, 5). Consequently, the researchers recommended that “new varieties should be offered as compliments to, rather than substitutes for, the basics” (1997, 5).

The author has witnessed on numerous occasions shareholder comments that are fundamentally matters of convenience. Examples include incessant and impatient requests for popular crops, like corn, when the plants are out of season or still small seedlings. Growers occasionally feel harassed by shareholders who continually request out of season and tropical fruits that they see in supermarkets throughout the year. In short, today American consumers associate immense variety, immediate availability, and low price with food access.

Another economic condition with negative implications for a CSA-STGP union was that the large majority of growers were not receiving salaries and/or benefits that they considered to be satisfactory. The average annual salary of Laird’s survey respondents was \$11,225 (1995, 79). Growers who indicated a lack of financial success often stated that they worked too many hours for their monetary return (1995, 104).

Jered Lawson’s survey respondents received an average annual salary of \$12,500 for sixty hours of work per week (1992, 30). Seventy percent of these growers did not receive compensation for benefits like vacations, medical insurance, and retirement funds (1992, 30). A CSA grower in Laird’s survey stated: “My concern is that most CSAs undervalue their share prices based on a fear that they wouldn’t sell if they were priced based on a realistic budget including all capital depreciation, realistic salaries, health insurance, vacations, etc. All the stuff regular businesses need to cover!” (1995, 86). As

with STGPs, CSAs have operated with restrictive budgets because of insufficient funding.

In this economic context, CSA proponents have been compelled to entice potential consumers with artificially low share prices. This is despite data that have shown the price of a share often to be less than the price of conventional produce. In 1988, the Kimberton CSA found that while one share cost \$320, “. . .The same quantity of vegetables, according to prices at local markets, would have cost \$530—a difference of \$210. (Groh and McFadden 1990, 167). A 1996 study by researchers at the University of Massachusetts, reported in the New York Times dated 9 July 1997, also found CSA to be economical: the food for a \$450 share “would have cost up to \$1,150 in a conventional grocery store, a local food market or an organic food market.”

Undervalued share prices typically cause growers to pursue additional income sources. The works of Lawson and Laird revealed that, in addition to overseeing the agricultural and organizational operations of the CSA, growers were marketing their products through other avenues in attempts to attain economic well-being. Sixty four percent of Lawson’s grower respondents (1992, 28) and 74% of Laird’s (1995, 61) marketed a portion of their harvests outside of their CSAs. A farmer in the latter study remarked that “financial survival is based on doing this.” (1995, 62).

The economic accessibility of CSA to the shareholder community must also be considered in light of CSA-STGP collaboration. With a substantial portion of the nation’s STGPs operating in socioeconomically disadvantaged communities, share accessibility is of crucial importance. The fiscal organization of CSA, *i.e.*, pre harvest payment, is likely

uninviting to those lacking economic security. If the CSA model is disproportionately available to middle- to high- income consumers, its suitability for STGPs will be suspect. Nor will it bring the desired local community cohesion.

In their works both Lawson and Laird addressed the issue of CSA as a middle class phenomenon. Laird divided surveyed CSAs' shareholder incomes into three categories—below \$25 k, \$25 k to \$40 k, and \$40k to \$100 k—and observed that 47% and 50% respectively, of the farms in the two latter categories reported no obstacles to obtaining adequate membership, compared to only 17% with average member incomes in the lowest category (1995, 112). Lawson gives this explanation for low income inaccessibility: “It isn’t so much that the price of a share is not affordable; rather, having to put money up front, or not being able to make a financial commitment due to a lack of income stability, makes (sic) purchasing a share inaccessible to lower-income people” (1992, 30). With growers already struggling to secure budgets and salaries, it seems unlikely that U.S. CSAs could ensure participatory equity.

However, the studies revealed that many of the nation’s CSAs took actions to increase share availability to people and organizations of limited income. Fifty five percent of the CSAs in Laird’s survey had implemented creative strategies for including low income participants (1995, 90). Share accessibility was attained in a number of ways. While Laird was a grower at the Intervale Community Farm, lists of needy groups were kept, and funding was solicited from local businesses to subsidize their shares. One farmer in Laird’s study received grant money from a local university to pay for limited income

shares. Shareholders from Full Belly Farm in Guinda, California donated six to eight shares to the Charlotte Maxwell Breast Cancer Center in Berkeley, California (Rivers 1997). Additionally, the researcher observed that many CSA farms offered work shares, *i.e.*, reduced price or free shares in exchange for help with CSA operational activities like farm labor or administrative and organizational activities.

CSA economic design by definition utilizes a diverse funding base, *i.e.*, a *community* of shareholders. It is this (annually) guaranteed market that has most attracted farmers to the model (Laird 1995, 116). Unfortunately, the fiscal ideals of the CSA model have generally not been realized because of difficulties concerning shareholder recruitment and retention. Without a demonstration of fiscal stability for CSA growers, the promise of CSA for STGPs lacking funding diversity is questionable.

However, STGPs possess certain characteristics that might facilitate successful shareholder recruitment. For example, an existing STGP will be more likely than a local farmer to have an established reputation for social, environmental, and community service within a locale, perhaps thereby garnering support for a CSA operation with relative ease. An initial step toward STGP fiscal sustainability might involve solicitation of shares to charitable funders (*e.g.*, local businesses, restaurants, etc.) in the community. The CSA model's flexibility would be advantageous in this case.

Though the feasibility of CSA implementation would certainly depend upon individual STGP characteristics, the analysis revealed a number of educational strategies that have been particularly effective in increasing shareholder commitment to and

understanding of the CSA model. According to Laird, “education of members is the most crucial aspect in membership recruitment” (1995, 37). In a nation that has during this century become physically and philosophically estranged from agricultural food production, providing information about the economic and environmental advantages of local food production and community food security may be a necessity, particularly if the movement is to succeed over the long term.

Many CSAs create printed layouts of their crop plans, detailing which fruits and vegetables will be planted over the year, and during which months they will be available. This allows their shareholders to do their meal planning ahead of time, and gives potential shareholders a realistic impression of both regional and seasonal availability. Busy shareholders also appreciate recipes when they receive foods less familiar to them than potatoes or lettuce.

Another worthwhile CSA practice during shareholder recruitment occurs when seasoned shareholders discuss their experiences with and impressions of CSA to prospective members. The superior taste, freshness, and health enhancing qualities of CSA produce are inevitably discussed. An additional benefit is that this interaction facilitates positive communication and cooperation among members. Shareholders living within close proximity may help each other when one cannot make a trip to the farm to obtain his or her share, for example.

Though in theory, CSA is based on a philosophy of mutual support and egalitarianism among participants, in practice most growers contributed more than their

share toward maintaining the viability of operations. The CSA concept precludes such a condition. Theoretically, when problems arise, *i.e.*, a crop fails, a piece of equipment is needed on the farm or a project's budgetary demands are not being met, the issue is resolved by all parties participating in the CSA—growers *and* shareholders. Unbalanced cooperative situations are not economically sustainable, as they overtax growers, and may ultimately lead to grower/farmer attrition. A CSA farmer of Meriwether Harvest related, “Our CSA ended prematurely because of grower burn-out. . . The CSA model is an excellent one, but shareholder expectations based on present produce pricing leads to too low a share price to provide growers the financial security they deserve. We are professionals and should be compensated as such” (Lawson 1992, 81). With the indications that STGPs already considered themselves understaffed and struggling to provide sufficient salaries for their staff, CSA probably would not appeal to many STGP personnel.

In reviewing the CSA literature and in personal encounters with numerous CSA growers, the U.S. government's subsidization of conventional agriculture (*i.e.*, industrial agriculture) was time and time again identified as a serious menace to CSA, causing consumers to expect artificially low food prices. Perhaps in the future growers who build and enrich soil, rather than those who degrade and poison it, will be financially rewarded by government. Until this occurs, however, the best that CSA can do is to shift consumer perspective with regard to CSA: stress that monetary contributions serve to support a sustainable agricultural operation, rather than to “buy” the harvest.

The data suggested that in many cases, growers had accepted low salaries to ensure the operation of incipient CSAs, possessing optimistic economic forecasts. Seventy eight percent of Laird's respondents believed that CSA "offers a more financially secure marketing outlet than other means of distributing their products" (1995, 78), and fifty eight percent expected the head farmer's income to increase in the long run because of the CSA (1995, 80). Unfortunately, due mainly to insufficient membership and renewal rates, many growers encountered difficulty securing higher incomes during subsequent years. Additionally, with unrealistic initial impressions of the demands of the CSA model, (*e.g.*, planning complex cropping schemes, assembling individual weekly shares, communicating with shareholders) many growers work many more hours than anticipated. Therefore, it seems that a realistic CSA conception should be emphasized to potential growers and shareholders alike.

Laird's respondents indicated that more agricultural experience would help them to be more successful with the CSA. It may be that farming experience is the key indicator for CSA success, though factors like geographic location of the farm and interpersonal/social ability of the grower(s) certainly play a major role in the recruitment and retention of shareholders. In response to the question, "How has change to CSA affected your work load?" Andy Scott (who has 30 years experience in organic farming) said that CSA has simplified it, with less marketing and post harvest handling (Scott 1997). However, even experienced growers may be ill prepared for CSA farming, which demands complex cropping systems to ensure an extended harvest season.

Objective 2, Hypothesis 2 Results and Discussion:

The hypothesis that the U.S. CSA model could complement certain social U.S. STGP features was supported by the analysis of seminal CSA works and personal interviews and observations at operational CSAs. The ability of CSAs to create or nurture a sense of community was identified as its most significant social feature. In Laird's survey, respondents listed community as the most critical factor for the success of a CSA, above monetary issues and production (1995, 106).

Laird's respondents identified "community building" as the most successful aspect of their CSAs (1995, 116). Ironically, community building was also their first choice for least successful aspect of the CSAs (1995, 103), though "only marginally" (slightly above finances and share problems). Of the 68 percent of respondents who believed that their CSAs had nurtured a sense of community, many indicated that this "community" had evolved out of creating a venue for networking among members (1995, 93).

A number of positive social qualities were identified among U.S. CSAs. Some were factors that facilitated relations between shareholders and growers and among shareholders themselves, and others were those with social implications exceeding the individual CSA projects. These identified qualities demonstrated a potential for improving and/or complementing social attributes of U.S. STGPs.

Seventy percent of Laird's respondents held community building festivals on their farms, averaging 2.5 per year, and others referred to "activities such as apple pressing, monthly potlucks, and corn plantings" (1995, 88). Full Belly Farms in Guinda, California

celebrates each harvest year with a “Hoes Down Harvest Festival,” which in 1996 advertised such features as a full day of music, farm crafts, organically grown food, and activities for children such as cow milking, corn grinding, and felt making from wool. Fun, informal events like these are also likely to encourage less involved community members to increase their visits to the farm and to regard the CSA farm as a community asset.

Fifty seven percent of Laird’s respondents had established connections with schools and/or other educational groups, such as universities. Many organized applied activities with these institutions, such as farm field trips, with planting and harvesting. For example, for three consecutive years while Laird was a CSA farmer at the Intervale Community Farm, 300 University of Vermont students from an introductory Environmental Studies course visited and worked on the farm (1995, 90).

In his study, Lawson noted the prominence of women involved in CSA and estimated that women play central roles in 38 (76%) of his 50 surveyed CSAs (1992, 51). Lawson portrayed this female attendance as a positive contrast to conventional agriculture, where women more often occupy peripheral roles. Lawson’s conviction was supported by observations of the present study: during the 1995 Western Region CSA Conference, women and men appeared to be equally in attendance,¹⁴ and during an on-site interview at Full Belly Farms with female co-owner Dru Rivers, it was noted that both farm interns were also female.

¹⁴ The author was among the female attendants.

Kane's and Lohr's social factors findings were contradictory to that collected from CSA growers. Telephone interviews with new Southeastern U.S. shareholders revealed that they were "split fairly evenly between those interested in community and those not interested" (1997, 3). A comment of a new shareholder from the latter group follows: "I don't have any expectations whatsoever. I did it entirely for myself. I wasn't really thinking about the community. . . about the global importance of it. I thought, 'I want fresh vegetables and he's got 'em.'"

Kane and Lohr also analyzed 196 responses to a mail survey in which shareholders were asked to rate their satisfaction with CSA features such as share quality and quantity, distribution venues and times, quality of CSA newsletter, and social/community aspect. These results were discouraging with regard to social factors: "Quality of the newsletters and social/community aspects of the CSA were dropped from this particular analysis because few farms in the study made the social/community aspect a priority and only half consistently published newsletters" (1997, 6).

An additional negative CSA social factors finding was that minorities were disproportionately unrepresented in the CSA movement. Of the fifty farms responding to Lawson's survey, "eight have fewer than 5% of their shareholders being people of color (African-American, Native-American, Chicano/Latino, Asian-American)" (1992, 56). Though women were well represented at the 1995 Western Region CSA Conference, minorities were conspicuously absent.¹⁵

¹⁵ It should be noted that, although they constituted the majority, CSA growers and shareholders were not the sole conference attendees.

It is interesting that community building was considered to be even less successful than finances and share problems, especially given the serious fiscal and share concerns that CSA growers demonstrated in the previous section. Creating community appears ultimately to be crucial to the viability of CSAs. With growers also providing goods to external buyers, maintaining a vigorous community aspect within the CSA can be a difficult task. According to Lawson, “A greater commitment to the CSA can become a problem for many farms, because financially it is essential for them to also focus on outside markets” (1992, 62). The relevant question here is whether urban STGPs would be more or less able than CSAs to create community.

Kane’s and Lohr’s finding that few farms focused on the “community” aspect of CSA is also interesting and very much at odds with data from Lawson, Laird, and interviews and observations. It is possible that the Southeastern CSA survey sample is unrepresentative of the U.S. population in this regard. Regional social factors or other factors could be the cause of this difference. The cause is worthy of future investigation.

The underrepresentation of minorities in CSA is discouraging, both for the social element of the movement and its negative implications for the joining of the CSA and STGP models. With a substantial portion of marginalized urban STGP participants representing minority groups, the appeal of CSA to noncaucasian community members will be in question. While CSA may be a “white” movement, there exists a strong potential for it to become multiracial/multiethnic. “Since gardens can be a context for strengthening and celebrating cultural identity, CSAs (*or some community-adapted form*)

[emphasis added] could become a popular item” (Lawson 1992, 56). Another compelling reason for combining the CSA and STGP models.

Objective 2, Hypothesis 3 Results and Discussion:

The hypothesis that urban STGP environmental features could be complemented by using the CSA model was supported. Although the STGP survey demonstrated that many already operated with environmental and ecological conscientiousness, CSAs generally apply sustainable agricultural techniques in a more systematic fashion. Therefore, there exists a significant potential for CSAs to help improve this feature for STGPs.

Prominent among CSA environmental features was the presence of petrochemical-free growing methods. Asked to number “The important reasons your CSA formed within the community,” Laird’s respondents selected “to supply organic food” as most important (1995, 96). In his study, Jered Lawson remarked that “I have yet to find a CSA that is not employing either organic, bio-dynamic, bio-intensive, or some combination of the three” (1992, 42). These farming practices generally improve soil structure, employ low input resources, and reduce natural resource consumption through minimized packaging and shipping of harvest.

CSA was observed to provide aesthetic as well as ecological benefits. All of the CSA farms visited by the author (approximately ten California operations) were visually appealing, whether in the spring, with bright flowers, or in the fall, displaying squash of various colors, shapes, and sizes. This did not appear to be strictly a phenomenon of

pastoral beauty: Among Laird's 73 respondent farms, there was no bias toward urban or rural location. This finding provides hope for improving community pride and cohesion in urban garden project areas: likely to display crops with more visual exposure to the public, community members would be drawn to the beauty of a CSA-STGP.

The potential for CSA to help ecologically and aesthetically enhance the urban STGP landscape is promising. Though the approximately 30% of STGPs that used chemicals in their gardens did so only sparingly, CSA's impressive commitment to sustainable agriculture practices provide a good model for STGP agriculture, and a path toward improving natural ecosystems functioning in the urban environment.

The analysis revealed that CSAs were encountering two problems that were also faced by STGPs: understaffing and centralization of control. Often, a CSA will have a single head grower, who, in addition to planning and maintaining agricultural production, must recruit new shareholders and maintain communication with existing members, and perform all of the administrative tasks associated with the CSA.

Obviously, the CSA movement does not have concerns with undiversified funding and the attainment of fiscal self reliance as does the STGP movement. CSA does however suffer from the precarious nature of shareholder funding sources. Of the surveyed STGPs, the maximum time period for which their main funding source could be relied upon was twelve months. Because shareholders make contributions on a one season basis, the CSA model may appear to operate with some fiscal precariousness. However, the analysis also showed that the nation's CSAs can rely upon a steady influx of new members from year to

year. CSA therefore may be appropriate for STGP under certain circumstances.

