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FOOD, FARMING, AND OUR JUSTICE SYSTEM: HORTICULTURE PROGRAMS  
IN CORRECTIONAL SETTINGS

A Dissertation Submitted in Partial Fulfillment of the  
Requirements for the Degree  
Doctor of Public Administration

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## ABSTRACT

Food, Farming, and Our Justice System: Horticulture Programs in Correctional Settings

By Stacy D. MacCready, DPA

**Purpose.** The purpose of this research was to examine how inmate horticulture programs have emerged and have been replicated in an effort to rehabilitate individuals, curtail spending, and reduce recidivism. The research explores how food justice and drug policy intersect, examining the roles of classism and racism and taking note of factors influencing recidivism.

**Theoretical Framework.** Diffusion of innovation analyzes the adoption of a new idea, technique, product, or service, focusing on how it is communicated and adopted by a social system over a period of time. It is necessary to understand the relationship among culture, values, existing practices, and political/social/environmental climate in order to facilitate the adoption of a new innovation.

**Methodology.** The researcher employed a mixed methods research design. The researcher performed a historical review of policies and events that led to the overcrowding of prisons and the criminalization of certain substances. Semistructured interviews were conducted with 10 individuals involved with inmate horticulture programs. Elements included in the study are the variation between programs and their perceived efficacy, challenges, and barriers.

**Findings.** Research findings revealed inmate horticulture programs fall into different areas of focus; innovative programs have blended components to provide integrated services. Five primary archetypes were identified: rehabilitative/therapeutic, punitive/labor, vocational, cost savings, and sustainability. Collaboration was crucial in framing the conversation, determining the skillsets of those involved, and the best way to leverage resources. Challenges to diffusing therapeutic inmate horticulture programs stem from social and political inflexibility.

**Conclusions and Recommendations.** The social construction of an issue or population impacts the political response, framing of issues, and type of media attention received. The amount of public demand to address the policy issue and federal government involvement influence the adoption and diffusion of innovations. The community benefits from horticulture programs, because former inmates are less likely to commit crimes or victimize people if they have been exposed to rehabilitative programs that prepare them for job opportunities upon release. Well-rounded programs give participants an understanding of food justice, horticulture, leadership, restoration, and healing and access to wraparound services.

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## DEDICATION

This dissertation is dedicated to prisoners of the War on Drugs  
and anyone who ever had the odds stacked against them. May you receive the  
chance you deserve and have the resilience to succeed.

## CHAPTER I

### INTRODUCTION

The United States spends \$51,000,000,000 annually on the War on Drugs. In 2011, there were 2,266,800 individuals incarcerated in federal, state, and local institutions. Over 1.5 million people were arrested for nonviolent drug charges in 2012 (Drug Policy Alliance, 2012). Walmsley (2012) reported the United States accounts for 5% of the world population and an astonishing 25% of the world's prison population. The rapid expansion of the penal system has grown into what is known as the Prison Industrial Complex. In 2011, between 6.6%-7.5% of all Black males between the ages of 25-36 were imprisoned; Black males 20-24 years old were incarcerated at 7 times the rate of White males in the same age range (Carson & Sabol, 2012). The disparities are evident when you examine data on arrests, convictions, and sentencing practices impacting people of color and those from impoverished backgrounds. California is among the costliest states to incarcerate a person; at \$51,998 per year it is double the national average, and a small fraction of that amount (\$926, 1.8%) is allocated toward rehabilitation (Petersilia & Snyder, 2013).

How did we come to embrace such harsh punitive practices for addressing nonviolent crime? Answering that question is complex and ties into many areas beyond the criminal justice system. Considerations about race, class, economics, and social policy are only several of the areas that provide clues when examining the evolution of

policy decisions against certain segments of the population. It is alarming that taxpayers continue to fund a broken system with billions of dollars each year. Private organizations and political actors have packaged and constructed issues in a manner that makes what they are pitching palatable to the general public. In reality, the public gets nothing in return for mass incarceration; our streets are not safer, it does not reduce crime or recidivism, and it does not rehabilitate individuals by any stretch of the imagination. Research validates that harsh sentencing practices, such as mandatory minimum sentencing for nonviolent drug offenses, is costly and harmful to society (Lowthian, 2010).

There are a handful of programs that have penetrated prison walls to bring therapeutic programming to inmates. Many of the programs were initiated by community groups, organizations, and individuals that wanted to make a difference by addressing issues faced by incarcerated individuals. Inmates grapple with behavioral issues, lack of employment, and possessing no marketable skills, along with battles with addiction. There are groups that have found innovative ways to address these challenges through horticulture.

The research examines how inmate horticulture programs have emerged and have been replicated in an effort to rehabilitate individuals, curtail spending, and reduce recidivism. There are multiple levels of formality associated with inmate horticulture programs and how they came into existence; their commonalities and differences are examined. Horticulture is an umbrella term that is used throughout the body of this research. Horticulture encompasses farming, edible and nonedible crops, landscaping,

habitat restoration, gardening, horticultural therapy, in addition to the skills and technologies associated with the aforementioned. The research explores how food justice and drug policy intersect, examining the roles of classism and racism and taking note of factors influencing recidivism.

### **Background and Purpose of the Study**

Preventative and harm-reduction strategies focused on community-based approaches related to drug use, poverty, unemployment, and criminal behavior deserve more recognition and monetary support. Therapeutic community treatment models that provide rehabilitation and support services focused on addressing antisocial behaviors and attitudes reduce recidivism (Mitchell, Wilson, & MacKenzie, 2007). Research calls for more attention to determine which communication strategies are most effective in civic engagement related to community-level intervention. Several researchers (Astbury, 2008; Chinman et al., 2005; Petersilia, 2008) echoed concern that there was a gap in research translating theory to practice and program implementation.

Horticulture therapy has been formally used as a therapeutic tool for several decades, with documented accounts of its benefits going back to the late 1700s (Jiler, 2006). Rice and Remy (1998) found exposing jail inmates to horticulture therapy reduced depression, substance abuse, and aggression. Horticulture therapy used in conjunction with other forms of therapy and training transforms inmates and brings them in touch with feelings and promotes self-awareness. Gardens can be aesthetically pleasing to the normally harsh and barren prison landscape and offer a sense of accomplishment and serenity to those who work in the garden.



Incarcerating individuals for extended amounts of time fragments the family unit which is not only harmful to the offender, but has dire consequences for society as it alienates individuals from their children and families (Arditti & McClintock, 2001). Prison expenditures are siphoning resources away from areas where they could be put to better use. Society receives nothing in return for incarceration. Individuals are removed from society for lengthy periods of time and rarely receive rehabilitation or the tools necessary to help them assimilate back into society as contributing members upon release.

The horticulture therapy community asserts an organic garden free of chemicals or pesticides is symbolic in and of itself for those that have battled with addiction. Gardening provides a host of lessons that complement the principles of recovery, including patience and compassion. A connection to horticulture helps people recognize the importance of daily maintenance and dedication in order to achieve results. Witnessing and nurturing a living plant and helping it to thrive without any toxins reinforces the benefits of a chemical-free lifestyle.

Inmate horticulture programs have collaborated with community groups to build local, sustainable food sources in conjunction with schools, community organizations, government agencies, local businesses, and citizens. The collaborative cross-sector approach makes a positive impact in a variety of areas by employing people locally. Citizens are taught how to grow sustainable food sources while being environmentally conscious. This type of collaboration is especially valuable in settings known as “food deserts” where there is a lack of fresh produce and healthy food options in the area. One

of the most notable findings was that many of the horticulture-related programs examined through the course of research reported extremely low recidivism rates for individuals who have participated in their programs.

The inmates participating in horticulture programs learn skills that are transferrable to employment once they are released. Several innovative programs provide robust curriculum on horticulture while participants are incarcerated and assist them with finding employment upon release. Green jobs are an area of employment that benefits offenders by providing a steady income and building ties with the community. Many inmates will return to their old neighborhoods; having training to care for urban gardens enables them to provide fresh produce to locals.

### **Research Problem**

The incarceration rate and sentencing length associated with nonviolent drug offenses offers a picture of how certain populations are disproportionately impacted by policies. The United States has the highest proportion of 18- to 25-year-olds in prison; some states have more young people under supervision of the criminal justice system than in college (McBride, Terry-McElrath, Harwood, Indiardi, & Leukefeld, 2009). In 2011, the Bureau of Justice Statistics reported 17% of state prison inmates and 45% of federal prison inmates were incarcerated for drug charges; a large segment of these individuals are serving long sentences for possession only (Drug War Facts, 2014). Approximately six in 10 state prison inmates are incarcerated for drug law violations and have no history of violence or high-level drug sales (Mauer & King, 2007). Legislation such as Three Strikes and mandatory minimum sentencing for nonviolent offenses has

resulted in overcrowded prisons and jails, which prompt the construction of more prisons and outsourcing to private companies.

There are exorbitant monetary costs associated with implementing a punitive model to address nonviolent offenses. Private companies such as the Corrections Corporation of America (CCA) and GEO Group rely almost exclusively on government contracts. In 1984, CCA first began housing undocumented individuals for Immigration and Naturalization Services and undocumented individuals with convictions for the Bureau of Prisons. Tennessee contracted with CCA to house detainees in Texas that same year. Today it is common for inmates to be shipped across state lines to fill empty beds in privately run facilities and to ease overcrowding in state and federal prisons. Privatization does not stop at prison; a person may be paroled to a residential treatment center or transitional program that is also owned and operated by private companies such as CCA and GEO Group. The two companies jointly earned \$3.2 billion in 2012 housing and supervising offenders (Kirby, 2013). Private prisons have a conflict between commercial interests with a profit motive and rehabilitating inmates for the greater good of society.

The quality of programming and personnel at privately run facilities is an area for concern. There are a limited number of options between privately held companies; the lack of competition results in contracts being continually renewed without any performance indicators of their effectiveness (Jing, 2010). Much of the cost savings for private companies is derived from cutting payroll expenses through the use of less-skilled, low-wage, nonunion employees (Jing, 2010). The staff turnover rate for private

companies is 52% compared to their public counterparts at 16% (C. G. Camp & Camp, 2000). It is not surprising that the quality of programming and type of individuals drawn to occupy roles at private facilities would suffer, considering the level of pay and high turnover rates.

This research focuses on groups and individuals that have collaborated in order to change the perceptions of incarcerated individuals and the types of programs and services they are provided. The researcher examines horticulture programs in correctional settings, how they came into existence, and their perceived efficacy. This study also explores what factors hindered or helped the diffusion of inmate horticulture programs and how reframing the social construction of target populations can shift the discussion.

### **Theoretical Framework**

Social construction and diffusion of innovation are the theoretical foundations from which this research is examined. The world is shaped through images, stereotypes, and the value placed upon objects, people, and events, which also architect policy (Sabatier, 2007). The degenerative policy model (Schneider & Ingram, 1997) dissects how the social construct of target populations and policy design interplay; policy designs and outcomes are driven by distorted perceptions of target groups. Policymaking dynamics include a wide range of actors: policy entrepreneurs, interest groups, social movements, agencies, elected officials, and their counterparts (Schneider & Ingram, 1997).

Societal perceptions of justice are affected by the distinctions built into the policy design that proclaim which targets are worthy and entitled and which are viewed as

burdens and deserving of sanctions. The social construction of a population or issue sets the tone in regard to how the media, institutions, organizations, and the public interact with or shun the group. Social construction also influences resource allocation and decisions tied to what types of programs and services will be made available to the target population. As a result, policy designs tend to be repetitive by sustaining and maintaining established social constructions, power associations, and institutional cultures. Target groups become disenfranchised and are stripped of their political voice over time as degenerative policies become institutionalized.

Diffusion of innovation analyzes the adoption of a new idea, technique, product, or service, focusing on how it is communicated and adopted by a social system over a period of time (Rogers, 2003). According to Rogers (2003), the decision on whether or not to adopt an innovation hinges on the potential adopter's perceptions of the following categories: relative change, compatibility, complexity, trialability, and observability. The diffusion of innovation decision process is based on how information is conveyed and on how attitudes are formed and entails the following stages: knowledge, persuasion, decision, implementation, and confirmation. The characteristics of individuals in a decision-making capacity strongly affect the outcome of whether or not an innovation is accepted and implemented. Diversity, communication, and inclusion during the planning process determine whether the innovation is embraced; adopter categories include innovators, early adopters, early majority, late majority, and laggards. It is wise to frame an innovation in a context that is in alignment with existing norms. The chances of an

innovation being adopted and diffused are heavily dependent upon the institutional culture and whether leadership is supportive.

Understanding the relationship between culture, values, existing practices, and political/social/environmental climate aids in facilitating the adoption of a new innovation or idea. Reframing how the problem is defined can expose issues to new audiences and draw in the attention needed for promoting change. The perception of a policy target also impacts diffusion; those with minimal appeal will be less likely to draw attention in the policy arena, making change difficult (Savage, 1985). The researcher explores the dynamics of social constructions and diffusion of innovation in great detail in Chapter III.

### **Research Questions**

1. What are the perceptions of those involved in developing these horticulture programs about the program's efficacy and its challenges and benefits to those served and to the community?
2. How do the programs vary?
3. What role has collaboration played in establishing horticulture programs in correctional facilities?

### **Methodology**

The researcher employed a mixed methods approach to explore how community organizations and correctional facilities collaborated to bring horticulture programs to incarcerated individuals. By examining the gardening programs, the researcher gained an

idea of their efficacy, the role collaboration played, and whether there was a therapeutic component. The research is qualitative and paints a descriptive picture of processes, perceptions, and behaviors relative to the subject. Through the qualitative method, inferences were made upon pattern and trends drawn out of the data. The researcher interpreted the data collected through second-hand sources (scholarly research and government reports) to illustrate the monetary impact of implementing excessively punitive policies to address nonviolent offenses. Semistructured interviews were helpful in gathering the perceptions of those working closely with the inmates in horticultural programs.

Semistructured interviews establish a general question guide so similar and consistent information is gathered from each interviewee. The flow of the interview is conversational and allows the interviewer to vary the sequence of questions and ask clarifying questions (Patton, 2002). More in-depth data are collected through this style of interview, because the researcher and participant are not bound by an inflexible protocol; the likelihood of information gaps is reduced with the semistructured model. The researcher can adapt through the process in order to extract details and ask clarifying questions to obtain the information needed for a thorough analysis.

The researcher began by canvassing the Internet and compiling an extensive list of existing horticulture programs in correctional settings along with their community counterparts that provided wraparound services. The query focused on adult institutions at the state and county levels. The study examined the variation among programs and their perceived efficacy, challenges, and barriers. The database created by the researcher

collected details, including the location of the program (city, state), when it was established, type of institution (state, county), size of the garden, funding, recidivism rate (if available), whether there was a classroom component, contact information, and other miscellaneous notes (the mission and goals). Information on the community collaborators that helped make the inmate gardens possible was also catalogued.

After spending a great deal of time getting familiar with the programs details, the researcher noticed similar characteristics stood out among programs. Identifying the common themes prompted the researcher to categorize the programs into five primary archetypes: therapeutic/rehabilitative, vocational, punitive/retributive, cost savings, and sustainability. The researcher decided to focus on programs that sought to make a meaningful contribution and improve the standing of the inmate participant by preparing them to return to society hopeful and motivated.

The researcher interviewed 10 individuals from seven states who were involved with inmate gardening programs, via semistructured telephone interviews from August 6, 2013 through September 10, 2013. Phone interviews were conducted due to the interviewees being spread out across the United States. It would have been too costly and require a great deal of time to travel and meet with each person individually. Interviewees were recruited based on their experience with inmate horticulture programs and also the collaborative multiorganizational approach they implemented to achieve their goals.



### **Limitations**

A threat to qualitative research is that the researcher may misinterpret the meaning of information gathered through dialogue (Baxter & Eyles, 1997). Critics of the mixed method research approach argue that it can be too complex, time consuming, and expensive for a single researcher to use multiple methods concurrently (Cronholm & Hjalmarsson, 2011). The research was limited in that there are reliability issues associated with the use of semistructured interviews; respondents may not be forthcoming with information if there is not an adequate level of trust and mutual respect established between the interviewer and research participant (Holloway & Wheeler, 2010). Geography presented a challenge since the horticulture programs were spread out across the United States and the interviews were conducted over the phone, which makes building a rapport slightly more challenging. The researcher brings with them their own experiences, attitudes, and experiences, which can taint the subjective interpretation of qualitative results (Fassinger & Morrow, 2013).

### **Significance of the Study**

There has not been an inquiry analyzing the growth and diffusion of gardens in correctional settings. Waitkus (2004) produced enlightening data on the impact a garden had on the prison yard at San Quentin State Prison. This research expands upon the impact of prison gardens to explore how they were established, what purpose they serve in correctional settings, and the impact they have on lives within and outside of prison. Examining inmate gardens in relation to diffusion of innovation will identify best

practices and adaptations to local settings and assist with the planning and implementation of future programs by identifying potential barriers.

Chapter II reviews literature that provides a foundation for this research and gives a historical account of policies and practices that led to the current circumstances around drug policy, criminalization of substances, and rehabilitation. Chapter III covers theory and highlights existing programs and types of rehabilitation. Chapter IV explains the methodology applied to carry out the exploratory inquiry and states the research questions. Chapter V discusses the research findings and implications. The final chapter provides a summary of the research, draws conclusions, and makes recommendations for future research.

### **Definitions of Terms**

**Civic engagement.** Working to make a difference in the civic life of communities and developing the combination of knowledge, skills, values, and motivation to make that difference. It means promoting the quality of life in a community, through both political and nonpolitical processes (Erlich, 2000).

**Degenerative politics.** Negatively perceived outgroups are identified as being responsible for social problems and are targeted by policy (S. Nicholson-Crotty & Meier, 2005).

**Deviants.** Individuals who have little or no political power and resources; they are viewed as undeserving and dangerous and considered to add no value to society (Schneider & Ingram, 2005).

**Diffusion.** The process by which an innovation is spread over time through communication channels among members of a social system, including the communication of information and attitudes (Rogers, 2003).

**Dissemination.** The process of implementing multiple strategies to spread information (Schwarzbach, 1999).

**Harm reduction.** A set of practical strategies that reduce negative consequences of drug use, incorporating a spectrum of strategies from safer use, to managed use, to abstinence (Harm Reduction Coalition, 2014).

**Heterophily.** The degree to which individuals who interact are different in certain attributes like beliefs, education, and social status (Schwarzbach, 1999).

**Homophily.** The degree to which individuals who interact are similar in certain attributes like beliefs, education, and social status; a link between individuals acts as a conduit for the exchange of ideas and attitudes (Schwarzbach, 1999).

**Horticulture.** The science and art of growing fruits, vegetables, flowers, or ornamental plants.

**Moral entrepreneur.** Draws attention to the actions of a marginalized group to convince others that those actions constitute a fundamental threat to society (Ben-Yehuda, 1990).

**Policy design.** Inclusive of properties that determine targets of benefits and burdens, goals to be achieved, problems to be solved, tools to be used, rules of inclusion or exclusion, legitimizing factors, and implementation framework (Ingram, Schneider, & deLeon, 2007).

**Social construction.** In relation to policy, social problems are often manifestations of widely held social anxieties; negatively constructed groups are blamed for problems and become targets for punitive policies (J. Nicholson-Crotty & Nicholson-Crotty, 2004).

**Therapeutic horticulture.** A process that uses plants and plant-related activities through which participants strive to improve their well-being through active or passive involvement (American Horticultural Therapy Association, 2014).

**Target group/target population.** Groups selected to receive benefits and burdens through policy design elements (Ingram et al., 2007).

**Wraparound services.** Intensive, individualized care planning and management process (National Wraparound Initiative, 2014).

### Summary

The Prison Industrial Complex has made a lucrative business out of the mass incarceration of large segments of the population. As a result, fiscal resources are strained and misallocated, and communities of color are disproportionately impacted. The policy maneuvers that support the continual passage of degenerative legislation need to be scrutinized. Sentencing practices should be reformed so that nonviolent offenders are not being incarcerated for lengthy periods of time. Resources could be better spent in community programs to address the root causes of why people turn to crime, addressing poverty, lack of employment, and addiction.

This research examines how individuals, organizations, and communities have collaborated to bring meaningful and therapeutic horticultural programs to incarcerated

individuals. The leveraging of resources to address the vast array of complex needs of citizens returning to the community is studied. Also, the research takes into consideration what factors promote or act as a barrier to diffusing inmate horticulture programs. Issues of race, class, and poverty are discussed and provide insight into how the social construction of issues frames the discourse around the topic and impacts policy decisions and the allocation of resources.