Established STGPs may possess the community support necessary to draw a committed force of shareholders.

All of the CSA operations visited and CSA growers interviewed during the course of the present investigation were either already fiscally stable, or the head growers optimistically expected that in the near future they would enjoy fiscal stability exclusively from the CSA. Despite the fact that 78% of Laird's respondents believed that CSA was a better financial option than more traditional marketing techniques (1995, 115), it is possible that this positive economic observation is due at least in part to a study bias: California CSAs and CSA growers were almost solely among those visited for the present study. Certainly, only with particular organizational, geographical, and attitudinal factors in place do CSA projects proceed unobstructed.

Objective 3: Determine ability of United States STGPs to achieve socially therapeutic program goals and to provide social and environmental benefits for their communities.

***Hypothesis 1:* Most United States STGPs successfully achieve their therapeutic program objectives.**

***Hypothesis 2:* Most United States STGPs contribute social benefits to their communities.**

***Hypothesis 3:* Most United States STGPs contribute environmental benefits to their communities.**

Primary Methods: Survey of United States STGPs, personal interviews of STGP staff, participant observations.

Achievement of the third thesis objective— determining the ability of United States STGPs to achieve their socially therapeutic program goals and to provide social and environmental benefits within their communities — also relied largely upon the collection of STGP survey data, an efficient data gathering technique. The supplemental data collected from personal interviews and participant observations were generally in agreement with that of the survey: STGPs were attaining their socially therapeutic program objectives.

Objective 3, Hypothesis 1 Results and Discussion:

The hypothesis that most United States STGPs successfully achieve their therapeutic program objectives was confirmed by the three primary research methods. The survey respondents gave their projects high positive ratings (the average 8.0, and the range 5 to 10 on a 10-point scale) on ability to attain therapeutic goals. Projects were presumably fostering self esteem (the first choice for project social/therapeutic objective), providing occupational skills, teaching life skills, and fostering a connection to the land (the three second most popular first choices). The following responses to “Additional

comments regarding PPPs or project's therapeutic environment?" better demonstrate the socially therapeutic value of these projects:

"The patients (psychiatric) enjoy getting outdoors and using tools to be productive."
 "Inmates make many comments about how proud they are of their new skills."
 "It is the only time my students can feel safe and have fun in the urban outdoors."
 "Teen employees hold onto their [STGP] jobs for long periods of time (over a year average)."

The primary goal of the various youth centered SLUG programs (introduced in Chapter 2) operating in several of San Francisco's socioeconomically deprived communities appears to be providing youth at risk with "the fundamental skills they need to improve their lives" (Piper 1996, 3). They nurture a sense of responsibility by providing paid employment within the community, instilling self esteem and neighborhood pride through local publicity, and creating hope for the future through theoretical and practical training

During a Saturday visit to the San Francisco League of Urban Gardeners' (SLUG) Saint Mary's site, the grounds were abuzz with volunteers and PPPs engaged in gardening and landscaping tasks. The ten or so student PPPs worked steadily, and without instruction. John Colon, the site supervisor was on hand to assign work duties and tools, and to ensure quality performance. The day's work was so well organized and supervised, in fact, that the author thought better of interrupting their work for interviews.

Executive director, Mohammed Nuru, regards SLUG's urban agriculture theme as "a stepping stone" for the youth employees (September 24, 1996 interview). Though

many of the youth gardening interns gain job promotions within SLUG (like John Colon, who began as an assistant supervisor), the reality of the inner city youth is one of peer pressure and often a true need to take home a salary. Though SLUG's wages are quite good (\$5/hour starting; \$5.50/hour middle wage; \$6/hour leadership), the monetary rewards of drug dealing, coupled with the stereotype of the "backward" farmer donning faded, baggy overalls can discourage PPPs from pursuing a life of urban agricultural endeavors. Though the Saint Mary's program has very low turnover among its youth participants, according to Colon, the work is not appealing to all Hunter's Point youth: "Some of them think it's cool; some of them think it's slave work, especially when they do the digging. "Oh, we're not in the slave days.' I've heard that a lot. . . .It's hard work. . . . try it out, if you can't handle it there are other alternatives" (May 24, 1997 interview).

SLUG programs feature a variety of attractive features within the context of the small-scale agriculture theme. Among the SLUG program features that appeal to marginalized San Francisco youth are positive socialization with peers and adult role models and participation in grassroots efforts to empower their communities. Many star SLUG participants are among those who had formerly shunned the venture.

Colon himself admits that as a youngster, he "got into a lot of trouble." Later, he began working with Private Industry Council (PIC), an organization that provides summer jobs for youth. In 1995, when he acquired a YMCA teacher's aide position, Colon was fully committed to helping youth attain equal opportunity in their societies.

The topic of accomplishing social/therapeutic goals warrants further study. Given

the sparse staffing of respondent STGPs, and the fact that respondents were STGP coordinators and directors, the rating of ability to accomplish these goals was often self evaluative and therefore a potential source of respondent bias. Furthermore, the interview and observational data could also be unrepresentative of the population, if the sites visited tended to belong to the more successful STGPs. Future studies into this area should attempt to capture more objective response data through alternative measures, such as longer periods spent solely observing PPPs in their usual work settings.

However, while quantifiable survey results were useful for confirming a positive outcome for Hypothesis 1, the scientific measurement of therapeutic capability is less likely to capture the essence of day-to-day operations and stepwise therapeutic progress. And this is the strongest argument against quantifying social therapeutic success, especially when the viability of the project depends on such analytical findings. Certainly STGPs can significantly improve the quality of life without accomplishing all of their therapeutic goals.

Objective 3, Hypothesis 2 Results and Discussion:

The second hypothesis, that most U.S. STGPs contribute social benefits to their communities, was also confirmed. STGP interviews and observations produced the bulk of the data supporting the hypothesis. However, much of the survey data confirming achievement of social/therapeutic goals suggest that social benefits were provided to the community as well.

In as much as they facilitate meaningful relations among people from divergent

social groups, such as STGP staff, PPPs, and community members, social benefits are conferred upon STGP communities. When CSA shareholders from the community visit the Santa Cruz Homeless Garden Project, either to pick up weekly produce allotments or to volunteer their time in the garden, many positive social encounters occur. During a few author visits to the two and a half acre garden site, community members, homeless citizens, and project staff were observed working alongside one another, their talk pleasant and casual. Rarely does one witness such a scene in other suburban Santa Cruz neighborhoods;¹⁶ exchanges between homeless and nonhomeless citizens are usually limited to solicitations of money from one party, and obvious discomfort from the other. In this therapeutic garden's social atmosphere, empathy and mutual support—shamefully absent in urban American society — can blossom.

In an effort to do something positive for the community in the wake of the 1992 Los Angeles race riots, a group of Crenshaw High School students, and their science teacher, Tammy Bird, created a garden project called Food From the 'Hood on a quarter acre of idle land behind the laboratory. True to the original statement of purpose, which the students painted on a mural facing the garden, the gardeners “give back to the community.” Twenty five percent of their harvest is donated to needy families in South Central Los Angeles, and the neighborhood has been the subject of much positive publicity.

¹⁶ This is not to say that Santa Cruz provides a good example of social intolerance. On the contrary, typical of many university towns, its inhabitants are generally regarded as possessing liberal social values and coveting standards of equal rights.

Subsequently, Norris Bernstein, a prominent salad dressing producer and marketing consultant offered his expertise to the incipient Food From the 'Hood salad dressing venture. Bernstein now sits on their board of directors, and works alongside the students, both during board meetings and dressing tastings (Larner 1997).

Self report survey data, though less explicit than the interview and observational data, also indicated that respondent STGPs were providing social benefits to their communities. As has been established, respondents gave their projects very high ratings with regard to ability to achieve social/therapeutic goals. With self esteem fostered (the most popular social/therapeutic objective as ranked by respondents) and occupational and life skills taught (the second most popular social/therapeutic objectives) corresponding, social benefits were received by their communities. Nearly as many (4/17) respondents ranked "to provide a supportive social environment" as their first choice of project social/therapeutic goals as they did to the second most popular first choices (5/17).

It is the poor inner cities in the United States that suffer most from a lack of food security. Hence, it is especially important that STGP staff and participants operating in these areas understand the concept of community food security, and the potential benefits its establishment offers to the local economy and local health (*i.e.*, through improved nutrition). If such an education of community members occurs, their support, and thus project sustainability of STGPs, would likely increase as a result.

Objective 3, Hypothesis 3 Results and Discussion:

The findings of the self report surveys and post survey questions indicated that

most respondent STGPs were contributing to the environmental enhancement of their communities, supporting Hypothesis 3. Where an STGP was part of a larger institutional mental health program, benefits were more limited to the immediate “community” of staff and participants. Nonetheless, the majority of projects appeared to be acting in concert with a nationwide movement to reduce the use of synthetic chemicals in small scale plant production.

The example of East Palo Alto, California demonstrates typical environmental benefits that result from grassroots community greening efforts, some tangible and others less so. In the spring of 1995, people affiliated with an East- and a South- Palo Alto based community organization assembled to firmly reestablish a community garden turned abandoned lot strewn with trash, used syringes, and shady loiterers. The lot is adjacent to a large apartment complex, predominantly inhabited by Mexican immigrant families. Throughout the summer months, the area was cleared and plots allotted to these families. Then, the area sprang to life: groups of children came each day after school, to run and play among the fragile new vegetables, and in the sturdy old trees; their mothers gathered to water and weed, recalling the days when they admonished the children of the sharp and festering objects in this lot; their fathers spent long weekend hours turning compost, building vegetable trellises, improving the irrigation system, and admiring their crimson red peppers and towering corn stalks.¹⁷

Also consistent with these data is that the “fostering a connection to the land”

¹⁷ The author participated in reestablishing and maintaining this community gardening effort.

option was among the second most chosen social/therapeutic goals by respondents.

Today open space and wilderness areas are becoming ever more scarce. If urban dwellers are to comprehend their alliance with nature, applied environmental education will be increasingly necessary.

The low-input agricultural feature of STGPs is likely to be the result of a variety of factors. First, public concern of the human health risks associated with synthetic agricultural chemicals has resulted in decreased usage. With the primary focus of many urban community garden projects being environmental restoration of their blighted neighborhoods, decreased synthetic chemical use results. Also, some survey respondents indicated that their PPPs had heightened sensitivities to chemical agents. Finally, those projects using environmentally “friendly” practices may be the most appealing to potential funders.

Summary and Conclusions, Objectives 1, 2, and 3:

With regard to Objective 1, the STGP survey, personal interviews, and participant observations identified several key factors that compromised STGP sustainability. The majority of self report survey respondents considered their projects to be understaffed and reported on average only 1.4 full time staff and 0.7 part time staff. Though a portion of the STGPs reported a reliable volunteer force, the interviews and observations revealed that the work required for overall program functioning and success was typically dependent upon the efforts of one or a few key personnel. In observation, these key personnel typically worked significantly longer than full time hours, rendering them

susceptible to job “burn out.”

The three methodologies revealed that STGPs typically were relying upon one or a few funding sources for program operations (2.0 average sources when those comprising 5% or less were omitted). However, the premise that a small number of funding sources contributed to the nonsustainability of STGPs was not supported. The majority of self report survey fiscal indicators were positive, with most STGPs meeting budgetary requirements and reporting “reasonably stable” financial status’ and operating budgets either “staying the same” or “increasing.”

The findings of Objective 2 were mixed: while they supported the potential for CSA to maximize certain social and environmental STGP features, they did not support the ability of the U.S. CSA model to improve the fiscal sustainability of U.S. STGPs. Though CSAs operated with broad shareholder funding bases, most did not generate sufficient income to support staff beyond the primary grower. Also, regardless of age, the majority of CSAs were constantly struggling to maintain their shareholder base.

The majority of STGPs were found by the self report survey, interviews, and observations to successfully achieve their therapeutic program goals and to provide social and environmental benefits for their communities. Respondents gave their projects high ratings on ability to achieve their therapeutic goals, and chief among these goals was “to foster self esteem” and “to foster a connection to the land.”

Evaluation of Research Project

Overall, the combination of the self report survey, interview, and observational

research tools functioned well to decrease bias from the target study sample. Personal interviews were conducted informally, and much of the author's participant observation data confirmed that collected from the target subjects.

Certain characteristics of the self report survey, however, did particularly lend themselves to respondent bias. For example, in part III, the "Project Staff" section of the survey, respondents were asked to rank their project staff from "poorly qualified" to "well qualified," from "inability to function as a cohesive unit" to "functions well as a cohesive unit," and from "power struggles" to "mutual respect." With the average number of full time staff at 1.4 persons, the questions are highly self evaluative, perhaps increasing the likelihood for positive responses. Likewise, in part IV, the "Primary Project Participants" section, because of the sparsely staffed respondent projects, responses to the question, "How would you rate the project's ability to attain its therapeutic goals?," were self evaluative.

This particular potential source of bias might also be responsible for the contradictory data from the economics section of the survey, *i.e.*, of the 13 respondents (n=16) who reported that their projects' current fiscal status' were either "very stable" or "reasonably stable," only 8 also reported that their projects were meeting budgetary requirements. Furthermore, if, as this finding appears to indicate, a significant portion of respondent STGPs are barely "reasonably stable," the polling of existing STGPs would cause sample bias. Any projects that recently halted operations due to insufficient funding would be excluded from the study sample.

An alternative, and perhaps superior research strategy would involve face-to-face or telephone interviews with a feasible number of randomly selected project staff, responding to open ended questions, which would also likely result in an increased response rate. This data could then be compared to observational and participant data from the population to confirm its validity. Finally, attempts to obtain data about failed projects would be made.

CHAPTER 7

RECOMMENDATIONS FOR MODEL CSA-STGP ENGAGING URBAN YOUTH AT RISK

Overview

This chapter completes the present work through (1) discussing the potential for CSA-STGP program viability; (2) characterizing, in detail, two models of success among the nation's STGPs engaging youth at risk; and (3) presenting recommendations for increasing such program viability. Additionally, professional resources for CSA and the STGP are listed, as they can provide geographically specific information and references.

Discussion and Conclusions

Given the appropriate circumstances and conditions, a combined CSA-STGP operation for youth at risk is highly desirable in the urban context. Youth from distressed communities would be gainfully engaged during their nonschool hours, and actively facilitating environmental improvement, food security, and economic growth. As the youth and other community members gain valuable social and occupational skills, long-time disempowered communities would become mobilized, united, independent, and healthy.

The nation's CSAs demonstrated social and environmental benefits with potential to enrich and expand those of U.S. STGPs engaging youth at risk PPPs. For example, if CSA were adopted, youth would practice CSA organizational activities that involve

sustained interaction with community members. These activities include teaching basic planting to community members, weeding, and harvesting techniques; planning and advertising annual member meetings and farm festivals; and interacting with shareholders during produce pick up days. Other CSA responsibilities potentially providing practical skills for youth include bookkeeping, writing and publishing newsletters, and developing shareholder satisfaction surveys, potentially offering a broader range of educational activities than currently exists at many of the nation's youth-centered STGPs.

Adopting CSA environmental aspects could aid STGPs in establishing community food security and environmental justice principles in economically distressed, physically debilitated communities. With CSAs operating in urban regions, communities that have been highly targeted by the fast food industry would enjoy increased access to healthful, petrochemical free foods. Additionally, the currency used to support the CSA operation would recirculate within the community.

The sustainable agricultural methods (organic, biodynamic, and biointensive) used by CSA practitioners could substantially enrich and restore urban soils. With adoption of these practices in socioeconomically disadvantaged communities, environmental standards, conditions, and awareness could be raised to levels seen in middle class and affluent areas.

Finally, CSA can offer valuable benefits to youth centered STGPs for which the sustainable agriculture component is ancillary to other program features and objectives. SLUG, for example, aims to improve the lives of low income San Franciscans "by focusing on urban gardening as a means rather than an end" (Nuru and Calandra 1996, 1).

Director Mohammed Nuru declares that “SLUG is not the end of the road.” A CSA-supported STGP would instill an ethic of environmentalism and land stewardship in inner city youth, helping them to take an active part in rectifying past wrongs associated with environmental racism in their communities.

Although the study findings did not affirm the ability of the CSA model to improve the fiscal sustainability of U.S. STGPs, CSAs were confirmed to possess a broad consumer (funding) base. And unlike STGPs, CSAs were not required to invent new program features from year to year in order to sustain crucial program funds. But with a few exceptions, CSAs received income sufficient only to cover their agricultural and labor costs. Consequently, CSA does not appear to be appropriate for STGPs interested exclusively in rectifying unstable economic conditions.