## CHAPTER II

### REVIEW OF RELATED LITERATURE AND THEORY

#### **Overview**

The prison population in the United States has exploded at a steroid rate of growth, increasing by 1,100% since 1980 (Mauer & King, 2007). The United States far exceeds any other developed nation in the number of individuals incarcerated (Walmsley, 2012). The War on Drugs, mandatory minimum sentencing, and the targeting of certain segments of the population have contributed to the exponential prison population growth over the last few decades. The Prison Industrial Complex has grown into a profitable and powerful political machine that warehouses a vast number of citizens without producing evidence that they rehabilitate individuals or reduce recidivism. The situation of the prison system is unique in that it is allowed to flourish and expand without demonstrating it is the most effective or efficient means by which to address criminal behavior. The social construction of a population influences policy decisions and determines how people are treated. An examination of history and legislation that have fed into the cycle of poverty, addiction, and incarceration will give insight into how the United States journeyed to this dismal set of circumstances.

The literature review explores how institutions fail to provide adequate rehabilitation and other pertinent resources to prepare incarcerated individuals for returning to society. Further complicating the situation, the privatization of corrections

creates a conflict of interest, because prison administrators answer to shareholders yet are not held accountable for the effectiveness of their programs. Proponents of the privatization of corrections argue that it saves money because the corporations are able to operate facilities at a reduced cost; there is conflicting information on whether this is in fact accurate and also what is being compromised in order to achieve the savings.

Creative community collaborations have devised strategies to provide offenders alternative programs that serve inmates in several capacities, including rehabilitative therapy and vocational training through the practice of gardening. Gardening can be a transformative experience when it is coupled with therapeutic practices and lessons, because it gives participants an opportunity to reflect on what behaviors landed them where they are. By learning about himself or herself, the offender is able to recognize triggers that lead to poor decisions and to practice changing how they respond to situations. Gardening programs can also help to socialize participants and improve how they interact with society upon release. The purpose of this qualitative piece of research was to identify inmate horticulture programs, how they came into existence, the role collaboration played, and the programs' perceived efficacy.

### **Criminalization and Incarceration**

A vast array of drugs were used in religious ceremonies and sold over the counter until groups were targeted and stigmatized for their use of drugs. Politicians and those in power created laws to their benefit, which criminalized cultural traditions that had been in place for generations. Substances were sensationalized to put fear in the public over certain drugs having potentially addictive properties. In other instances where there was

a profit to be made, the dangerous side effects of drugs were not given adequate attention. The Bayer chemical company sold heroin over the counter as a “nonaddictive” substitute for codeine and morphine, as well as a cough suppressant (Meier, 1994). Cocaine was marketed as a cure for sinus problems and also used as a food additive in replacement of caffeine.

Cannabis is an example of a multifaceted plant with a history of use, including industrial, medicinal, and recreational. Ships sailing across the Atlantic Ocean in the 1500s were fitted with sails and rope made of hemp; the durable material could withstand the harsh saltwater. Hemp was an important crop during the colonization period; the versatile substance was used to make paper, rope, and a range of garments. George Washington documented his experience cultivating the plant and sought to establish a homegrown supply to avoid having to rely on England to supply the useful material (Lee, 2012). There were in excess of 100 articles on utilizing marijuana for medical purposes between 1839 and 1900. There was documented use of the plant for hundreds of years before it was outlawed.

The government has leveraged drug policy as a social control mechanism, often targeting certain socioeconomic statuses and ethnic groups. Opium dens in San Francisco became illegal in the late 1800s; these laws targeted the Chinese community. A state law banning the smoking of opium was passed in 1881. The federal government banned the importation of smoking opium in 1909 in an effort to eliminate European control over China and create an opportunity for the United States to trade opium (Brunn, Pan, & Rexed, 1975). Historically, policies were blatantly directed at specific groups;



over time politicians and those with vested interests learned to camouflage their agendas. Moral crusades permeated the political agenda in an effort to deter behaviors deemed inappropriate by those wielding power and influence as well as to suppress the social standing of targeted populations. From 1865 to the 1920s, convict leasing was a way to work around the abolition of slavery and have access to cheap labor. Convict leasing has been cited as one of the earliest privatization efforts in correctional settings (Welch & Turner, 2007).

The first major federal drug policies surfaced early in the 20th century; states had already developed prohibitive drug policies. The Pure Food and Drug Act of 1906 mandated prescription and labeling requirements for many substances, including alcohol, cannabis, and cocaine. The Harrison Act of 1914 regulated and taxed production, importation, distribution, and use of drugs such as opium and coca leaf derivatives (Inciardi, 2008). The distinction was made between recreational and medical drug use; a person could not possess “psychoactive substances” unless it was for medical purposes (Lee, 2012). Individuals and companies selling regulated drugs were required to register with the federal government, maintain records of transactions, and pay taxes. The Treasury Department was tasked with enforcing the Harrison Act, since it was framed as a revenue act (Meier, 1994).

Beginning in the 1930s with movies such as *Reefer Madness*, marijuana smokers were depicted as deviant drug-crazed individuals wreaking havoc on society; this type of propaganda helped garner and reinforce support for prohibitionist policies. Mexicans, African Americans, and other non-White ethnicities were targets for negative propaganda

around crime and its correlation to marijuana. The media mogul William Randolph Hearst used his newspapers as a vehicle for promoting racism and fear in order to manipulate the American public. Hearst harnessed the power of his newspapers, magazines, and radio stations across the nation to initiate sensationalized campaigns with headlines such as “Murder Weed Found Up and Down the Coast—Deadly Marihuana Dope Plant Ready for Harvest That Means Enslavement of California Children” (Lee, 2012, pp. 50-51.)

The Federal Bureau of Narcotics (FBN), led by Harry Anslinger, expanded criminal sanctions, which included legislation such as the Marijuana Tax Act. The Marijuana Tax Act of 1937 was created to address marijuana, because it was not covered by the Harrison Act and was only permitted for medical purposes under the Pure Food and Drug Act. For the next quarter of a century, the FBN exerted control over reports and information that refuted the harsh penalties associated with drugs. The FBN reportedly altered its own data to reflect a decline in the number of drug users, which the FBN attributed to the strict laws passed by Congress (Meier, 1994).

In 1944, The *LaGuardia Committee Report* was released by a distinguished group of scientists and physicians from the New York Medical Academy. The committee was tasked with assessing the risks associated with marijuana. After 5 years of research, the committee surmised that marijuana was incorrectly referred to as a narcotic. It did not incite deviant or promiscuous behavior, and prolonged use did not lead to physical or mental degeneration. The *LaGuardia Report* also cited the potential for marijuana to be used in a medical context as it had therapeutic characteristics, such as increasing appetite,

creating a sense of emotional well-being, and euphoria. The report encouraged further research into the medicinal benefits of marijuana.

Anslinger was infuriated with the report's findings because it dispelled all of the false claims he used to support his harsh stance against the plant (Lee, 2012). Anslinger went to great lengths to discredit the report and resorted to threatening opponents with incarceration. He also leveraged the power of the FBN's license to grant access to the importation of opiates, which enabled him to have the American Medical Association and pharmaceutical companies back his efforts. The Boggs Act of 1951 was another victory for Anslinger, which imposed mandatory minimum sentences for violations of the Narcotic Drugs Import and Export Act. In 1965, the FBN was dismantled and its responsibilities were taken over by the Department of Justice and the Department of Health, Education and Welfare.

Through the 1960s and 1970s, the baby boomers challenged social norms and experimented with many illegal substances. As a generation, they were strong enough in numbers to challenge traditional views of experimentation with substances, notions about race, parental and institutional authority, and values toward sexual practices (Inciardi & McBride, 1991). Richard Nixon has been cited as the first president to introduce War on Drugs rhetoric to the political arena in an effort to boost his presidential platform. The "Southern strategy" Nixon employed administered harsh penalties to those found to be pushing societal boundaries. Challenging political actions and holding public demonstrations in the name of peace and equality were behaviors that could get a person arrested.

The Reagan administration took a number of steps to restructure the balance of power by legislating tax reforms that favored corporations and the wealthy (Friedman & Parenti, 2003). Policies impacting labor and civil rights were also targeted; during this era, Reagan reinvigorated the War on Drugs in 1982 and galvanized federal and state prohibitionist policies. The FBI's budgetary antidrug spending grew from \$8 million in 1980 to \$95 million in 1984, while funding for agencies focused on treatment, education, and prevention was cut substantially. The National Institute on Drug Abuse (2014) budget was slashed from \$274 million in 1981 to \$57 million in 1984. There was also the creation of the Organized Crime Drug Enforcement Task Force (OCDETF) which coordinated the efforts of all the agencies involved in the War on Drugs (Friedman & Parenti, 2003). In addition to the tough-on-crime policies, there was a widespread effort to transfer the administration of public services to the private sector; this included education, healthcare, and prisons. There was a big push toward privatization in order to diminish the size of government and, in theory, create competition among private companies to provide the best quality service for the lowest amount of money (Welch & Turner, 2007).

Inner city communities were also undergoing an economic downturn during the 1980s. Globalization sent industrial and manufacturing jobs to countries that lacked unions and workers' rights; businesses capitalized by paying low wages to workers overseas. Technology and computer-based jobs increased in the United States; but there was an employment gap for those lacking formal education, and African Americans in the inner city were hardest hit (Alexander, 2012). With very few viable legitimate

employment opportunities, solicitation of drugs was an accessible means to generate income. Increased drug use among youth in conjunction with the publicized correlation between drug use and crime diminished any chance of drug reform during this era.

In 1986, the House of Representatives approved \$2 billion towards antidrug efforts, including engaging the military in narcotic enforcement and control. Soon after, the Anti-Drug Abuse Act of 1986 was signed into law and included extremely harsh mandatory minimum sentencing with unjust disparities between crack and powdered cocaine, although they are almost pharmacologically identical substances. Crack was a drug associated with African Americans and impoverished communities, while cocaine was widely consumed by Whites and among affluent circles within society. The year 1988 introduced additional exclusions for those with convictions under the Anti-Drug Abuse Act; housing, federal student loans, and other benefits were abolished for those with drug convictions. The mandatory minimum sentencing for possession of certain substances now carried a 5-year prison term for a first offense; prior to 1988 it was a 1-year sentence.

Sensationalized media campaigns bombarded the American public with images of crack babies and drug-crazed citizens, stirring up public fear and solidifying support for punitive policies. Mandatory minimum sentencing became a conduit for overloading the criminal justice system with nonviolent drug offenders. The number of people incarcerated in the United States now surpasses every other nation in the world, nearly 6 to 10 times higher than other industrial nations. The United States also has the highest proportion of 18- to 25-year-olds in prison; some states have more young people under

supervision of the criminal justice system than in college (McBride et al., 2009). People of color are hardest hit by drug legislation, depending on the geographic location; incarceration rates are 20 to 50 times higher for African American men in comparison to White men (Alexander, 2012). Unequal application of drug laws is part of the reason why people of color are overrepresented in the criminal justice system.

Continuing tough on crime trends, California approved “Three Strikes” in 1994, which enabled lengthy sentences for multiple felony charges. The legislation often translates into a person racking up multiple strikes in a single case and being sentenced from 25 years to life. Individuals who were previously convicted of two or more strikes, even if it occurred when they were 16 years old, could face a life sentence for a relatively minor nonviolent offense, including possession of a controlled substance. If the goal of this legislation was to keep the most dangerous and incorrigible criminals off the street, then it has failed miserably. In November 2012, Californians approved Proposition 36 which made revisions to the law, such as imposing a life sentence for new serious or violent felonies, resentencing for those serving life sentences for offenses not found to be violent or serious. The law still may impose a life sentence for certain nonviolent drug offenses if the individual’s prior convictions were for rape, murder, or child molestation.

Local law enforcement gained a stake in the drug war through asset forfeiture legislation, which became a way for police departments to bolster their budgets. Seizing cash, property, and valuables from individuals allows departments to keep up to 80% of the value of whatever they seize, without any need for charges to be brought against a person in order to have their property seized. Local and federal law enforcement

agencies split the profits from the sale of seized property, creating an incentive to aggressively target individuals for asset forfeiture, as well as a recipe for corruption within the agencies (Meier, 1994). Additionally, the Asset Forfeiture Fund under the Department of Justice accounted for \$236 million in the 2012 budget. This includes the Equitable Sharing Payments, which are paid to state and local agencies that assist in forfeiture cases.

The policies around asset forfeiture amount to harassment by the police and create resentment and distrust among citizens. Low-income individuals are often targets of asset forfeiture because they lack the resources to hire an attorney to prove their innocence. Taxpayers provide funding for law enforcement budgets; law enforcement reaping the benefits of confiscating property from drug offenders is not the most appropriate use of the funds. It seems that it would be beneficial for the communities impacted by the drug trade to have the money funneled back into the community and put toward education and treatment and providing services to those most affected.

When charges are filed, harsh sentencing structures have resulted in large segments of the population being incarcerated for excessively long periods of time for nonviolent offenses. Once persons have been released from jail or prison, it does not mean their sentence has ceased; they lose access to a multitude of support services and opportunities, permanently in some instances. Public benefits, scholarships, obtaining employment, and even finding a place to live are impacted by having a criminal record. Living with the stigma of having gone to prison is often worse than the time spent in prison. Alexander (2012) argued that drug offenders are reduced to second-class citizens

for the rest of their lives. The drug war is a form of institutionalized racism that has been allowed to prevail against groups without the resources to defend themselves.

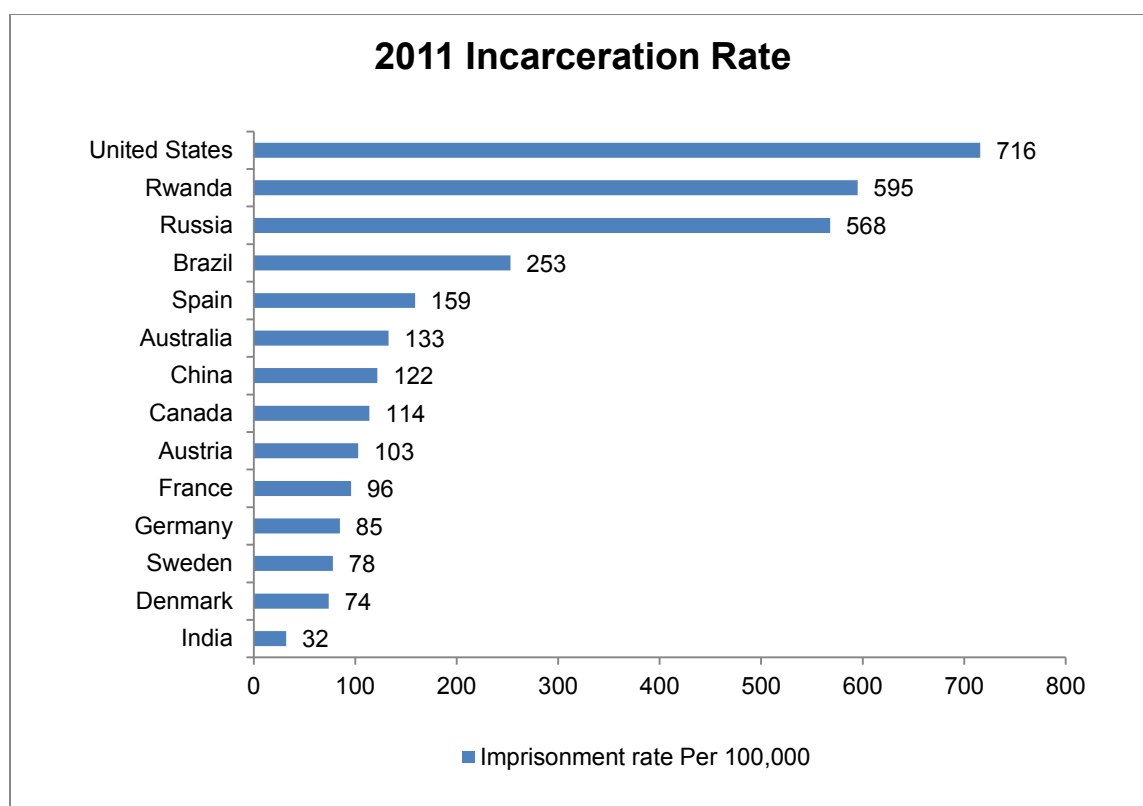
For decades, punitive approaches have been implemented and have perpetuated harsh treatment of nonviolent drug offenders, have involved little rehabilitative efforts, and have had harmful effects on society as a whole. Excessively punitive sanctions against nonviolent offenders have not provided any evidence of effectively addressing crime or addiction. The punitive policy stance toward drugs may be worthy of a reassessment to see if money could be better spent on other approaches.

The United States accounts for 5% of the world population and an astonishing 25% of the world's prison population. The federal Bureau of Prisons (BOP) fiscal year 2013 budget was \$6.9 billion, which accounts for more than 25% of the Department of Justice budget (La Vigne & Samuels, 2012). In 2011, the Bureau of Justice Statistics reported 17% of state prison inmates and 45% of federal prison inmates were incarcerated for drug charges. A majority of the inmates are nonviolent and incarcerated for possession only. Medium- and high-security BOP prisons are over 50% of their rated capacity, which poses a safety risk to inmates and staff as well as hinders the possibility to provide effective programming. Figure 1 illustrates the incarceration rate of the United States in comparison with other countries.

The number of people incarcerated for drug law violations has increased 1,100% since 1980 (Mauer & King, 2007). Today, nearly six in 10 people in a state prison for drug law violations have no history of violence or high-level drug sales (Mauer & King, 2007). Communities of color are disproportionately impacted by the unjust policies



associated with drugs. African Americans make up approximately 13% of the population, yet they account for 46% of the prison population. Mandatory minimum sentencing is partially responsible for the disparity. Since the sentencing practice was implemented, African Americans have received sentences 49% more often than White offenders.



*Figure 1. 2011 incarceration rate per 100,000. Adapted from *World Prison Population List* (9th ed.), by R. Walmsley, 2012, London, UK: International Centre for Prison Studies.*

Dr. Harry Levine of Queens College recently analyzed data spanning 2002-2012 from the New York City police department that revealed 1,000,000 hours were wasted on making 440,000 marijuana possession arrests. The individuals arrested for simple

possession were overwhelmingly young men (70% under 30) of color (85% Black and Latino). This is only a fraction of the picture; there are heftier costs and wasted resources associated with keeping these individuals detained. If convicted of possession, many of these young people will carry a permanent criminal record which will undoubtedly disenfranchise them further down the road.

### **Privatization of Corrections**

In the last several decades, many states have come to rely on private companies to house and supervise prison inmates. This is due in part to harsh sentencing practices that have caused the prison population to explode. Jing (2010) asserted overcrowding in prisons was one of the driving forces behind state prison privatization. Prison privatization comes in several variations: a prison that is financed owned and operated entirely by a private corporation, a publicly operated institution that is privately owned and financed, and a publicly owned facility operated by a private corporation (Weaver & Purcell, 1998).

Private companies such as the Corrections Corporation of America (CCA) and GEO Group rely almost exclusively on government contracts. CCA and GEO Group jointly earned \$ 3.2 billion in 2012 (Kirby, 2013). In 1984, CCA operated the Houston Processing Center to house undocumented individuals for Immigration and Naturalization Services and undocumented individuals with convictions for the Bureau of Prisons. That same year a county in Tennessee contracted with CCA to house detainees in Texas. Texas, California, Florida, and Colorado lead the nation in having the most privately run prisons in the nation (Friedman & Parenti, 2003). CCA houses over 90,000

inmates across the country and has offered to buy prisons from states having economic difficulties under an agreement which requires the facility to remain under the management of CCA for the next 20 years with the inmate population at 90% full (Kirkham, 2012). The GEO Group operates and runs 60 correctional facilities in the United States and dozens of residential treatment centers, youth centers, community corrections facilities, and nonresidential facilities. Over 65,000 inmates in the United States are housed by the GEO Group (Geogroup, 2012).

In 1997, Congress directed the Bureau of Prisons to begin a contract with Wackenhut, a private company to oversee operations at a federally owned facility in Taft, California, built to house low-security offenders. Three other prisons with a similar architectural design, prison population, and offender makeup were built in Arkansas, Ohio, and Mississippi. Staff and inmates were surveyed; the data showed that both the privately run Taft prison and other BOP prisons had issues maintaining quality in certain areas. Taft had poor results in sanitation and food service in comparison to the BOP-run prisons. The research concluded that private institutions should be monitored at the same level as public prisons to ensure quality is maintained (S. Camp, Gaes, Klein-Saffran, Dagget, & Saylor, 2002).