U.S. STGPs engaging youth at risk were achieving a diversity of positive outcomes for both the youth and their communities. Each one of the nation’s STGPs and CSAs has its own unique features and value, and each is both a noble and worthy endeavor. With altruistic, optimistic, and tireless staff, the highly acclaimed STGPs in the U.S. demonstrate well the right combinations of success factors described in the previous section. Following are profiles of two such projects for youth at risk that were observed during the present analysis.

SAN FRANCISCO LEAGUE OF URBAN GARDENERS:

Eighty four percent of residents in the Alemany and Hunter’s View public housing developments—where SLUG’s Saint Mary’s Urban Farm is located—are jobless (Nuru

and Calandra 1996, 1). This is the Bayview/Hunter's Point district, where 52% of the households are classified as low to very low income. Recognizing the nefarious grip that crime, drugs and gang warfare have on much of the local economy and the reality of declining public and private funding for the poor and unemployed, SLUG has taken direct and effective action.

With foresight and a practical approach, SLUG executive director, Mohammed Nuru, and staff developed this goal: "the end of welfare and other public assistance programs must be translated into the beginning of community-based economic self-reliance" (Nuru and Calandra 1996, 9). In this spirit, SLUG provides practical job skills, educational opportunities, and meaningful work to community members interested in improving their lives. The various SLUG programs will be briefly detailed to demonstrate the range of benefits and opportunities provided in this community.¹⁸

The Youth Garden Internship:

The YGI crew at Saint Mary's Urban Farm provides a hopeful model for distressed San Francisco youth. Approximately half of the teen crew work at the farm after school on weekdays. These are the "leadership" teens, who have proven themselves to be hardworking and dedicated to the project. Restoring indigenous vegetation and a dry creek bed, and raising vegetables that are donated to residents of the adjacent housing development has its pay offs, both in higher wages and increased community

¹⁸ These profiles have been excerpted from the Spring 1996 SLUG Update article, entitled "One Saturday in the Life of the Youth and Economic Development Department..." by Becca Prager.

responsibility. On Saturday mornings, local children come to the site to work in the garden with the teens, building positive mentoring relationships with them.

Green Team:

This program provides teens from juvenile hall with positive, satisfying alternatives to their community service sentences. These local youth clear and beautify community gardens, blighted lots, and city agency landscapes in their communities.

Double Rock:

Double Rock is SLUG's latest youth garden site, employing teens and young adults, ages eighteen to twenty three, in landscaping and garden maintenance work. The Double Rock site has long carried the stigma of being one of the most dangerous and disenfranchised communities in San Francisco. Providing local youth with job skills and meaningful work that beautifies their neighborhood was the objective, and is the accomplishment.

City College of San Francisco:

Participants of the three main Youth Internships at Saint Mary's, Juvenile Hall, and Double Rock attend class every Thursday at the Phelan City College Campus. Here they gain exposure to college life while they learn practical skills and information directly relevant to their lives, careers, and futures. The unique course combines material from four City College departments: African American Studies, Ornamental Horticulture, Transitional Studies, and Career Development.

Enterprise Program:

The Enterprise Program develops business ventures and job opportunities for San Francisco's low income communities. Youth participants receive training in business development and marketing, and jobs that foster local economic and ecological sustainability. Since its beginning, four entrepreneurial projects have been developed: Urban Herbals, a line of gourmet, organically grown vinegars, jams, and salsas, made by youth from SLUG's Youth Garden Internship program (youth work in all aspects of the business, from growing food to marketing products); SLUG Wear, a line of T-shirts and hats; The Chipper Program, a mobile chipping service and retail mulch sales business; and The Bulb Project, a flower bulb and native plant species propagation business that sells to nursery and garden stores.

Construction Crew:

Winning an ever increasing number of city contracts, SLUG's Construction Crew generates the largest portion of the nonprofit organization's revenue. Many Crew participants prove their motivation and talent while working on the city jobs, and are later hired privately by city and private contractors.

Environmental Justice Department:

SLUG's Environmental Justice Department collaborates with the Mayor's Office of Housing and with community based organizations to prevent and eliminate outdoor

lead hazards in low income neighborhoods. The Lead Crew transforms neglected and hazardous yards into safe, beautiful spaces for family recreation and gardening.

FOOD FROM THE 'HOOD:

Food From the 'Hood is a South Central Los Angeles success story that was spurred by one of despair. Since its inception following the 1992 Los Angeles race riots, Food From the 'Hood's student owners have established a unique and nationally recognized salad dressing enterprise.

In 1993, when the company received a \$50,000 grant from Rebuild LA, the city's riot recovery agency, Food From the 'Hood's corporate offices were installed and its commercial salad dressing venture launched. Today, the company markets two Straight Out 'the Garden dressings. With help from numerous community and national sources, the students have achieved distribution in 23 states and 2000 stores nationwide.

In 1995, the company had a net profit of \$76,000. Half of this was reinvested in the company and the remainder financed college scholarships for Food From the 'Hood's fourteen graduating seniors. Student owner Cesar Bravo explained the scholarship point system: students earn 100 points for every hour invested in the company. Bravo proudly stated that his \$2400 college scholarship earnings translates into eleven percent of company ownership (Bravo 1997).

Work at Food From the 'Hood requires participation in every aspect of the business, including gardening, new product development, accounting, marketing, and trade show and in-store demonstrations. According to executive director and president,

Aleyne Larner, "They're learning communications, money management, networking, protocol and self-reliance. These skills will benefit them whether they decide to become entrepreneurs or not" (Haynes 1996, 1 [A]). Students also have access to academic support and counseling at Food From the 'Hood through an SAT preparation course and college application advising. In 1996, all seventeen FFTH graduates were accepted at four year universities.

In the Washington Post, Food From the 'Hood advisor and former marketing executive Melinda McMullen states that, "it's not that these kids are special. It's that they've had the opportunity to *do* something special. . . . They were very, very different three years ago. Angrier. But they now know that if they work hard at something, they can achieve it" (Britt 1994, 4 [C]).

STGPs offer the kind of broad range of experiences that government has acknowledged is critical for positive outcomes for youth. Accordingly, these model projects nurture and facilitate pride in accomplishment, self-esteem/confidence, the ability to work with others, the ability to set goals and to communicate, a sense of responsibility, employment and leadership skills, community/civic involvement, and assertiveness. According to Lawrence F. Katz, Chief Economist at the U.S. Department of Labor, "Experiences with innovative programs suggest that intensive programs with broad ranges of services are most effective for youth. The youth program that appears to have the strongest positive effects, the Job Corps, is an intensive residential program that changes the youth's environment and provides basic skills training, occupational training, work

experience, social skills training, and job placement services” (U.S. Congress, House of Representatives 1993, 32).

Recommendations

While certainly it is the unique characteristics of individual communities and community members, as well as a combination of crucial variables, rather than individual factors that often determine success, certain factors do appear more often than others among thriving projects. With this awareness, general conditions, practical recommendations, and priorities are given for the CSA-STGP engaging urban youth at risk. These are designed to facilitate the complementary coupling of CSA and STGP features and to minimize the weaknesses of each model. The general conditions recommended for the CSA-STGP project operation in the inner city environment are (1) maintaining a critical number of CSA and STGP personnel; (2) enlisting educated, committed shareholders from the community; (3) developing a well-organized crop plan; (4) supplying organically grown, high demand produce; (5) establishing geographic proximity of the agricultural site to the shareholder community; (6) securing funding sources outside the income obtained from CSA shares; and (7) offering flexible payment options.

Because both the CSA and the STGP models were found to possess problems related to understaffing, a combined operation would require a minimum number of both CSA personnel (*i.e.*, growers or head farmers) and STGP staff. Setting such standards would help to minimize concentration of control in the projects as well as employee

turnover rates resulting from “burn out.” Additionally, it is important for personnel to be integrated in or at least well versed in the social fabric of the community, and to understand the specific needs of the community.

Recruiting exclusively community members well informed of CSA-STGP project operations, and committed to their ideals may be tedious and difficult. However, the data suggest that such a strategy would be advantageous to the long term viability of the project. Once the CSA component is established, word of mouth is the best method for acquiring shareholders who will be dedicated. Full Belly Farms’ thriving CSA began at the suggestion of a regular farmers’ market customer who wanted their produce during months when the market was shut down (Rivers 1997).

New CSA growers should always distribute materials with information regarding operations and crop plans before accepting shareholders. This activity also promotes better organization and planning of the CSA. Training youth participants to prepare and distribute such information would ensure that they themselves understand the philosophy and principles of the program.

Preparing an organized crop plan is crucial, especially for grower(s) unaccustomed to production in the congested urban environment. Development might include a survey of the local potential shareholder community regarding their food preferences and desires, a meeting with or partnership with a local nutrition organization or council, and an assessment of land productivity and harvest season length. Growers unfamiliar with the region should seek the information and advice of local growers. Additionally, less

experienced growers (and especially novice youth growers) should consult the handbook, Community Supported Agriculture: Making the Connection, by the University of California Cooperative Extension. This book is presented in seven sections, which include such topics as developing a CSA, finding and keeping members, production for CSA, and managing shares. Included are examples and advice from successful CSAs nationwide, as well as well-organized pull-out forms that are designed to be used during the planning and operational stages of CSA.¹⁹

CSA organizers must pay careful attention to consumer satisfaction with regard to CSA products. As aforementioned, the number one selling point for CSA is often its organically grown produce. Meeting this desire is typical of the nation's CSAs. However, it appears that less often do growers and shareholders understand one another when it comes to selection and availability. From the growers' perspective, the fruits of each harvest are fresh, healthful, and high quality. Alternately, the shareholders' perspective is often that growers do not provide products in desirable portions and/or varieties.

This situation places the grower in the bind: satisfy consumer demand, or fail. Practical solutions include implementing shareholder satisfaction questionnaires periodically throughout a growing season, and providing adequate amounts of high demand (*e.g.*, potatoes, corn, tomatoes, onions, and fruits) whenever possible.

For a number of reasons, including the fact that CSA farmers must provide a substantial harvest throughout the majority of the year, experienced farmers fare better in

¹⁹ Call (916) 889-7385 for additional information, or to order the handbook.

the CSA movement. According to Laird, (1995, 114) “The majority of those (CSAs) that have had limited success overcoming obstacles and problems stated that growing enough food is their major obstacle. Survey responses suggest that production problems are most likely the result of inexperienced growers.” Training in intensive crop production will also be necessary for growers confronting the increased space limitations of urban areas. Given the importance of organically grown produce to CSA shareholders, growers with training in sustainable agriculture techniques will also be at an advantage.

A relatively small proportion of American consumers take time from their busy, frenetic schedules to obtain fresh foods from agricultural production sites. Convenience appears often to take precedence over value when people shop. A significant portion of shareholders will not return to their CSA if it is perceived as an inconvenience. Ideally, of course, a CSA operation is located within close proximity to its consumer group (which bodes well for urban CSA-STGPs) and can also offer the relaxed ambiance and beauty of a rural farm.

With CSA growers in the U.S. already procuring low salaries, coordinators of the STGP component would be required to ensure that monies were secured to support the therapeutic features of the program. This requirement cannot be overemphasized, considering the importance of multiple program features to youth based organizations’ success. This will be challenging given the current diminishing institutional funding base in the U.S. However, the CSA component may help increase funding potential.²⁰

²⁰ For example, it may increase a project’s likelihood of securing a USDA Community Food Security grant.

Possessing less income security than the nation's typical CSA shareholders, low income consumers will be more likely to adopt the CSA philosophy if they have access to nontraditional payment options. Examples include sliding scale fees, installment payments, and individually priced subscription shares. Subsidization may be sought through institutional funders or private local donors. Offering reduced share prices in exchange for on farm labor or administrative assistance can make such circumstances advantageous for the farm.

Studies have revealed that knowing little about their target group, organizations offering programs for youth often fail to attract them (Carnegie Corporation 1990, 70).

What follows is a list of recommendations specifically designed to aid in securing a stable group of youth participants.

1. Ally with other established community youth based organizations and local educators.
2. Involve youth in the full planning and implementation process.
3. Offer compensation and opportunities for promotion.
4. Offer a variety of programs within the STGP whole.
5. Screen potential PPPs and implement formal work agreements.
6. Make the garden a community resource, to increase the status of youth participants.

Finally, when developing and establishing the CSA-STGP, several priorities should be embraced. To maintain the philosophical integrity of the operation, the economic objectives must remain secondary to the social and therapeutic objectives of the program. The focus should remain on fostering self esteem, self reliance, a sense of neighborhood pride and responsibility, and providing practical occupational skills.

The commitment of the program to enhancing and empowering the community should not be compromised or allowed to wane. Though youth may be inspired to seek

employment or educational opportunities outside the project region, a positive commitment and loyalty to the community should be encouraged.

Professional Resources:

The following organizations and resources may be helpful to both incipient and continuing urban gardening projects.

1. American Community Gardening Association (ACGA):

ACGA is a not-for-profit organization of gardening and open space volunteers and professionals. Established in 1979, ACGA promotes the growth of community gardening and greening in urban, suburban, and rural America. The Association facilitates community greening through the formation and expansion of national and regional community gardening networks, develops resources in support of community gardening and greening, encourages research on the impact of community greening, and conducts educational programs.

ACGA members have access to publications such as “Creating Community Gardens--A Handbook for Planning and Creating Community Gardens to Beautify and Enhance Cities and Towns,” Garden Planning for City Lots, and Case Studies of Entrepreneurial Community Greening Projects.

100 N. 20th St. 5th floor Philadelphia, PA. 19103-1495

From the Roots Up Training Program:

From the Roots Up is ACGA’s two-year initiative to lend intensive technical assistance to emerging local greening organizations dedicated to providing low-income

neighborhood revitalization and environmental education through community gardens and children's gardens. The mentorship focuses on three areas: organizational development, community organizing, and program development.

2. American Horticultural Therapy Association (AHTA):

The AHTA is the only national organization in the U.S. dedicated to advancing the practice of horticulture as therapy to improve human well being.

362A Christopher Ave. Gaithersburg, MD 20879-3660.

E-mail: 75352.122@compuserve.com

3. The Urban Agriculture Network:

The Urban Agriculture Network is a global resource center working to promote agricultural production in urban areas.

1711 Lamont Street. NW Washington, DC 20010.

E-mail: 72144.3446@compuserve.com

4. The Community Food Security Coalition:

The Los Angeles based Coalition authored the Community Food Security Act of 1995, which, as part of the 1996 Farm Bill provides \$16 million until 2002 in matching grants to non-profit organizations for community-oriented food projects.

P.O. Box 209 Venice, CA. 90294. Website: <http://www.foodsecurity.org/cfpp.htm>

5. **Community Support Agriculture of North America Inc.**

An organization that provides networking and technical assistance to existing, aspiring, and potential CSAs. Publishes the quarterly *Seasonal News*.

818 Connecticut Ave. NW Suite 800 Washington, D.C. 20006

February 10, 1997

Dear

I am currently serving on a planning committee for an urban garden project engaging youth at risk in San Jose and pursuing a graduate degree in environmental studies. During my involvement with local Socially Therapeutic Garden Projects (STGPs) and other community based agricultural operations over the past few years, I have developed a profound appreciation for their social and environmental value. I have therefore dedicated my master's work to identifying the problems encountered by the nation's STGPs and to seeking solutions that will engender project sustainability.

In cooperation with the University of California Sustainable Agriculture Research and Education Program, I am conducting a survey of STGPs throughout the nation. Please be assured that completed surveys will be confidential and responses cited anonymously. The survey will take approximately one hour to complete. I realize that this represents a significant time commitment, however, I expect that the findings will be useful to you. A summary of survey findings will be sent to all respondents.

Lastly, university policy requires me to assure you of the following obvious information:

Your participation is voluntary and choosing not to participate in this study, or in any part of this study, will not affect your relations with San Jose State University or the University of California. No risks are anticipated as a result of your participation in the study. If you have questions or complaints about research subjects' rights, please contact Serena Stanford, Ph.D., Associate Academic Vice President for Graduate Studies and Research, at (408) 924-2480.

Please return your completed survey in the stamped, self addressed envelope by February 18th.

I very much appreciate your taking the time to complete this survey, and your willingness to participate in my study. If you have questions or concerns, do not hesitate to contact me.

Best wishes in your continuing efforts,

Jacqueline Chu

Dear

- Because this survey is going to a diverse group of garden projects throughout the nation, certain questions will restrict your ability to best represent or characterize the project with which you are affiliated. The quality and breadth of this study will be greatly increased by the information and comments that you may provide at the end of each section of the survey, and at the close of the survey. Thank you again for your time and your input. Following are a few definitions of terms found in the body of the survey:

Primary Program Participants (PPPs) The main social group(s) that the project is designed to support, guide and/or inspire.