There is conflicting research on rural communities and whether prisons boost and sustain the local economy by employing community members or cause harm. Assuming that job vacancies will be filled by locals does not take into account seniority of existing employees who are not locals and that many of the lower skilled jobs are performed by inmates. The Sentencing Project conducted a study of seven rural New York counties

housing correctional facilities which did not produce significant findings that those counties fared any better financially or had lower unemployment rates in comparison to other rural communities that did not host a prison (King, Mauer, & Huling, 2003).

The government has been sending federal inmates and immigration detainees across state lines to private facilities for decades. Welch and Turner (2007) found that it is not uncommon for inmates to be moved between states to fill empty beds in private correctional facilities. Moving inmates away from their families isolates the prisoner, because it can be a challenge for their families to travel for visits. Cutting ties to the prisoners' support system disenfranchises them and causes damage to the family unit. It can also be difficult to maintain connections, which can impact an inmate's transition back into the community upon release.

A large portion of detention facilities, residential treatment centers, and transitional programs for parolees are owned and operated by private companies such as CCA and GEO Group. In an effort to reduce spending, states like New York have contracted private entities to provide oversight and reintegration services for those coming out of prison. Much of the programming through the private entities shifts the funding from the parole department to Medicaid (Kleis, 2010). Individuals under the supervision of the criminal justice system often leave a privately run prison to enter community supervision, which is also privately run. Formerly incarcerated individuals are being adversely affected by the exploitive practices of privatized re-entry services, which are a condition of the participant's parole (Kleis, 2010).

The quality of programming and staffing at private correctional institutions is questionable. There are a limited number of choices among private contractors, which results in virtually no competition, so contracts are continually renewed with the same providers (Jing, 2010). C. G. Camp and Camp (2000) found salaries for private correctional officers were at 59% when compared to those occupying similar roles in public prisons. The turnover rate was also drastically higher in the private sector at 52% in comparison to public prisons at 16%. Private prisons routinely use less skilled and lower paid staff as a primary tenet of their cost savings strategy (Jing, 2010). By utilizing nonunion staff, the private facilities are able to have flexibility with job descriptions, the scope of work, and the benefits provided to staff (Kish & Lipton, 2012). The lack of competition, low salaries, and high staff turnover are likely to affect the quality of personnel drawn to the field, in conjunction with the quality of programming. Human rights violations are also areas of risk; there is very little oversight into how the private entities operate and treat inmates.

The use of prison labor is a controversial topic considering that the 13th Amendment includes language stating “involuntary servitude” is acceptable when it involves individuals convicted of crimes. This is where the situation gets convoluted; convict leasing programs sprung out of the interpretations of the law which determined a convicted person forfeited labor rights, including the right to organize and strike. Other arguments supporting the use of prison labor include the proclamation that labor rehabilitates and instills honesty, skills and work ethic which will help the person support his or her family once released (Kang, 2009). Another view is that prison labor can help

offset the costs of incarceration; states have passed legislation requiring inmates to work in order to subsidize the cost of incarceration. A number of states have chain gangs in which virtually no skills are acquired; men are shackled together with leg irons and work long hours in poor conditions. With the high cost of incarceration and over-filled facilities, it is ironic that it is easier to pass legislation that promotes exploitive labor practices than it is to reform policy in order to explore alternative to incarceration.

Kang (2009) found that parolees reported difficulty reintegrating into society based on the programming they were required to participate in under the direction of the private organization. Difficulty obtaining employment was a concern of all interviewees, who cited the program hours were between 9 a.m. and 5 p.m. several days a week. Individuals reported they were mandated to attend programming for an indeterminate amount of time and felt a disconnect between the types of offenses they were convicted of and the types of programs they were required to attend (Kang, 2009).

A majority of respondents expressed fear of retaliation for voicing concerns or questioning the mandated programming; they felt they were at the mercy of the private organization, because staff members could violate the individual and it would be their word against that of the organization providing oversight. Retaliation allegations have also surfaced in private prisons when inmates were disciplined for voicing concerns related to their working conditions or the racial discrimination among job placement (Kang, 2009). Parole offices reported excessively large caseloads, resulting in private entities having a great deal of discretion when it comes to decision making.

Research by Kleis (2010) concluded that taxpayers are not saving any money, because the financial burden has just shifted from parole to Medicaid, both of which are funded by taxpayers. Parolees indicated they are required to utilize their Medicaid benefits for programs mandated by the private organization without having any measures of success. Concerning questions arise from the delegation of this kind of authority to private institutions; with no quality indicators, how does the public know profit margins are not being placed before public interests?

Private prisons can have a conflict between commercial interests with a profit motive and rehabilitating inmates for the greater good of society. With so many revenue streams relying on the vast prison population, rehabilitation strategies are not widely implemented; and if they are there is no guarantee on the quality of services. Unions for California Correctional Peace Officers Association (CCPOA) and the private industry have a vested interest in keeping people incarcerated. CCPOA was formed in 1957 and exerts a great deal of political influence on public policy. The CCPOA backed initiatives such as mandatory minimum sentencing for drug possession and Three Strikes and lobbied against and successfully defeated Proposition 5, which would have increased funding for treatment and rehabilitation of nonviolent drug offenders and parolees (National Institute on Money in State Politics, 2014).

GEO Group and CCA are focused on profit because they are private companies, making them accountable to their shareholders for the generation of revenue. The combined gross revenue for CCA and GEO Group was \$ 3.2 billion in 2012 (Kirby, 2013). Private correctional companies are backed by other enormous institutions; CCA

has 114 institutional stockholders that hold over 28,000,000 shares combined. Cornell Companies had 36 institutional stockholders which accounted for over 9,000,000 shares prior to being acquired by GEO Group in 2010. GEO Group had 82 institutional stockholders owning over 9,000,000 shares until the holdings were increased by the acquisition of Cornell Companies (Kish & Lipton, 2012; Welch & Turner, 2007). Private prisons, in conjunction with CCPOA, garnered strong ties and support for their budgets over the last several decades, enabling the prison system to grow. The unions and private profit-generating prisons lobby for legislation to favor their cause without demonstrating that inmates are being rehabilitated or served in an effective manner.

Campaign contributions help ensure the interests of the payee (privately contracted companies, CCPOA) will be looked after and promoted should the candidate win a seat. Another tactic to ensure special interests are looked after involves keeping former politicians on the board of directors or affiliated with the company in an effort to influence other important decision makers in the policy arena. Private prisons make political connections through lobbying efforts that drive legislation, which results in mass incarceration and the transport and housing of prisoners between states (Welch & Turner, 2007). Successful efforts to influence and advance agendas are what led to the tremendously overcrowded correctional institutions that pose a safety risk to staff and inmates. Harsh drug policies with rigid sentencing practices prevent politicians from being labeled as “soft on crime.” The alliances between private corrections, government agencies, professional organizations, and financial backers create a powerhouse with a great deal of influence over policy and resources. These factors all play a part in a



complex matrix denoting why it is so difficult to shift the drug paradigm and resource allocation from one that focuses on punishment to one based upon rehabilitation by means of community collaboration.

### **Social Construction of Target Population**

Social construction is based on the argument that there is no single view of reality; interpretations of problems are subjective and often based on values (Kuhn, 1970). The world is shaped through images, stereotypes, and the value placed upon objects, people, and events, which also architect policy (Sabatier, 2007). The social construction of target populations is used as a mechanism to divide up people so they can be governed in a certain manner. When groups are negatively constructed as objects of scorn in need of punishment, those holding the power are able to alienate and antagonize the target population through policy design (Gergen, 1999).

Social construction is one of the supporting theoretical foundations of this research; the researcher taps into other models and frameworks to link ideas and concepts. The degenerative policy model (Schneider & Ingram, 1997) is derived from social constructs of target populations, and the model discusses how distorted perceptions of groups (targets) affect policy designs and outcomes. In the case of drug policy, individuals who use drugs have been targeted as lawbreakers who need to be punished and disciplined for their transgressions. It is easier to get public support for punitive policies by constructing negative perceptions, because society has been trained to fear those who use drugs and treat them as prisoners instead of patients in need of rehabilitation.

The degenerative policy model dissects how the social construct of target populations and policy design interplay with policy designs and outcomes driven by distorted perceptions of target groups. Target groups become disenfranchised and are stripped of their political voice over time as degenerative policies become institutionalized. The framing of an issue denotes the beneficiaries and those who will bear the brunt of the disadvantageous policy ramifications. The degenerative policy model examines how certain underprivileged groups are systematically targeted and alienated by policies that do not benefit them (Schneider & Ingram, 1997). Deceptive and confusing policies also discourage citizen engagement and results in disconnectedness from government, giving the politicians *carte blanche*.

The importance of policy design and its implications for society cannot be overstated. Policy design influences the social construction of target groups and delivers messages about which voices are important in the political arena. Policy design may favor specific bodies of knowledge and influence the dissemination of resources. Policymaking dynamics include a wide range of actors: policy entrepreneurs, interest groups, social movements, agencies, elected officials, and their counterparts (Schneider & Ingram, 1997). Societal perceptions of justice are affected by the distinctions built into the policy design that proclaims which targets are worthy and entitled and which are viewed as burdens and deserving of sanctions. As a result, policy designs tend to be repetitive by sustaining and maintaining established social constructions, power associations, and institutional cultures.

Reviewing literature associated with the degenerative policy model prompted this researcher to utilize a diagram (Figure 2) that is derived from social constructs of target populations, which illustrates how blurred perceptions of target groups shape policy design and influence outcomes. Depending on the degree of positive or negative constructions associated with a group, it will influence the degree of power they hold and whether they receive benefits or bear burdens as a result of the policy.

		<b>Constructions</b>	
		<b>Undeserving</b>	<b>Deserving</b>
<b>Power</b>	<b>Strong</b>	<b>Contender</b> Labor Unions Big Business <i>Moral Majority</i>	<b>Advantaged</b> Small Business <i>Government</i>
	<b>Weak</b>	<b>Deviants</b> <i>Drug Addicts</i> Criminals	<b>Dependents</b> <i>Community Networks</i> <i>Rehabilitation</i>

*Figure 2.* Social construction of target populations. Adapted from *Policy Design for Democracy*, by A. L. Schneider & H. Ingram, 1996, Lawrence, KS: University Press of Kansas. Italic text indicates researcher additions.

Marginalized groups that are perceived as a threat to society are cast into the deviant category. The imbalance of power allows those that wield it to frame issues and dominate the outcome of legislative efforts, while target populations labeled as deviant

are stigmatized. Power is indicative of the amount of influence a group has, which is usually a result of access to resources of various kinds: votes, money, and organizational and institutional affiliations. Deviants damaging behavior is a focal point, of which punitive recourse is the response. The deviant group has limited access to power and political resources, so it is virtually impossible to dispel the negative construction imposed upon them by a moral entrepreneur.

Moral entrepreneurs often draw power from affiliations with institutions and gain legitimacy because the knowledge they possess is favored and deemed credible. The role of the moral entrepreneur is to magnify the problem associated with the deviant group. After the deviant group's position as a menacing threat to society has been solidified, the next step is to identify a political entrepreneur to chaperone it through the policy phase. The moral entrepreneur and the political entrepreneur may be the same person, but their roles are distinctly different (S. Nicholson-Crotty & Meier, 2005).

Political entrepreneurs are said to display social acuity and are able to define problems, build teams, and lead by example (Mintrom & Norman, 2009). Political entrepreneurs can portray that a given situation or cause is in crisis and in need of attention if they foresee rewards or profits as a result of championing the cause; targeting a weak group with little resources does not pose much of a political risk. It can, however, pay off substantially if the policy benefits advantaged groups and builds the political entrepreneur's support base. The political entrepreneur must form coalitions with other politicians in order to successfully navigate the issue through the legislative process. The key is to propose that the payoff for implementing policies against the target group will

be more substantial than letting them go unpunished. It is not favorable for the public to view politicians as lenient or soft on deviant groups.

Social constructions are extremely resistant to change and are reinforced when they are incorporated into policy designs. Sustaining negative constructions sends messages that influence the political participation of groups. Negatively constructed groups are less likely to participate, and positively constructed groups are increasingly active in the political arena. Over time, policy designs become institutionalized; and as a result, degenerative policies are continually reproduced (Figure 3).

Addiction has been addressed historically from the criminalization perspective; an insufficient amount of resources are directed toward rehabilitation. Legislation such as Three Strikes and mandatory minimum sentencing for nonviolent offenders causes overcrowding in prisons and jails. Overcrowding typically results in the construction of more prisons or outsourcing to private companies like CCA and GEO Group. Prisons do not remain vacant; they are filled and overfilled with a disproportionate number of people of color and individuals convicted of drug possession. African Americans account for 13% of the U.S. population and make up approximately 45% of the prison population for drug charges, although they use drugs at the same frequency as other races (Drug Policy Alliance, 2012).

Research validates that harsh sentencing practices, such as mandatory minimum sentencing for drug-related offenses, is costly and harmful to society (Lowthian, 2010). Locking people up in prison for extended amounts of time fragments the family unit which is not only harmful to the offender, but also has dire consequences for his or her

children and families (Arditti & McClintock, 2001). The impacts of destructive and excessively punitive policies reverberate through society beyond those families that come into direct contact with the criminal justice system. Programs that keep families connected provide rehabilitation and support services are not only more cost effective and humane, but the program participants are also less likely to reoffend.

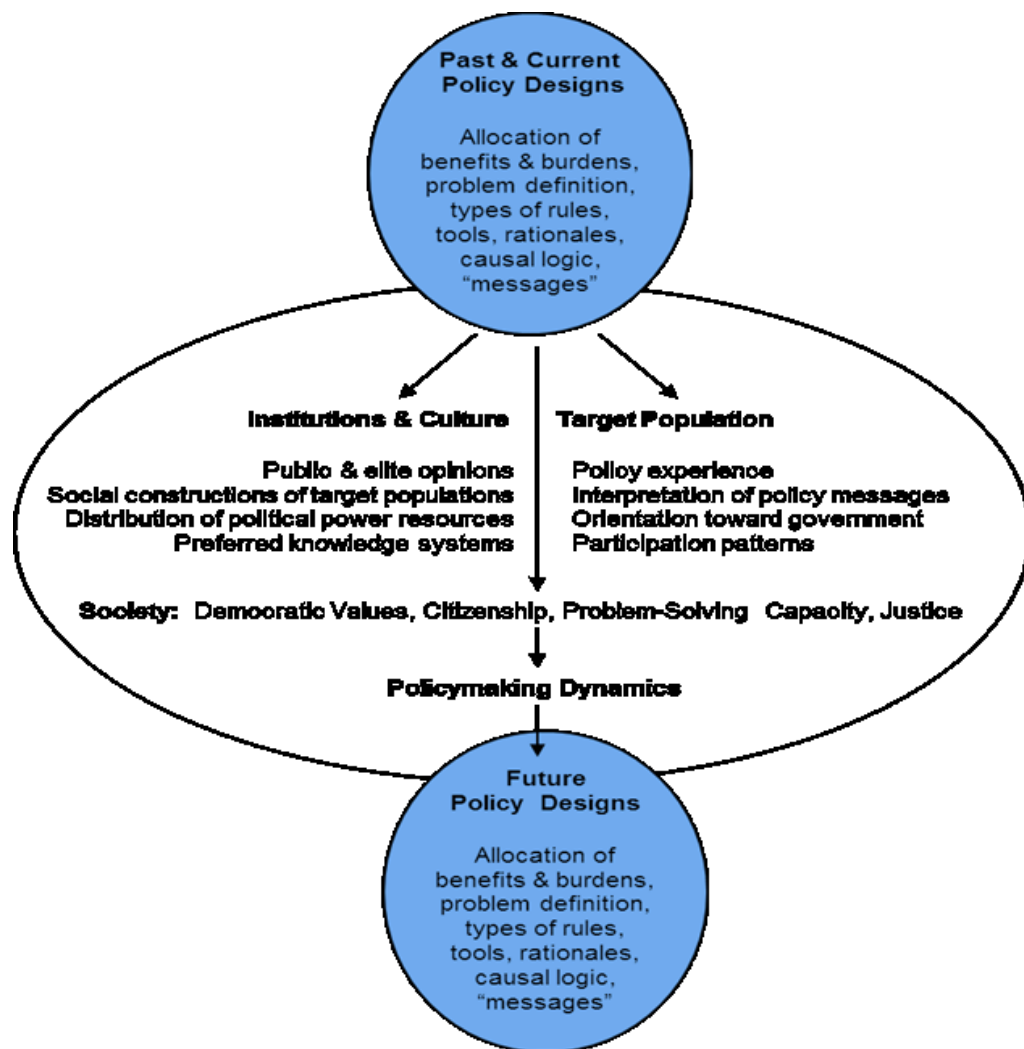


Figure 3. Degenerative policy cycle. From *Policy Design for Democracy*, by A. L. Schneider & H. Ingram, 1996, Lawrence, KS: University Press of Kansas.

## Summary

Trends encountered in the literature review include arguments that many of the flaws with drug policy are intentionally built into the political structure to keep certain populations suppressed (Sargent, 2002). Various forms of evidence are used to support this stance; such harsh punitive policies are a tool to exterminate the political voice of marginalized groups and keep them from participating. Individuals released from incarceration in the United States are disenfranchised more harshly than in any other country in the world (Alexander, 2012).

Policies have been implemented that disenfranchise offenders long after they have served their time. Over 5,000,000 individuals are disenfranchised from the political process by being stripped of their voting rights because of their felony convictions (Sentencing Project, 2014). Policies bar individuals with felony convictions from social services and educational grants that are pertinent to securing employment and leading productive lives. It is questionable why the criminal justice system is set up to fail those that come into contact with it instead of rehabilitating the person and providing them with the tools needed to sustain a crime-free way of living. The system has been designed in such a way that there needs to be a steady influx of prisoners to sustain the infrastructure known as the Prison Industrial Complex. Prisoners are also in danger of being exploited by providing cheap and expendable sources of labor for manufacturing a wide range of goods.

Over-incarceration of nonviolent drug offenders is an epidemic; in the federal system, 96% of inmates serving life without the possibility of parole are there for

nonviolent, drug-related offenses, 18% being first-time offenders (American Civil Liberties Union [ACLU], 2013). Research supports the use of community intervention and harm-reduction strategies as more effective means to address drug use in the community. Sharma, Burrows, and Bluthenthal (2008) found evidence that grassroots organizations and the community played a vital role in establishing harm-reduction activities. However, the value of the public health perspective related to harm reduction has been neglected in policymaking. Emmanuelli and Desenclos (2005) indicated that nongovernmental organizations acted as a catalyst to persuade the government to establish policies that would enable harm-reduction programs.

Prison expenditures are siphoning resources away from areas where they could potentially be put to better use. Nonviolent offenders are incarcerated and removed from society for lengthy periods of time and rarely receive rehabilitation or the tools necessary to help them assimilate back into society upon release. Harsh punitive approaches to the drug issue are failing and are monetarily and socially costly. The amount of money spent per prisoner can be quantified, but the ripple effects incarceration has on families and the social fabric of our nation is difficult to calculate.

The United States has a long history of racially and economically discriminatory policies, which has ultimately led to the over-incarceration of African Americans (Alexander, 2012). Dr. Martin Luther King asserted that people's indifference to the plight of others helped to legitimize discriminatory policies; this is relevant decades after he made his initial observation. People tend to have little regard for problems impacting individuals outside their group.



## CHAPTER III

### THEORY, PROGRAMS, AND REHABILITATION

Diffusion of innovation has been applied to the examination of policy adoption in a wide range of disciplines. There has not been an inquiry analyzing the diffusion of gardens in correctional settings such as prisons and jails. Diffusion of innovation analyzes the adoption of a new idea, technique, product, or service, focusing on how it is communicated and adopted by a social system over a period of time (Rogers, 2003).

In the context of this research, the diffusion of innovation is indicative of ideas that begin at an institution or segment of society and spread to other parts of that society (Richerson, Borgerhoff Mulder, & Vila, 2001). The process can be illustrated with the term “tipping point” to describe when the emergence of a trend or transformation becomes contagious and spreads widely (Gladwell, 2000). It is necessary to understand the relationship between culture, values, existing practices, and political/social/environmental climate in order to facilitate the adoption of a new innovation.

Punctuated equilibrium theory as described by Boushey (2012) integrates policy dynamics that impact the speed and scope of diffusion as well as the political response. Reframing how the problem is defined can expose issues to new audiences and draw in the attention needed for promoting change. The perception of a policy target also

impacts diffusion; those with minimal appeal will be less likely to draw political involvement and policy change (Savage, 1985).