Socially Therapeutic Garden Project (STGP) In this case, one in which plant production is not the primary focus and for which coordinators regard the healing or therapeutic nature of human-plant interaction as paramount.

I GENERAL INFORMATION

- | | |
|--|--|
| <p>1. Name of respondent _____</p> <p>2. Respondent's job title within the garden project _____</p> <p>3. Name of the garden project _____</p> <p>4. Address of the garden _____</p> <p>5. Date project became operational:
(month) _____, 19____</p> <p>6. Size of garden site (in acres, or fraction of acres) _____</p> | <p>7. What is produced on site? Animal products []
Fruits and/or vegetables [] Nursery plants []
Other (specify) _____</p> <p>8. Length of planting season. _____ Week(s)</p> <p>9. What has the land on which the garden site is located been used for before this project's existence?
_____</p> <p>9. Has soil analysis been performed at the garden site?
____yes ____no</p> <p>10. Have any soil contaminants been identified at the site?
Please specify _____</p> <p>11. Are plants grown on raised beds? ____yes ____no
____some/other Explain _____</p> |
|--|--|

II CREATION OF PROJECT

1. Please characterize to the best of your ability the role any of the following may have played in the creation of the garden project:
- Individual(s) _____
- Grassroots community group _____
- Local nonprofit organization _____
- State/national nonprofit organization _____
- Private institution _____

Government institution _____

Other _____

Additional comments regarding the creation of the garden project? _____

Things you would do differently in creating a garden project, given your present experience? _____

III PROJECT STAFF

1. Please write in the job titles of the project's core staff along the top row. Indicate the responsibilities associated with each job by placing an "X" in the appropriate box(es) from each column.

CORE GARDEN PROJECT STAFF

RESPONSIBILITY	JOB TITLE (Please fill in) →						
	STAFF/VOLUNTEER						
	PART TIME/FULLTIME						
	Management of budget						
	Hiring of staff						
	Management of staff						
	Project planning & coordination						
	Community relations/outreach						
	Networking with outside agencies						
	Writing grant funding proposals						
	Other fund raising activities _____						
	Recruitment of PPPs						
	Management of PPPs						
	Counseling of PPPs						
	Management of garden site						
Gardening activities with PPPs							
Job placement of PPPs outside project							
Other ()							

V NON STAFF INVOLVEMENT

1. Did/does the project receive advice or assistance from any of the following entities? Place an "X" in the appropriate box(es), and include details if possible.

	Start-up	Continuing	Type of assistance
American Community Gardening Association			
American Horticultural Therapy Association			
Agricultural extension branch			
Local government			
Local professional			
Local church			
Community members			
University			
Other ()			

2. Do you maintain working relationships with other educational, financial or social agencies in the community? If so, please name them and describe your relations:

3. Please describe the extent to which local community members are involved in the garden project, i.e., what has been their overall participation/attitude/reaction?

4. Additional comments regarding non-staff involvement in the garden project?

VI ECONOMIC FACTORS

1. What was your total operating budget for the 1996 fiscal year? _____

2. Please approximate the percentage of the project's operating budget that is currently derived from the following sources. These percentages should total 100%:

- | | |
|---|--|
| a. _____ government grants or subsidies | g. _____ sales of harvest |
| b. _____ non government grants or subsidies | h. _____ sales of other products (specify) |
| c. _____ donations/gifts | _____ |
| d. _____ fundraising activities/events | i. _____ other/s (specify) |
| e. _____ loans | _____ |
| f. _____ membership fees | _____ |

21. Please estimate the percentage of the project's operating budget that is allocated to the following sources. These percentages should total 100%:

a. _____ land and building rentals/mortgage

b. _____ inputs (tools, office supplies, etc.)

c. _____ staff salaries

d. _____ PPP salaries

e. _____ non-staff salaries

f. _____ capital expenditures

g. _____ equipment maintenance/payments

h. _____ building/infrastructure maintenance

i. _____ other/s (specify)

22. Who owns the land on which the project operates?

a. _____ the project

b. _____ local government

c. _____ federal or state government

d. _____ private land owner

e. _____ land trust

f. _____ other (please specify)

23. If not owned by project, amount of rent paid per year: \$ _____ /yr.

24. Additional comments regarding economic factors? _____

If you have any printed information about your project (e.g. budgets, pamphlets, newsletters, newspaper articles, etc.), I would appreciate receiving copies with this survey.

Please list any socially therapeutic garden projects that you know in your area, as well as those that have begun recently and those that are no longer in operation. Include name, address, phone number and a contact person if possible.



A campus of The California State University

Office of the Academic Vice President • Associate Academic Vice President • Graduate Studies and Research
One Washington Square • San Jose, California 95192-0025 • 408/924-2480

TO: Jacqueline Chu
P.O. Box 50623
Palo Alto, CA 94303

FROM: Serena W. Stanford *Serena W. Stanford*
AAVP, Graduate Studies & Research

DATE: February, 14, 1997

The Human Subjects-Institutional Review Board has approved your request to use human subjects in the study entitled:

"Social and Environmental Restoration Through
Urban Therapeutic Gardens"

This approval is contingent upon the subjects participating in your research project being appropriately protected from risk. This includes the protection of the anonymity of the subjects' identity when they participate in your research project, and with regard to any and all data that may be collected from the subjects. The Board's approval includes continued monitoring of your research by the Board to assure that the subjects are being adequately and properly protected from such risks. If at any time a subject becomes injured or complains of injury, you must notify Serena Stanford, Ph.D., immediately. Injury includes but is not limited to bodily harm, psychological trauma and release of potentially damaging personal information.

Please also be advised that all subjects need to be fully informed and aware that their participation in your research project is voluntary, and that he or she may withdraw from the project at any time. Further, a subject's participation, refusal to participate, or withdrawal will not affect any services the subject is receiving or will receive at the institution in which the research is being conducted.

If you have any questions, please contact me at (408) 924-2480.

Post Survey Questions

Dear Garden Project Survey Respondent:

I very much appreciate your response to my survey. The following questions concern issues that will be important to the final survey summary. Please fax your response to _____ by June 5th. Thank you, again!

-Jacqueline Chu

1. Garden location: Urban___ Rural___
2. Is the garden visible from the street? ___Yes ___No
3. Is the garden open to the community? ___Yes ___No ___Occasionally
4. Are any synthetic chemicals used in the garden? ___Yes ___No
5. If project funding is from a primary source, please describe that source:

6. Is marketing of garden product(s) an option? ___Yes ___No
___Presently marketing
7. Annual salary(ies) of staff and number of hours worked/week for each (optional):
8. Do salaries(y) fluctuate from year to year? ___Yes ___No
9. Is project fiscal self reliance an objective? ___Yes ___No
10. Comments:

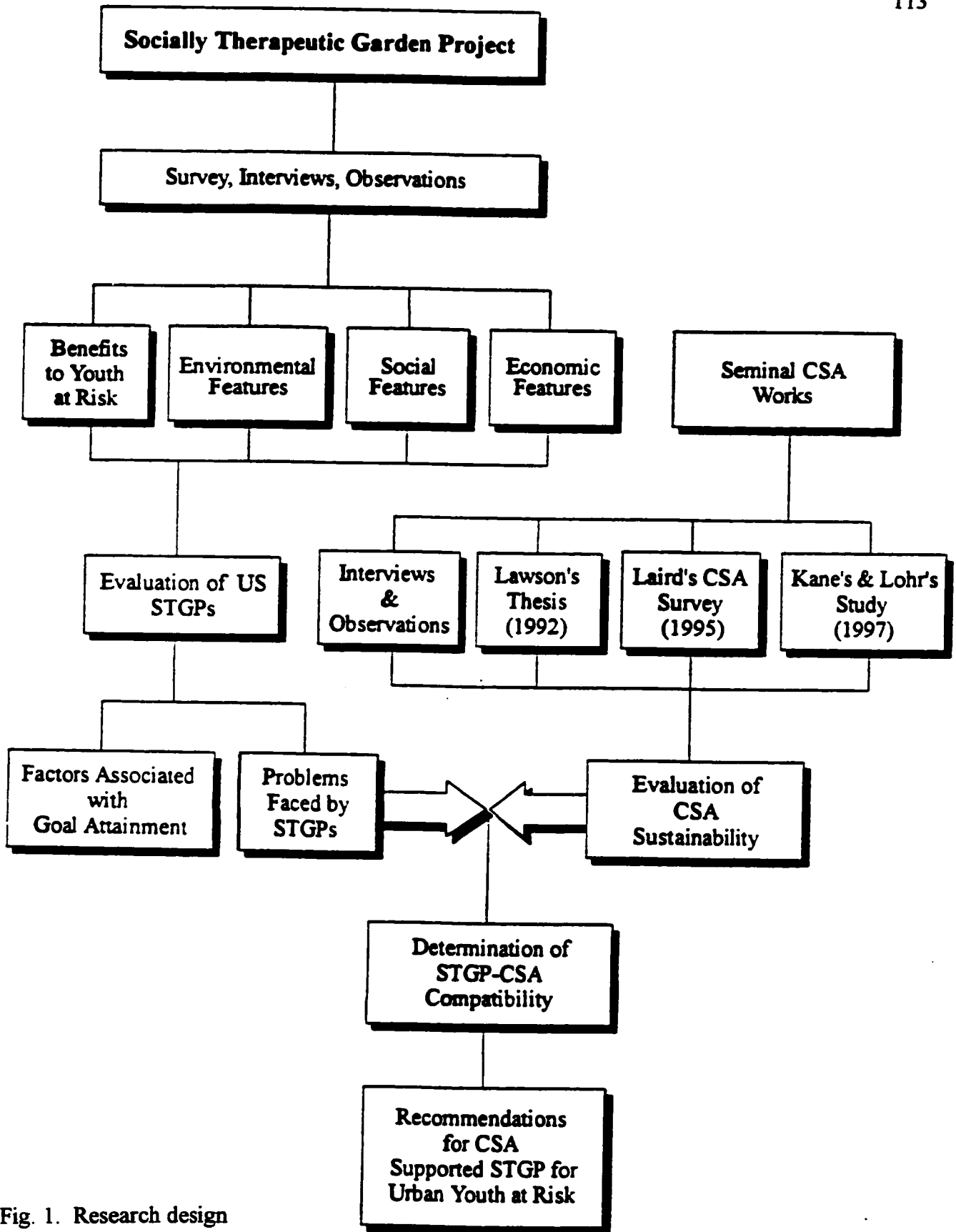
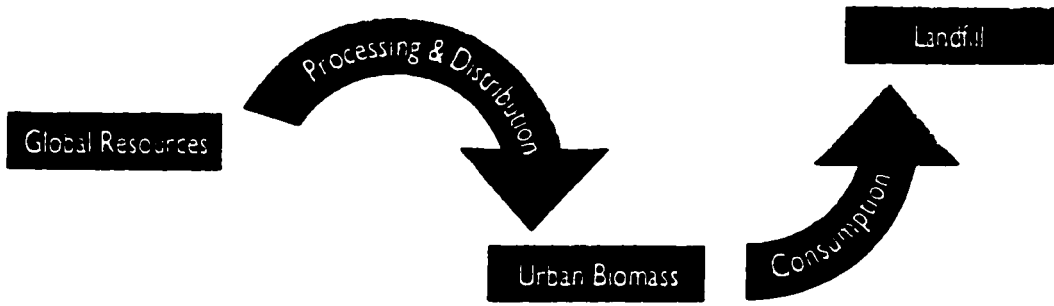


Fig. 1. Research design

Open Loop System



Closed Loop System

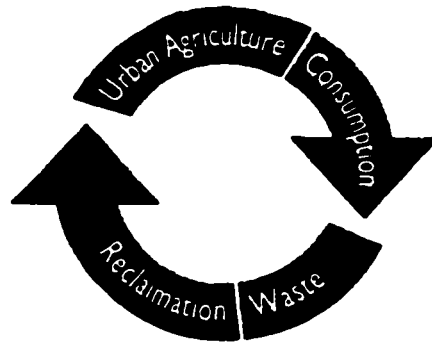


Fig. 2. Open Loop System vs. Closed Loop System

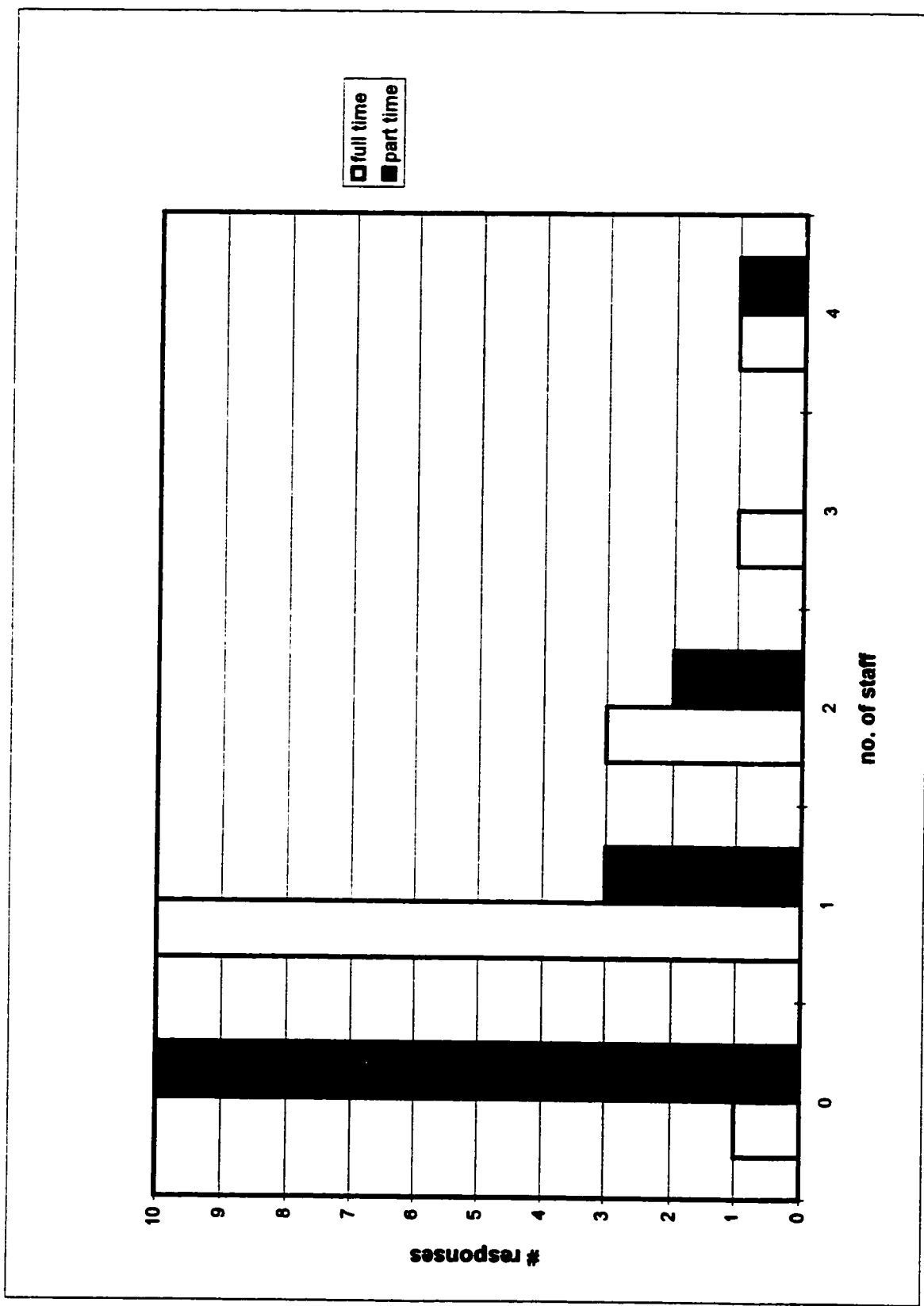


Fig. 3. Project Staff (n=16)

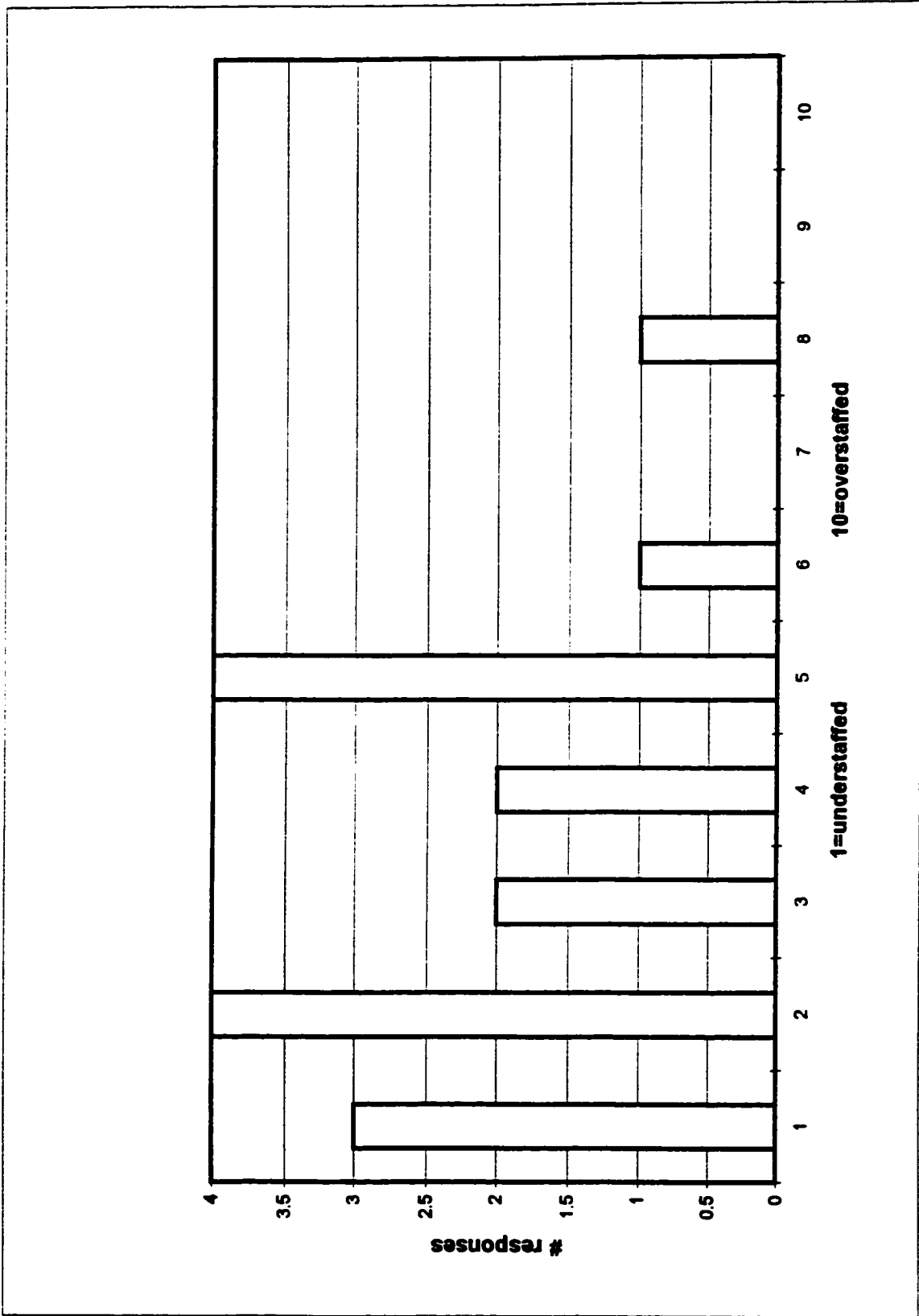


Fig. 4. Understaffed/Overstaffed (n=17)

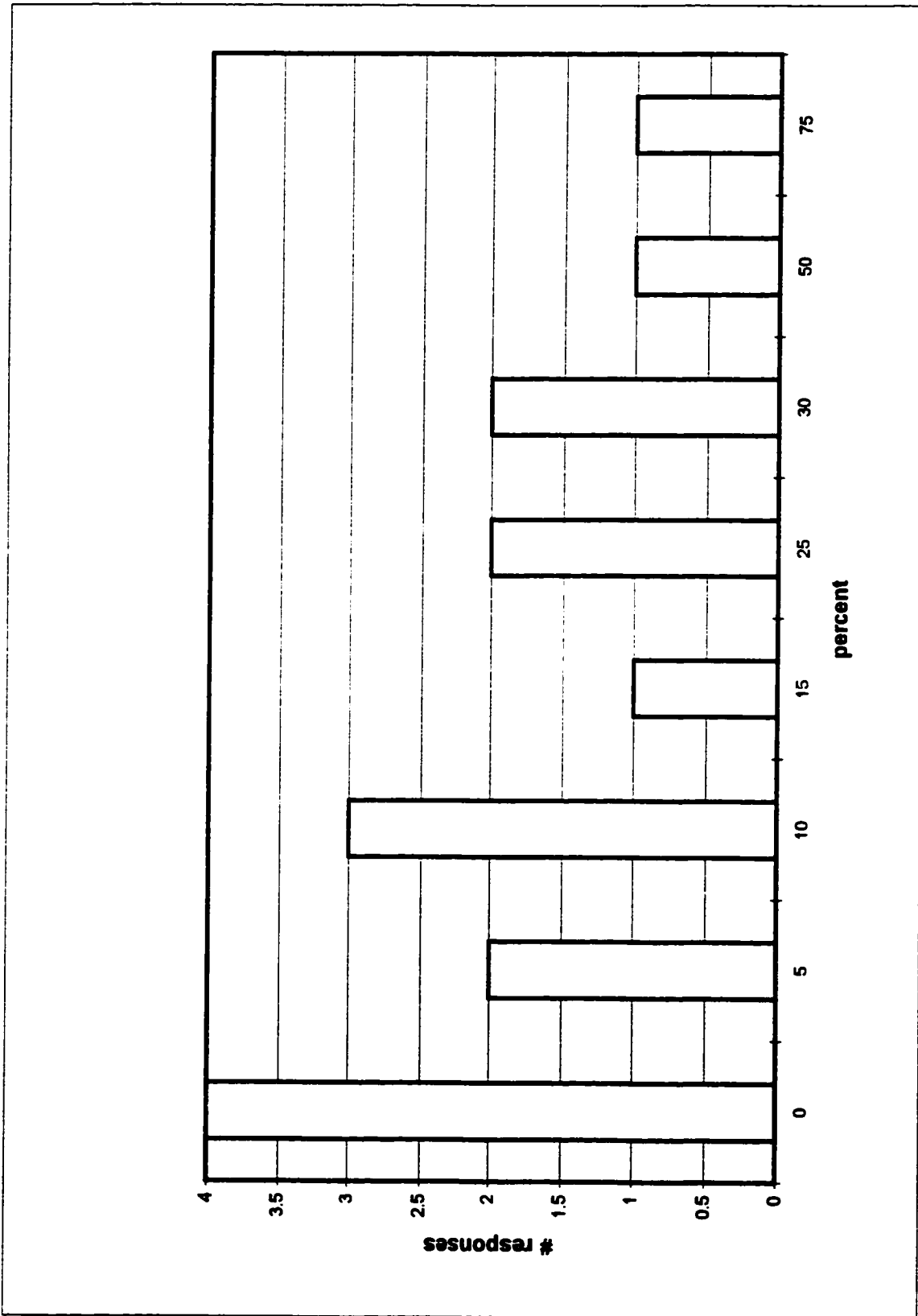


Fig. 5. Percent Volunteer Labor (n=16)

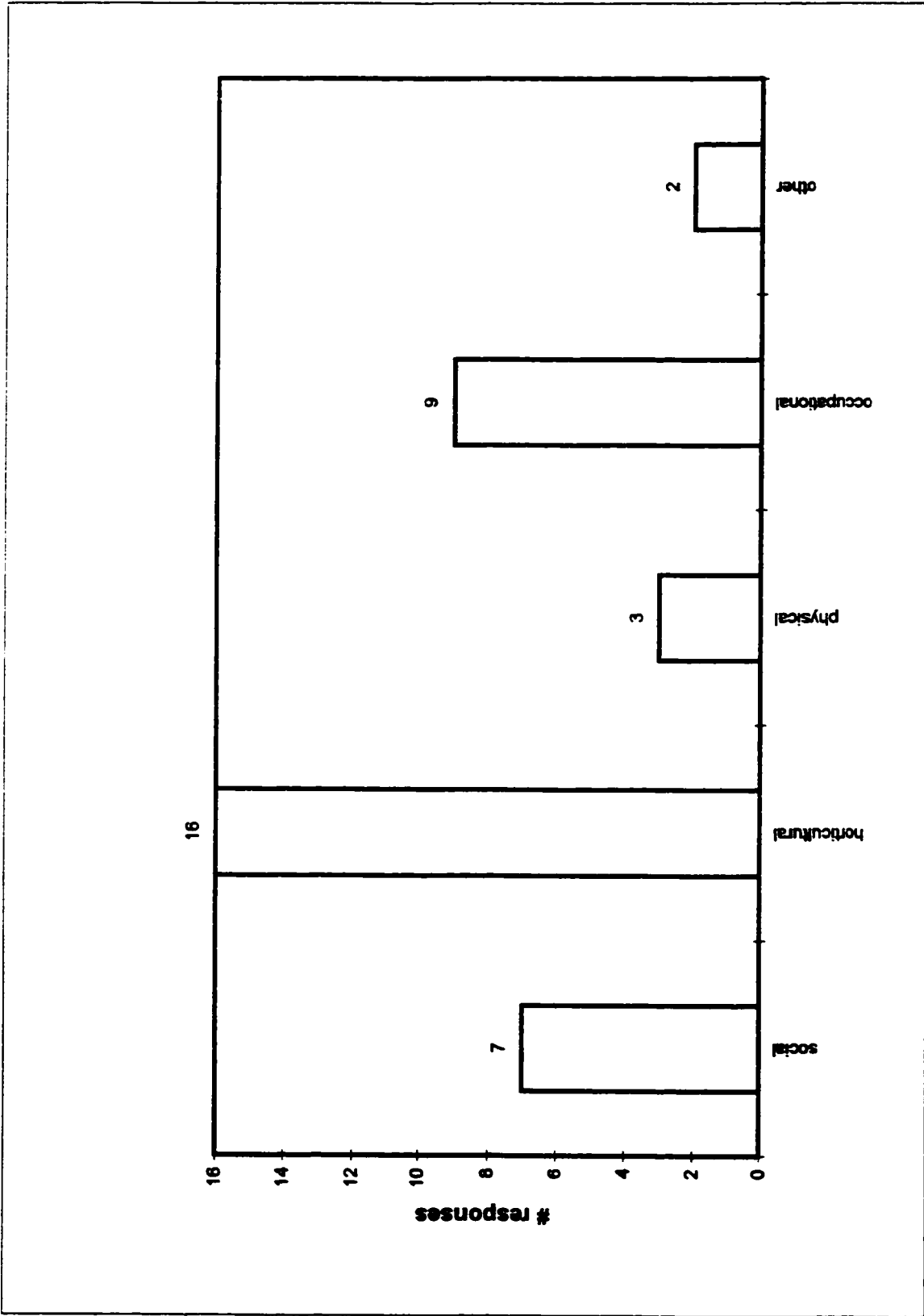


Fig. 6. PPP Skills (n=17)

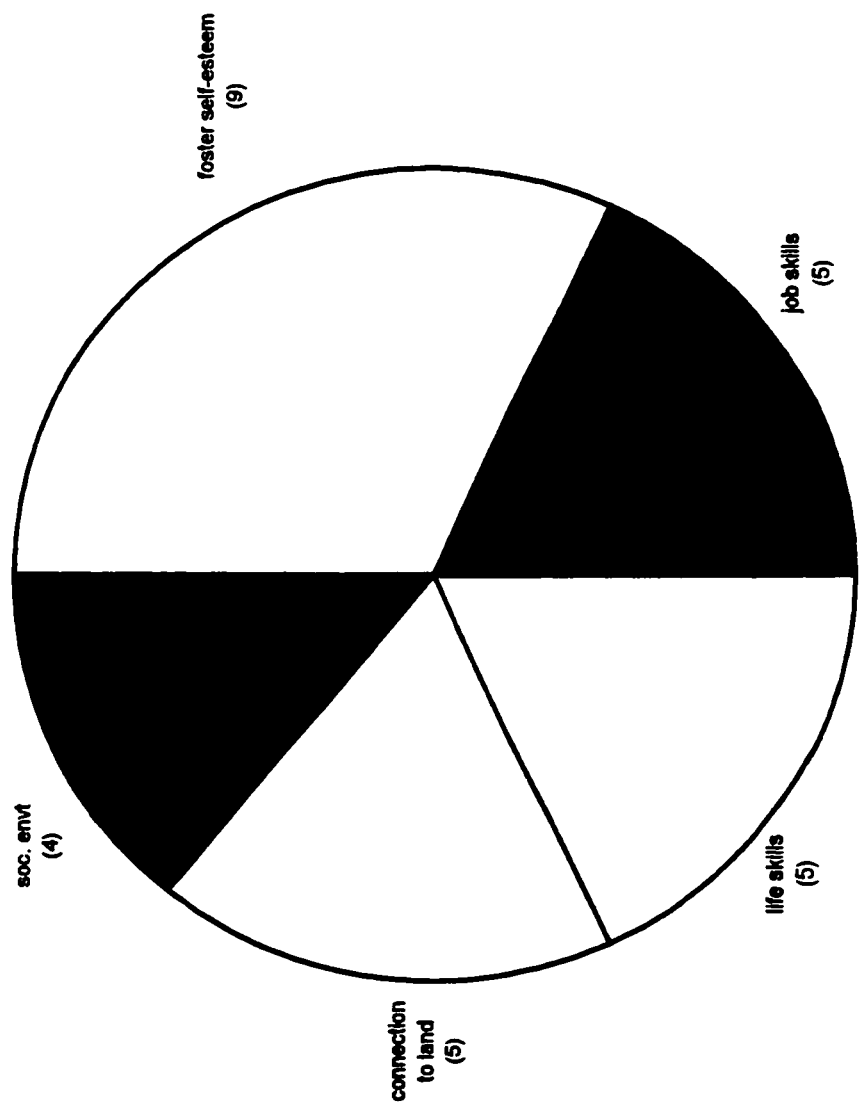


Fig. 7. Social/Therapeutic Objectives:
Top 3 Choices (n=14)

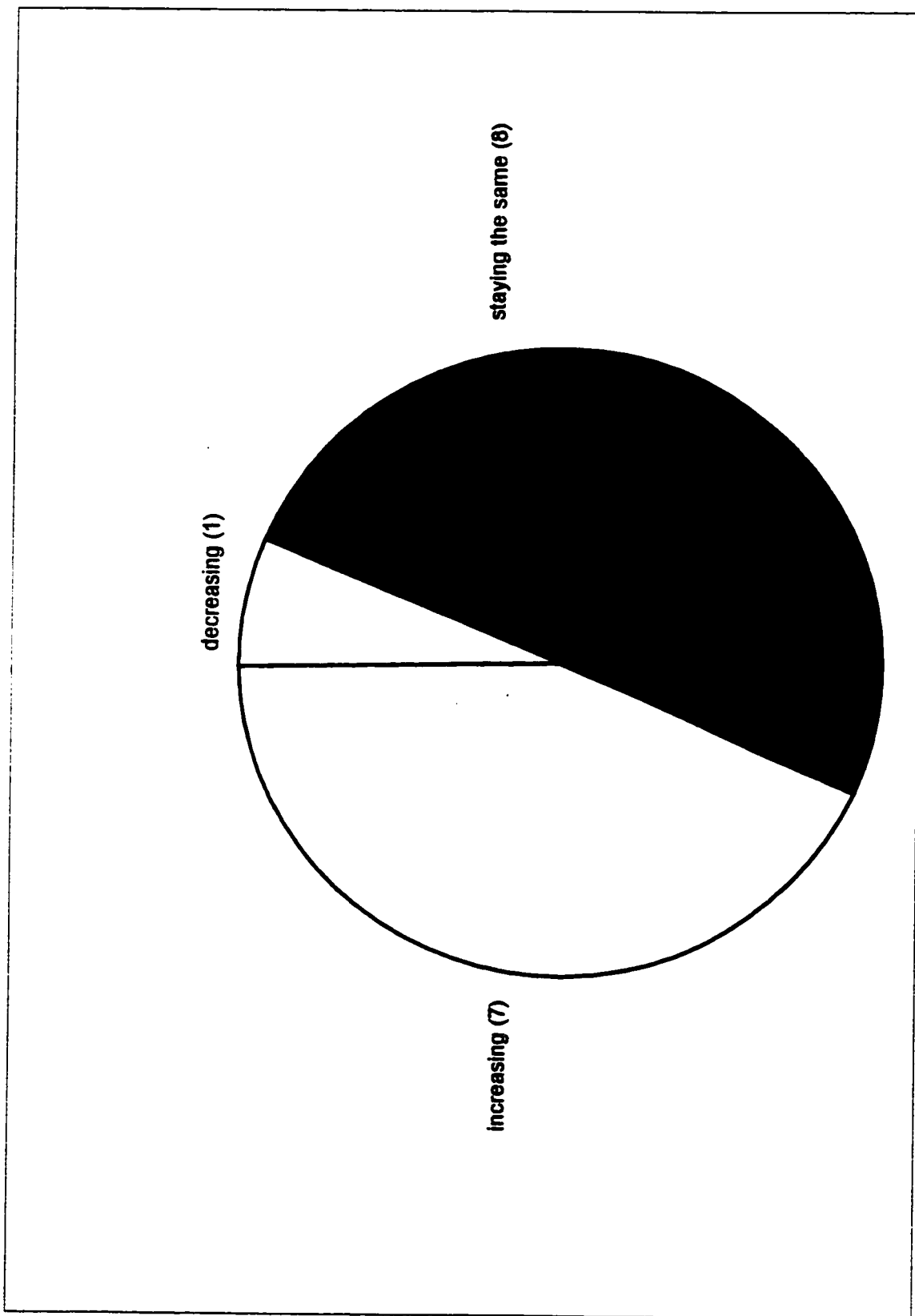


Fig. 8. Annual Operating Budget Trends (n=16)