### **Part I - Collaboration**

Government creates and implements policies that directly impact citizens, making them important stakeholders that should have a voice throughout the policy formulation and implementation process. There are different mechanisms that allow the government and citizens to collaborate; the forum utilized can also limit participation to different subsections of the population. Deliberative strategies have been identified as the most citizen-centered approach in public management by building public trust and support, as well as promoting governance (Cooper, Bryer, & Meek, 2006).

#### **Healing Communities Through Civic Engagement**

Civic engagement, as conceived in the discussion to follow, demonstrates numerous ways the community can be engaged to address issues related to poverty, crime, and policy. Research supports the use of grassroots organizing to intervene in issues faced by communities, because they can introduce additional perspectives and shed light on problems (Christens, 2010). Communities are closest to the issues impacting them and can provide valuable insight and solutions to the negative byproducts of incarceration such as unemployment, poverty, and recidivism. They also assist formerly outcast members of society assimilate back into a legitimate lifestyle. More recent movements around various Occupy causes have revitalized grassroots activity. In 2011, the Occupy Movement began speaking out against a variety of issues pertaining to social,

political, and economic justice, including the Prison Industrial Complex and mass incarceration. Occupy groups continue to reclaim public space in order for people to meet collectively and organize actions and resistance at a local level (Occupy Oakland, 2014). The research examines how collaborative grassroots systems have emerged and have been duplicated in an effort to bring about change. There are multiple levels of formality associated with grassroots organizations and how they came into existence, but their commonality is their motivation, which is to address institutional and social injustice.

Innovative ideas, technology, and engaging communities have helped with the renewal of civic engagement and have bolstered how citizens and communities are harnessing their power. Involving former offenders, community members, and other stakeholders helps produce effective and respected policy decisions as well as lend legitimacy to government. Citizens and communities are finding ways to engage in politics by becoming active in neighborhood associations and grassroots advocacy groups and by sitting on advisory boards. Often the groups and associations partner or collaborate with city officials, nonprofits, and local businesses to work on initiatives, address issues, promote services, or advocate for a cause.

Grassroots efforts include outreach and education on drug use and harm reduction and taking initiative to utilize community resources to address poverty and addiction and to deter criminal activity. Fostering networks of key players, having adequate funding and support in technology, and administrative assistance can help promote policy reform. Collaboration across boundaries and between organizations and communities that build

upon common ground and are inclusive of the “whole system” promote deliberative decision making (Gergen, 1999). Community problem solving often begins with several individuals or a few organizations. Community groups and organizations have initiated efforts to address the stigmatization and discrimination toward drug use and abuse. In forward-thinking communities, one can find evidence of a broad shift in policy activities which includes the creation of peer support groups and coalitions of former drug users, their family members, and treatment specialists (White, 2007).

Once the problem has been identified, there is a process involving various steps to determine how to frame the problem and prioritize the complexities associated with it. The network and community work together to identify possible solutions and ways to intervene. They also determine what key indicators of success are so they will be able to determine if they are making progress. Next is the actual implementation of the ideas and taking action to make a difference; this may involve nonprofit organizations, multisector participants, as well as community members and volunteers. In order to sustain itself and be seen as an inclusive community-wide effort, community problem solving typically involves multiple sectors and continually seeks out additional participants (Connor & Kadel-Taras, 2003). The drug policy reform movement involves a vast network of recovery advocates and revolves around promoting recovery, harm reduction, and rising above the stigma attached to former addicts. Networks can come in the form of multigovernmental, multisectorial, and multiorganizational collaborations; and they may span vertically and horizontally (Agranoff & McGuire, 2003). An important component toward the tail end of the process to promote continual progress and growth is to evaluate

the program or initiative; performance measures and benchmarking may be utilized to determine if the initiative is working as planned and to help discover ways it can be improved or modified to maximize effectiveness.

Forming collaborations, partnerships, and coalitions can accomplish goals by leveraging skills and resources. Partnerships were challenging for some projects; efforts related to offender reintegration into the community and harm reduction had issues with community partners following through with assistance or were met with resistance from citizens and groups. There is only so much that can be planned for; there are environmental factors beyond the control of the coalitions that impact the effectiveness of their initiatives. The political climate, timing, availability of funding, and public perceptions can make or break the collaborative efforts. Research calls for more attention to what communication strategies are most effective and utilized in civic engagement related to intervention, along with the determinants of effectively implementing drug prevention and intervention strategies within the community. Several researchers (Astbury, 2008; Chinman et al., 2005; Petersilia, 2008) echoed concern that there was a gap in research translating theory to practice and program implementation.

Justice is divided into different categories; the four most prevalent types are distributive/social, retributive, procedural/compensatory, and restorative. Distributive justice pertains to the way benefits and burdens are distributed among citizens, determining whether resources are fairly allocated. Retributive justice is in alignment with “just deserts” and addresses punishment and the extent of corrective justice applied to criminal behavior. Procedural/compensatory justice deals with fairness, impartiality in

decision making, and dispute resolution such as how people are compensated for events, such as an injury. Restorative justice deals with healing victims by repairing harm done to them by offenders taking responsibility for their actions (Maiese, 2003).

Criminologist Joan Petersilia (2008) conducted numerous studies that have debunked the effectiveness of retributive models. The evidence exists that the longstanding punitive approach of drug policy is ineffective and costly. Research by Arditti and McClintock (2001) produced solid proof that harsh sentencing practices such as mandatory minimum sentencing causes more harm to society than good. Locking individuals up in prison for extended amounts of time fragments the family unit, which is not only harmful to the offender but also has dire consequences for his or her children and families (Arditti & McClintock, 2001). Programs that keep families connected provide rehabilitation and support services are not only more cost effective and humane, but the program participants are also less likely to reoffend. Even with large amounts of credible research, politicians are not consistently open to acting upon the science-based evidence that discredits excessively punitive practices.

There has been an increase in awareness and promotion in adapting treatment models and establishing community interactions that focus on personal and social responsibility. Instead of focusing on criminalizing addiction, efforts are being made to keep families connected, in addition to establishing and maintaining ties to the community. Empowerment models work on teaching addicts to overcome addiction by breaking unhealthy habits and helping them to assimilate social norms and build confidence and communication skills through behavior modification (Peterson, Speer, &

Peterson, 2011). Having access to support services while addicts are getting on their feet and working through their addiction is crucial; and society does addicts and former addicts no favors by enabling discriminatory practices around employment and social services.

Dhami and Joy (2007) provided evidence that community involvement had a positive impact on deterring and intervening in drug use by rebuilding ties to the community. Community involvement included programs like restorative justice efforts where offenders and victims worked together in controlled environments to repair the harms caused by crime. Such programs help the offender put a face to the victim and see how his or her actions impacted the victim's life as well assist victims in getting closure. Some of the challenges are in defining the community to be served by the program, recruiting and retaining suitable volunteers, and obtaining financial support. Having a volunteer pool that is representative of the population the program is aimed at serving helps participants feel a sense of inclusiveness.

Community science is a collaborative multidisciplinary approach to drug use and abuse which focuses on prevention, education, and treatment (Chinman et al., 2005). A central component to this approach is community capacity, which is related to the degree citizens participate, define goals, understand issues, communicate effectively, and network. Community capacity helps to develop strategies that are related to the prevention, education, and treatment components of community science; the implementation of the strategy relies upon effectively collaborating. Community capacity demonstrates how grassroots movements like neighborhood associations and

more recently the Occupy Movement have encouraged citizens to take responsibility and have a voice in the direction of their communities and public policy.

Communities, researchers, addiction specialists, and advocacy organizations have come out in support of adopting harm reduction and public health approaches to drug prevention and treatment models, along with establishing community networks that focus on personal and social responsibility. Public health focuses on developing an understanding of the broader contextual influences of drug use, including socioeconomic factors. Instead of criminalizing addiction and incarcerating offenders, efforts are being made to rehabilitate users, keep families connected, and reestablish and maintain ties to the community. This is effectively done by leveraging community resources.

Engaging citizens at only one stage of the policy process may likely make citizens less trusting of government than if they had been involved from policy inception, implementation, and beyond (Cooper et al., 2006). If people care enough about policy and are motivated to get involved in discourse and taking action, then the government has an obligation to take what they are saying into consideration. The most favorable results are derived from mutually respectful forums where different viewpoints take turns and practice active listening to help guide stakeholders through the most appropriate course of action, leading to joint decision making. Combining approaches that utilize technology, educate stakeholders, encourage discourse, engage a wide spectrum of citizen participation, and result in government responsiveness produce thoughtful and well-informed policy.



## **Harm Reduction**

Preventative and harm-reduction strategies on how to approach community issues related to alcohol, criminal behavior, and drugs deserve attention. Harm reduction embraces the primary components related to promoting prevention, education, and treatment. By focusing on these strategies, society learns to effectively address drug use by framing it as a public health issue. It takes the coordination of various educators, medical professionals, outreach groups, and community police officers to leverage resources in a manner that produces results for communities in need. Prevention is a critical component in the harm-reduction approach; providing accurate and reliable information around the social nature and health risks related to drug consumption is critical. Delivering messages youth identify with, as well as realizing preaching abstinence is not the most practical approach, helps individuals make informed choices and promotes openness to conversations around drug use. Acknowledging that prevention is not going to be successful all the time allows for a realistic approach to managing the harms associated with drug use.

The Harm Reduction Coalition (HRC) is a national organization dedicated to treating addiction as a medical condition and providing the public with reliable information on drugs and the risks associated with drug use. The HRC conducts training sessions for professionals working directly with drug addicts and at-risk populations. By taking a realistic approach to drug use and providing accurate information, harm reduction reduces the negative impacts drug use has on society. People are educated and given resources to help them be as safe as possible regardless of where they are in their

addiction. They are not judged for their choices; they are treated with dignity and compassion and are provided with support should they want to discontinue using.

Safety First is a reality-based approach to educating teens about drugs using honest, science-based information where reducing harm and educating about the consequences of drug use is paramount (Rosenbaum, 2007). Parents are given ideas and information on how to openly discuss drugs with their children. The value of this approach is that it acknowledges that abstinence may be ideal but is not the most effective or realistic approach. Zero-tolerance policies put teens in danger by not providing them with accurate information and a forum to get reliable information on drugs. Maintaining realistic expectations fosters trust from teens and reduces the harms associated with drug use.