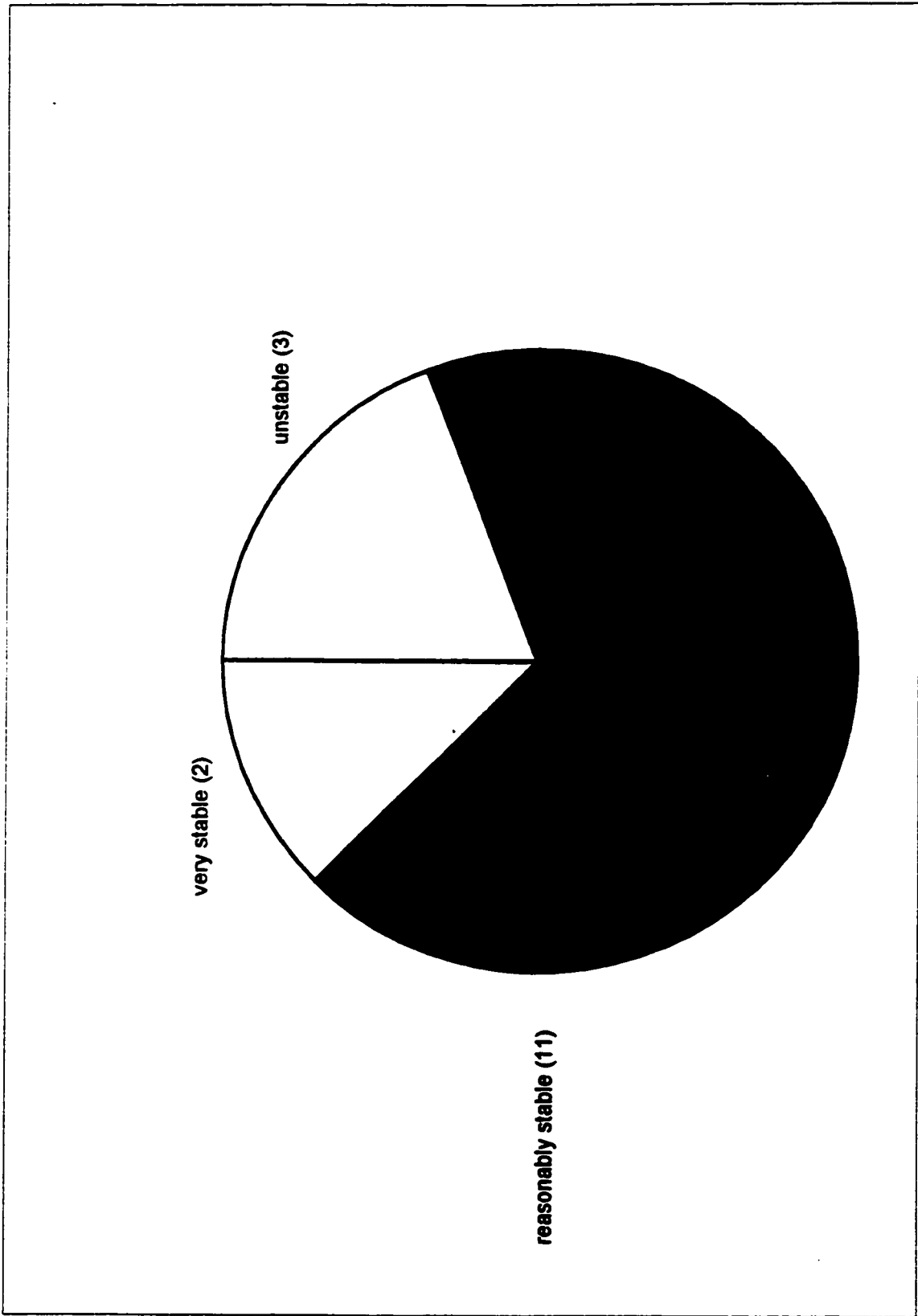


Fig. 9. Current Fiscal Status (n=16)

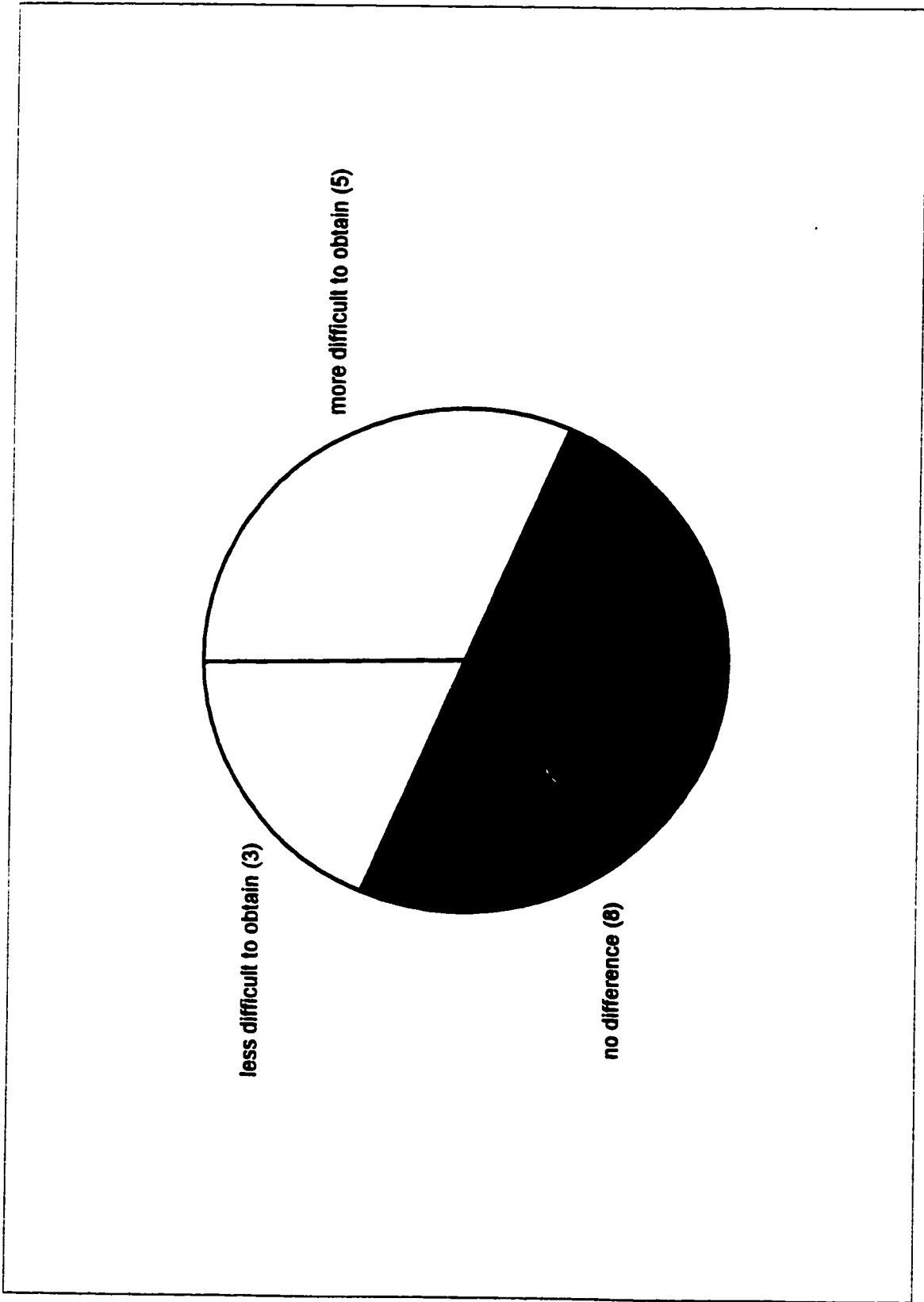


Fig. 10. Status of Main Funding Source (n=16)

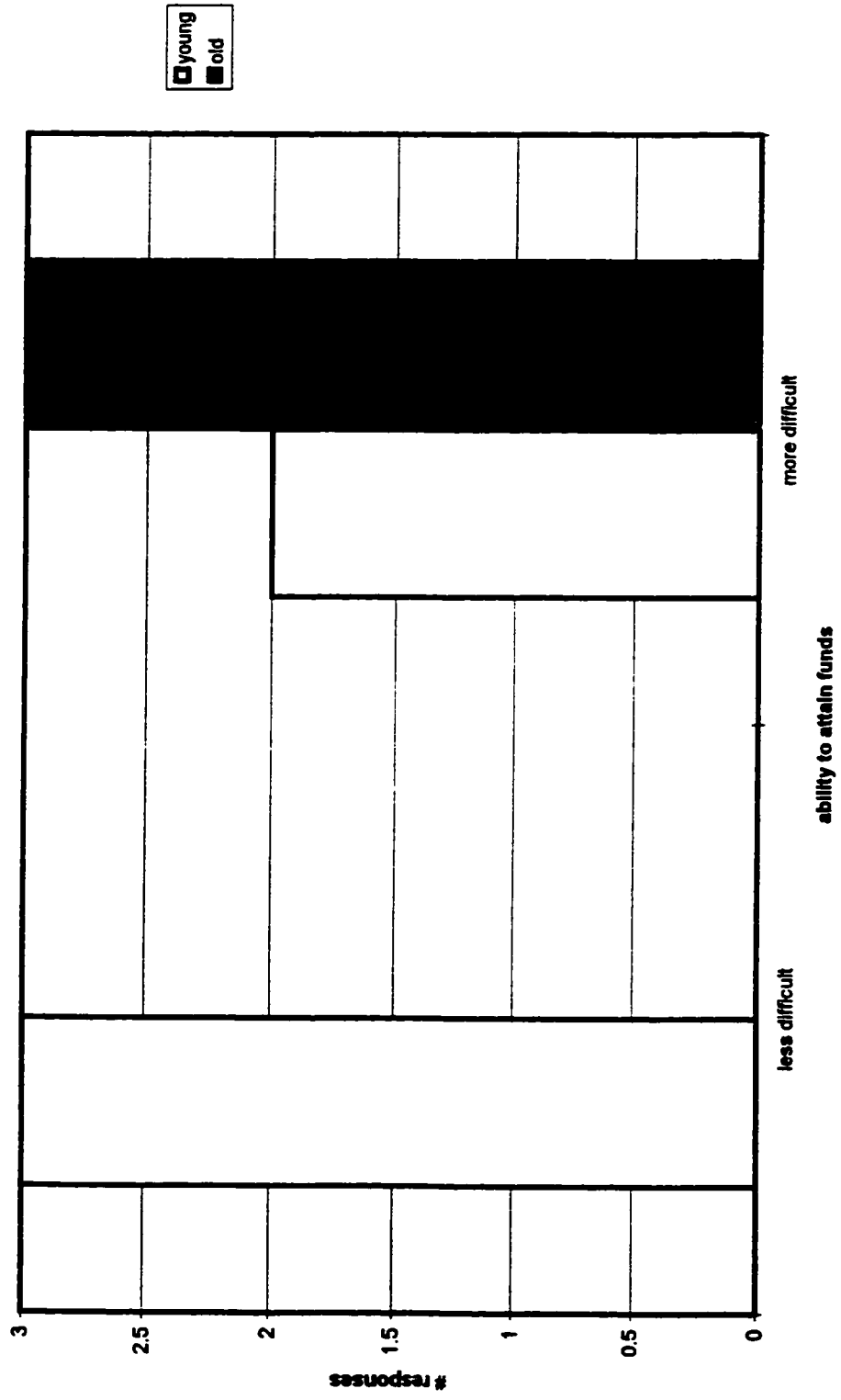


Fig. 11. Funding Procurement/Project Age

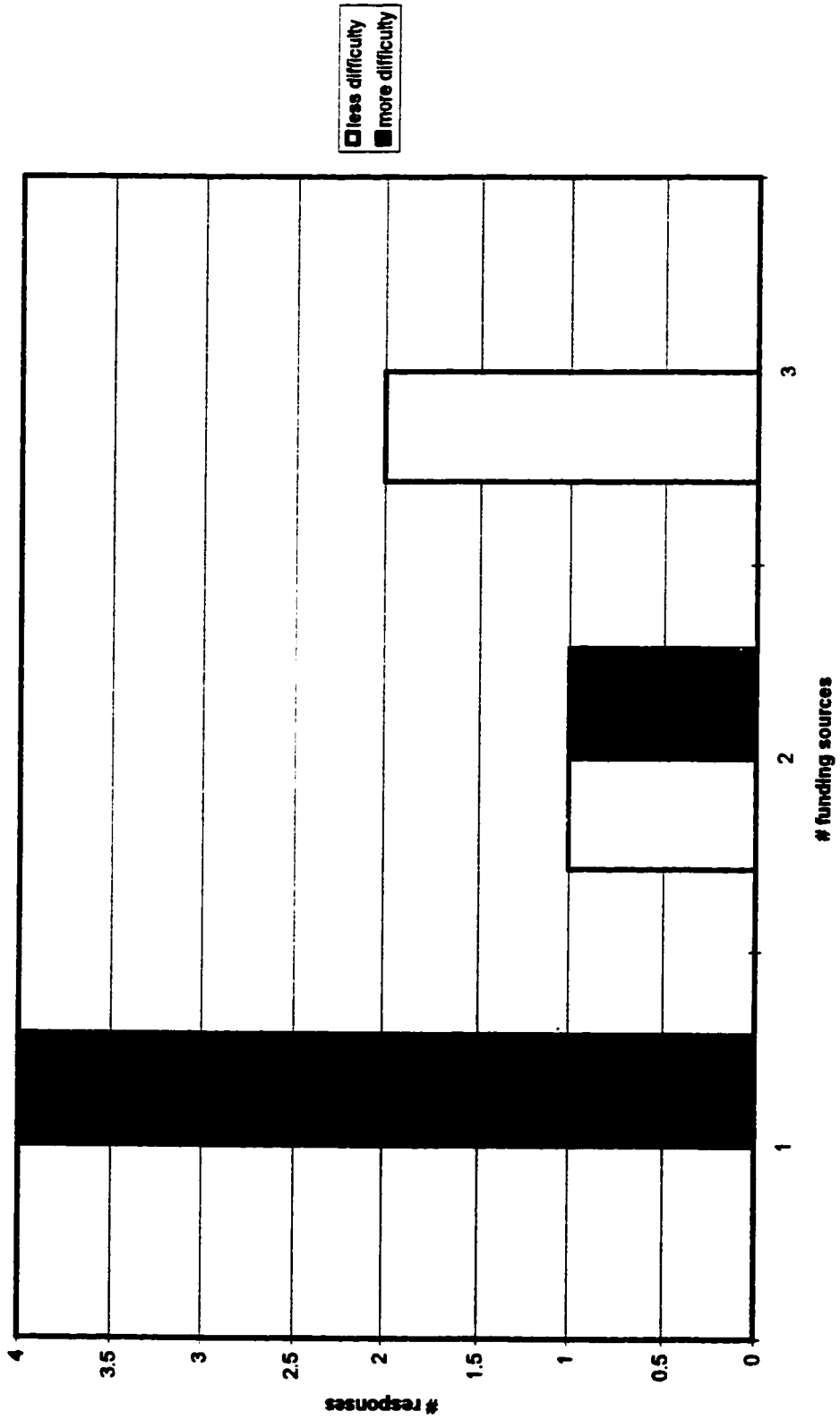


Fig. 12.
No. of Funding Sources/Ability to Obtain Funding

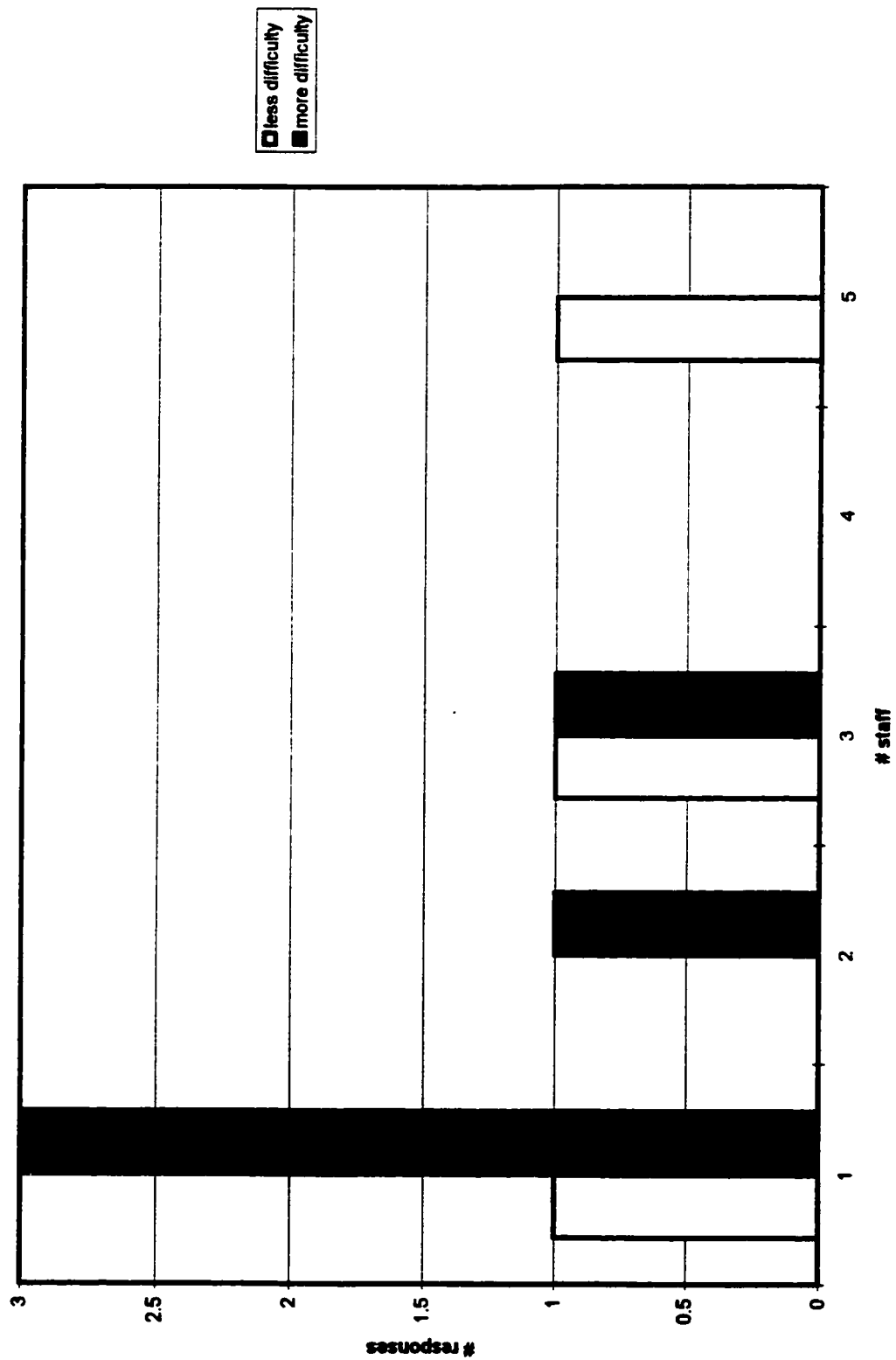


Fig. 13. No. of Staff/Ability to Obtain Funding

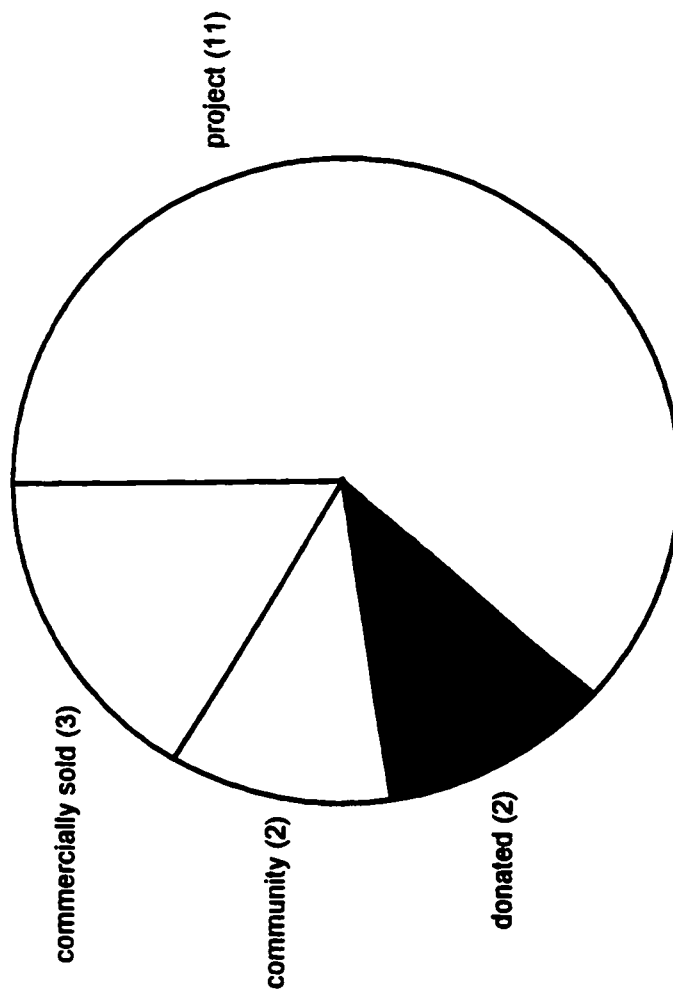


Fig. 14. Who Consumes Harvest? (n=16)

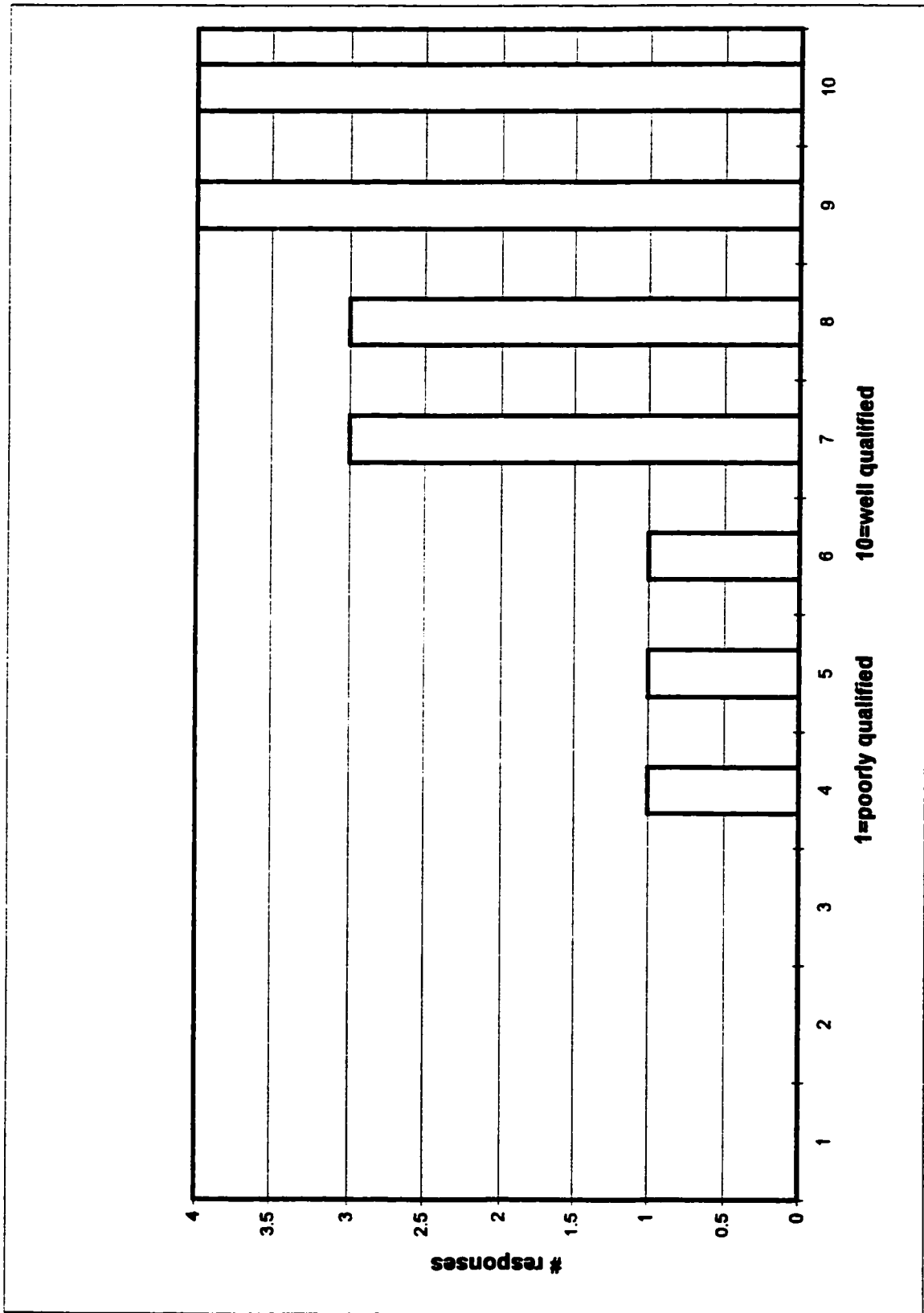


Fig. 15. Staff Qualifications (n=17)

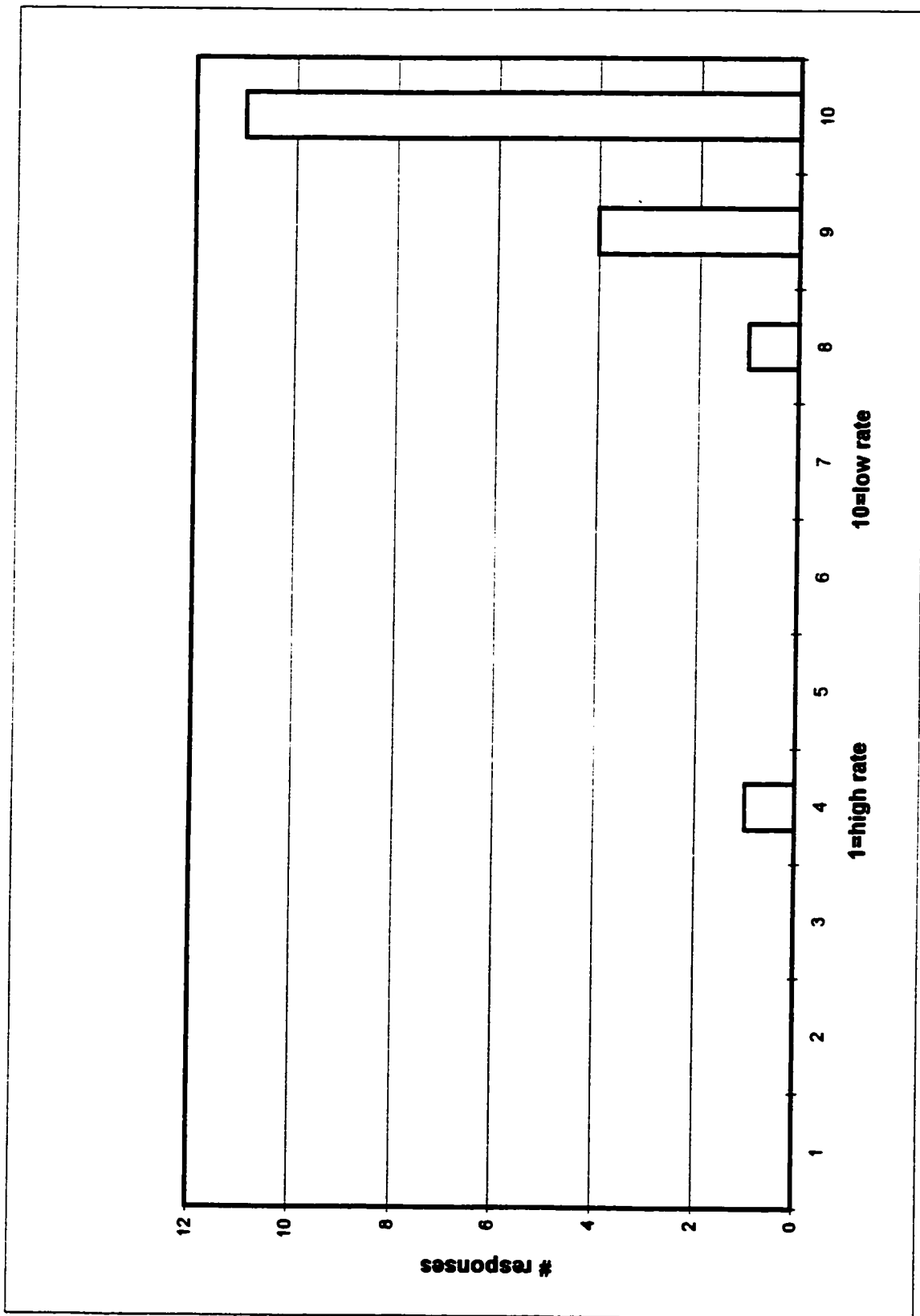


Fig. 16. Staff Turnover Rate (n=17)

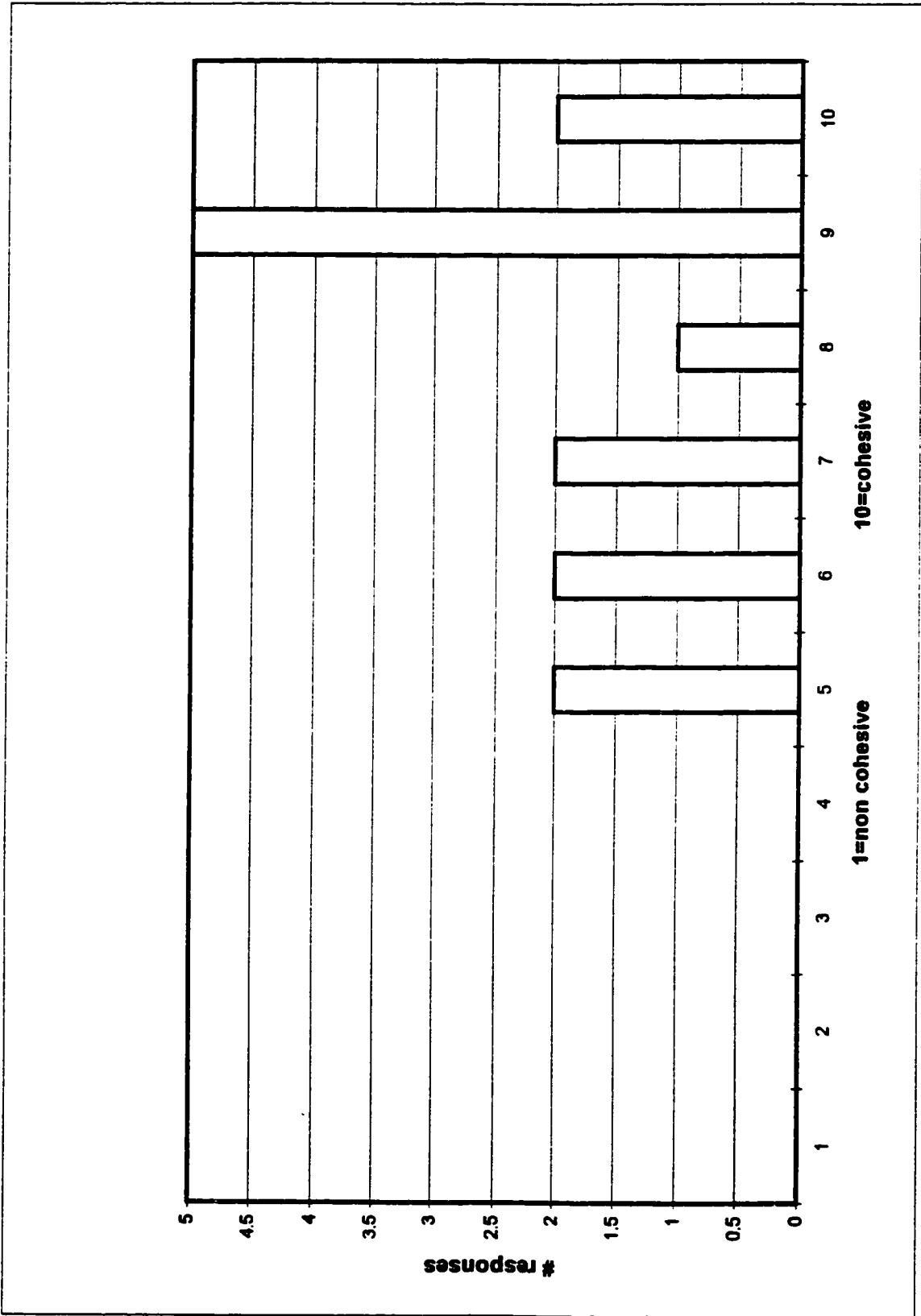


Fig. 17. Staff Cohesiveness

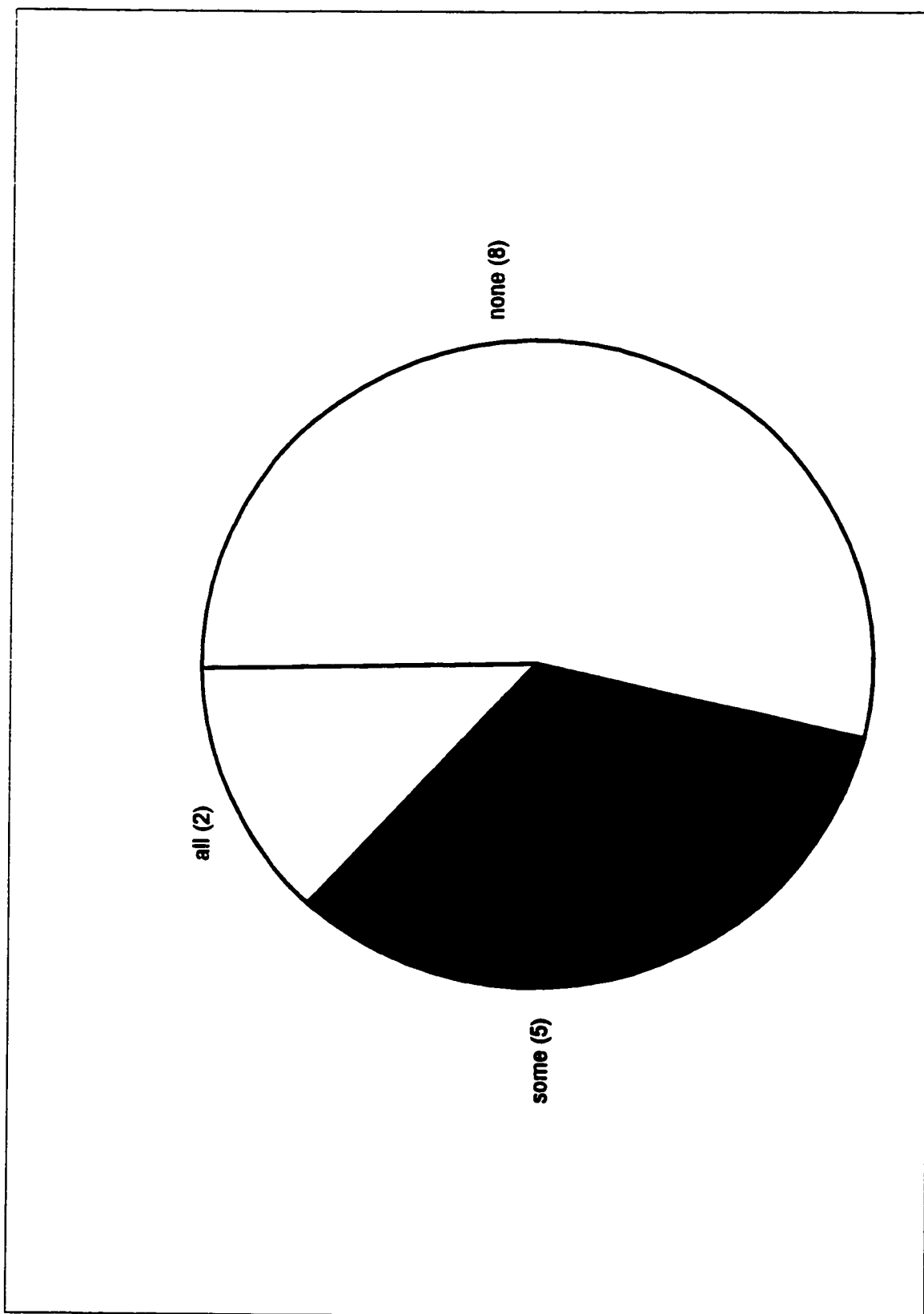


Fig. 18. Are PPPs Paid? (n=15)

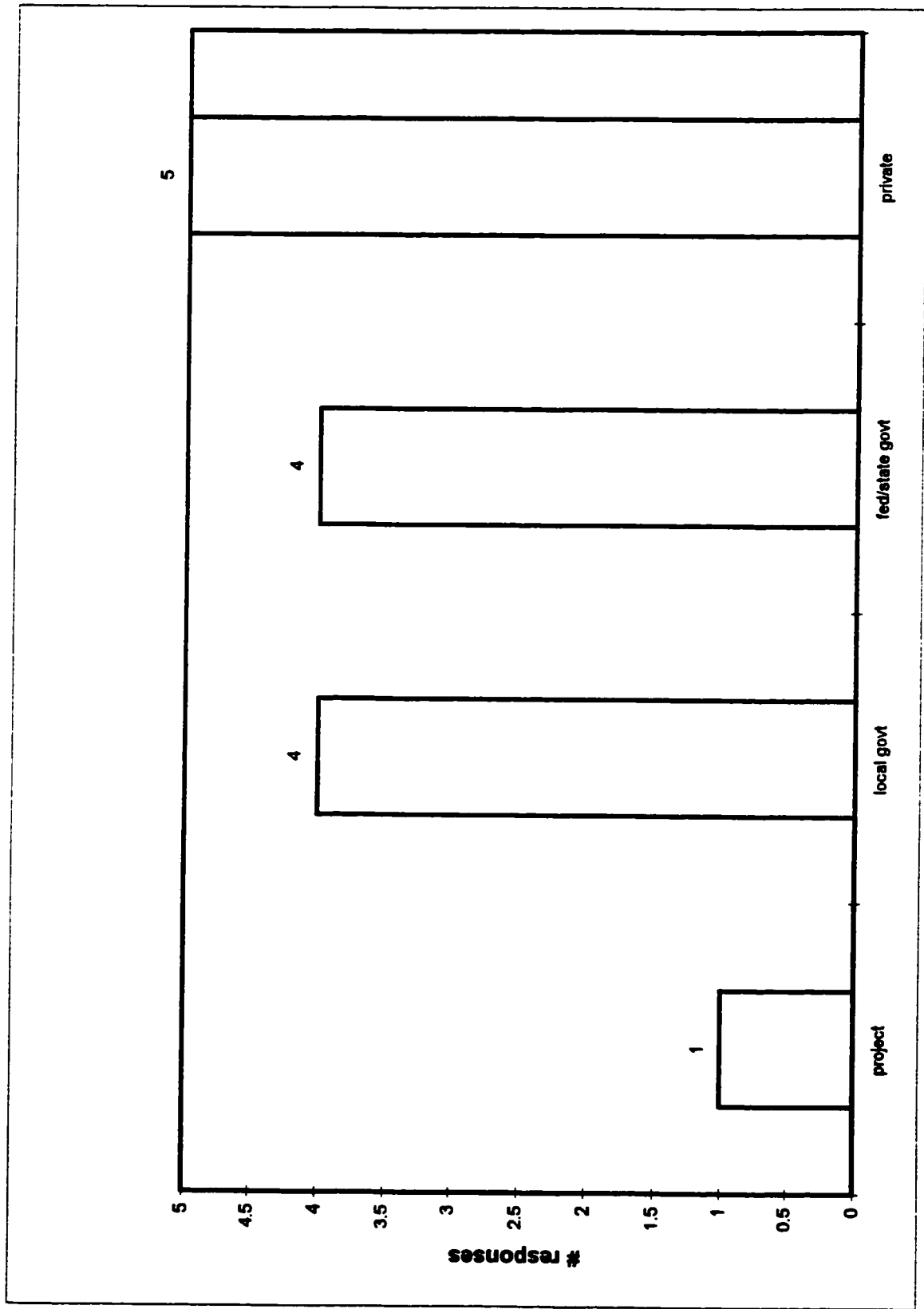


Fig. 19. Who Owns the Land? (n=16)

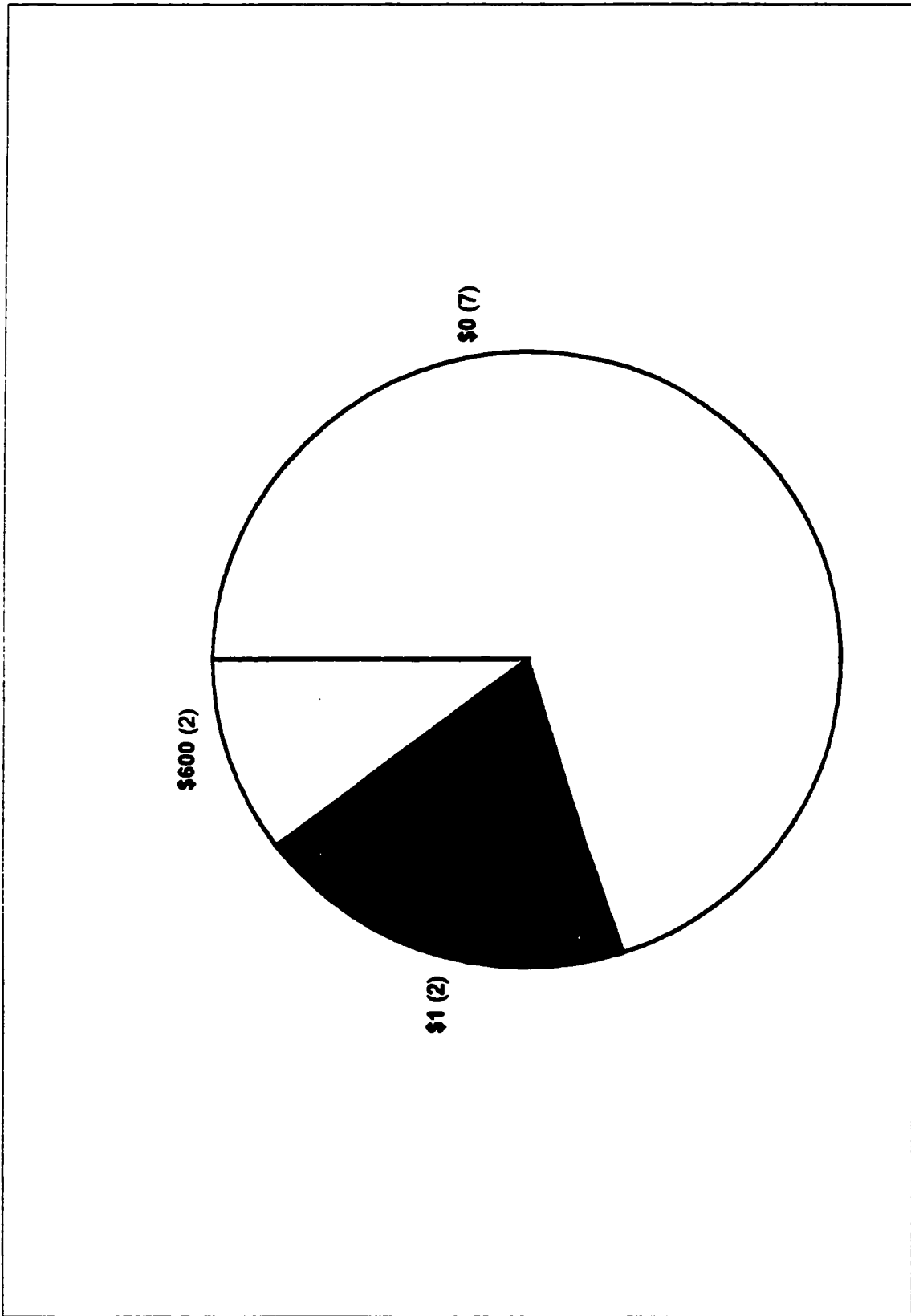


Fig. 20. Annual Rent

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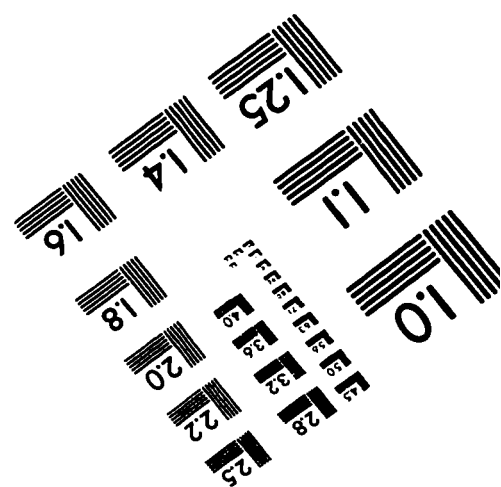
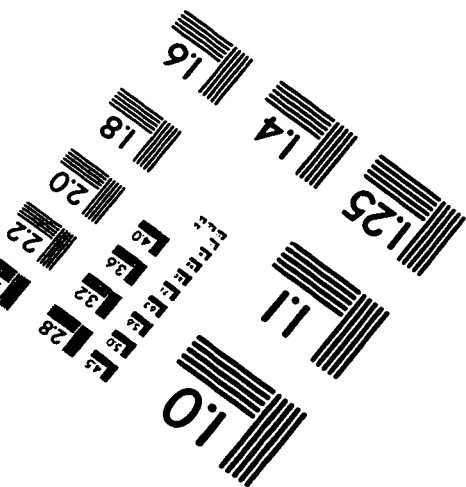
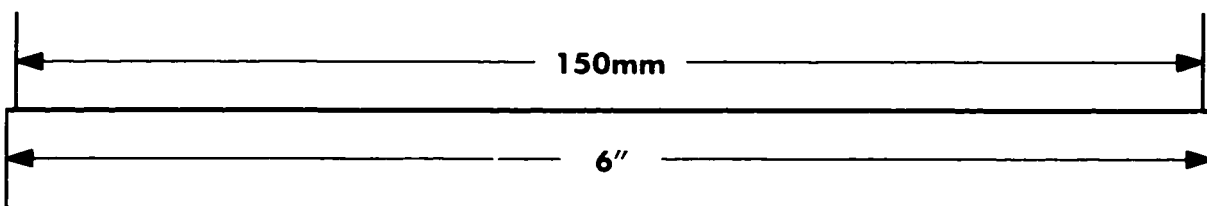
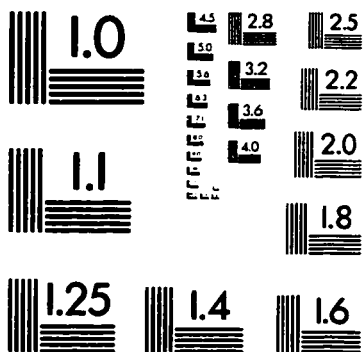
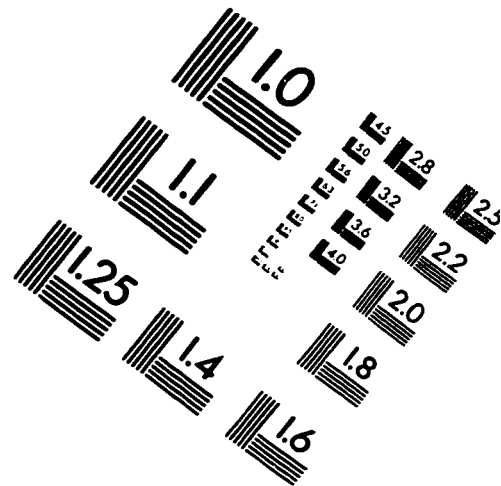
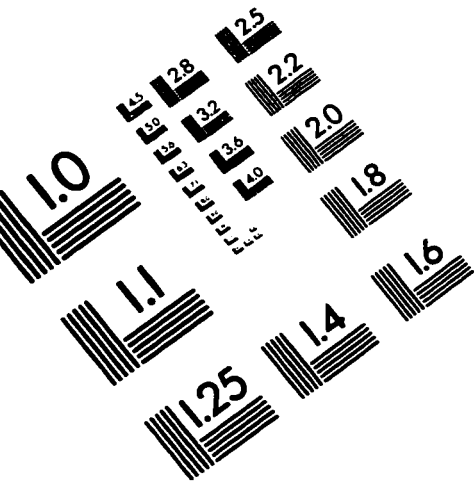
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IMAGE EVALUATION TEST TARGET (QA-3)



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