Involving the community in decision making is empowering and helps to define the issue and provide ideas on how best to address it locally. Community-level interventions identified included promoting harm reduction, providing sensible school curriculum on drugs, disseminating information to dispel stereotypes, using social media outlets to bring awareness to issues, and finding ways to collaborate with local advocacy groups and law enforcement. Grassroots movements including networks of nonprofits, neighborhood associations, and advocacy groups encourage citizens to take responsibility and have a voice in the direction of their communities.

## **Part II - Horticulture and Partnerships**

### **Horticulture Therapy, Therapeutic Horticulture**

There is a considerable amount of research on “what works” based on empirical studies that determined which strategies and interventions produced the best results. Timing and framing of issues is a delicate matter; social constructions and community perceptions of the issue can greatly influence policy and impact the success of the efforts. Several bodies of research address community corrections efforts in which people who had engaged in illegal behavior were given programs and rehabilitation in the community instead of being sent to prison (Astbury, 2008; Blenko & Sung, 2006). Assessing the individual needs of offenders and matching them with treatment geared toward their particular condition was suggested as a favorable and effective approach, yet it is often a difficult area for program administrators to adequately address (Astbury, 2008). Maintaining flexibility and integrity throughout the implementation process without jeopardizing the integrity of service delivery and program design can be a challenge.

Gardens have been a staple in medical and correctional institutions since their inception. Initially a garden in the prison setting provided a food source and means to exploit the free labor. It is important to delineate between therapeutic gardening designed to rehabilitate individuals and prison farms that exploit labor. Many times inmates are put off by gardening and avoid any type of horticulture-related activity due to various reasons, including the history of slavery associated with farming. Perkinson’s (2010) research supports the idea of two kinds of prison models: the reformatory model that was established in the Northeast and the retribution model derived from slavery. In the South,

the racially oppressive retributive model reigns supreme. Many of the prisons are located on what were once plantations. Some prisons were and still are run in a plantation-like fashion where inmates are forced to serve their time performing hard labor. The transition from slavery introduced convict leasing, a workaround that enabled the exploitive plantations-turned-prisons to maintain inexpensive labor

Hard labor exists today, primarily in southern states like Texas, Georgia, Arkansas, and Louisiana. As of 2002, it was reported that 16% of Louisiana inmates, 17% of Texas inmates, and 40% of Arkansas inmates are required to perform hard labor (C. G. Camp, 2003). The prisons have attempted to camouflage the harshness of the forced labor by presenting it as vocational training (Shenwar, 2008). Over 90% of Angola's inmates will never be released due to extreme sentencing practices in the state of Louisiana. The inmates are said to work 8 hours a day, 5 days a week; but it is not uncommon for inmates to get written up for disciplinary action and have to work additional hours. Inmates regularly work more than 65 hours per week. With quotas needing to be met, it creates an ideal situation for officers to fabricate disciplinary issues in order to get extra work out of inmates. Inmates also maintain the yards of prison staff that reside on prison property free of charge. As unjust and exploitive as these practices are, they continue due to the interpretation of the U.S. Constitution where the 13th Amendment states, "Neither slavery nor involuntary servitude, *except as a punishment for crime where of the party shall have been duly convicted*, shall exist within the United States."

In the late 18th century, literature in medical journals documented the benefits of gardening and found patients that spent time in gardens had an expedited recovery time (Jiler, 2006). Having a connection with nature is known to have a calming effect, which lowers stress and creates a sense of well-being. Prisons and correctional facilities that continue to operate gardens solely for the purpose of food production are missing out on a potentially beneficial rehabilitative resource.

Horticulture therapy has been formally used as a therapeutic tool for several decades, with documented accounts of its benefits going back to the late 1700s. The Menninger Institute in Kansas City used horticulture therapy curriculum in the field of psychology. The first undergraduate horticulture therapy program was established at Michigan State University around 1955 (Jiler, 2006). Horticultural therapy initially involved individuals with physical rehabilitation; since then the application of therapeutic gardening has expanded and has been effective with various types of rehabilitation (Sandel, 2004). It has been useful in treating individuals with disabilities, mental illness, disease, and emotional difficulties.

There are several purposes served by horticultural programs in correctional settings. As a whole, gardening serves to develop skills, improve confidence and social skills, and fosters a sense of interconnectedness between humans, nature, and the environment. Through gardening and horticultural therapy, inmates are able to relate this interconnectedness to their own existence. Horticulture therapy used in conjunction with other forms of therapy and training transforms inmates and brings them in touch with feelings and promotes self-awareness. Giving incarcerated individuals a skill and

something to nurture and care for benefits the institution, the inmates, and society. Correctional facilities have implemented gardening programs and noticed positive changes in the attitudes and interactions among inmate participants and a reduced number of behavioral incidents (Waitkus, 2004).

Several established prison gardening programs have shed some light on the benefits of awakening inmates' environmental awareness and introducing sustainable skills by giving them something to nurture with purpose. Recognizing the therapeutic benefits of gardens helps develop programs that teach inmates about horticulture, garden design, and how to care for crops. Gardens can be aesthetically pleasing to the normally harsh and barren prison landscape and offer a sense of accomplishment and serenity to those who work in the garden. In some institutions prison garden programs have eased overcrowding by allowing inmates to reduce their sentence 1 day for each shift they work in the garden. The dedication, commitment, and focus required to care for a garden teaches the inmates lessons that they can take with them beyond prison walls. Gardens are a source of nutrition and teach the inmates skills that can transition into employment opportunities upon release.

Research was conducted on a program involving horticultural therapy in Lamar County Texas by a researcher from Kansas State University, Richard Mattson. The program was established to cut costs by sentencing certain offenders to probation instead of jail. Mattson sought to determine the effectiveness of horticultural therapy on those sentenced to probation; 383 subjects were tested at four phases over a 3-year period while participating in food production, environmental restoration, and public space

improvement projects. The subjects in the horticultural therapy group showed substantial changes in self-esteem, increased environmental awareness, and robust knowledge in horticulture in comparison to those performing traditional community service activities. One of the most notable findings was that the recidivism rate for the horticultural therapy group was 26% in contrast to the 49% average for those not engaged in such activities (Jiler, 2006).

### **Sustainable Corrections and Rehabilitation**

California is one of the costliest states to imprison a person; at \$51,998 it is double the national average, and a small fraction of that amount (\$926, 1.8%) is allocated toward rehabilitation (Petersilia, 2013). Empowerment models work on teaching addicts to overcome addiction by breaking unhealthy habits and helping them to assimilate social norms and build confidence and communication skills through behavior modification (Peterson & Reid, 2003). White (2007) examined the recovery advocacy movement that highlights how communities have formed networks to address the barriers faced by people with drug dependencies, acknowledging that their criminal activities were often a result of their addiction. Recovering addicts having access to support services while getting on their feet and working through their addiction is instrumental to their overcoming their disease.

Addiction is not the only barrier encountered by citizens returning to the community after incarceration. Establishing housing and obtaining identification, transportation, healthcare, childcare, job training, emergency financial assistance, and counseling are factors that can set back an individual's progress if not addressed. An

integrated systemic approach involves providing the returning citizen with the support and resources needed to be successful. Effectively executing the delivery of services takes collaboration and partnership between the prison, horticulture society, community, and a host of organizations and social services. Roots to Re-Entry in Philadelphia and the Garden Project at Rikers Island in New York are two examples of programs that have assisted returning citizens with integrated services.

Catherine Sneed (2000) established the San Francisco County Jail Horticulture Project after counseling inmates and realizing they needed activities that gave them a sense of purpose and hope. Therapists took the gardening process and mirrored it with life experiences, enabling the inmates to reflect on their own situations on a deeper level and make changes. Weeding is equated to removing negative behaviors and influences from one's life. Transplanting and watering is a metaphor for being released from jail and continuing their personal growth. The program ran for 10 years and reduced behavioral issues and developed positive characteristics within participants. Gardening provides a therapeutic component and teaches inmates skills they can take with them beyond jail. In 1992, a postrelease program called the Garden Project was established and focused on delivering lessons of growth, renewal, and perseverance while providing a living wage.

The Insight Garden Program was established at San Quentin State Prison in 2003 by Waitkus; inmates are exposed to horticulture therapy and learn about landscaping, gardening, planning/design, and irrigation. In 2004, Waitkus wrote her thesis on the impacts the prison garden had on the physical and social climate of the prison. Data were



gathered through in-depth interviews with the garden program participants and prison staff. Descriptive data were collected on the number of lockdowns and disciplinary instances during the research. The findings revealed that the garden provided refuge, decreased stress, and was the only place that was “neutral” territory where races intermingled. The number of disciplinary write-ups on the yard decreased 36%. Program participants reported benefits of working with nature such as a sense of hope and confidence in gaining skills they could utilize after release. Green jobs are an area of employment that benefits offenders by providing a steady income and builds ties with the community by providing produce to locals through urban and neighborhood gardens. This type of collaboration is especially valuable in settings known as “food deserts” where there is a lack of fresh produce and healthy food options in the area.

Planting Justice collaborates with the Insight Garden Program (IGP) in San Quentin State Prison where inmates are educated on urban permaculture and organic food productions. The men are then involved in planning, designing, building, and caretaking a garden within the prison. There are postrelease job placement opportunities within several days of release; inmates are able to secure employment with Planting Justice’s Transform Your Yard program. Figures from a 2011 survey showed that the recidivism rate for 117 men who participated in the IGP program 2003-2009 had a 10% recidivism rate within 3 years after release compared to the state average of 70% (Insight Garden Program, 2014).

Planting Justice is a grassroots organization established in 2009 in Oakland, California that utilizes agriculture to address injustices within the food movement and to

promote economic, social, and food justice. The founders had a vision to create a regenerative self-funding social change movement that provides healthy food and jobs. Initially, funds were raised by going door-to-door, reaching out, and garnering support within the local community. Planting Justice has grown into an income-generating nonprofit that provides access to healthy food, grassroots community organizing, and green jobs in edible landscaping. Aside from teaching economically disadvantaged communities how to grow healthy food, Planting Justice educates the community on environmental, sustainability, and entrepreneurial opportunities.

The organization achieves this by building local, sustainable food sources in conjunction with schools, community organizations, government agencies, local businesses, and citizens. The collaborative cross-sector approach makes positive impacts in a variety of areas by employing people locally and teaching them to grow sustainable food sources while being environmentally conscious. A true grassroots model is utilized; volunteers literally go door-to-door in communities sharing the vision and building support from the neighborhood by providing workshops and work parties.

Vocational Rehabilitation Impact Center (VRIC), formerly called the Cook County Sheriff's boot camp, houses a .75-acre vegetable garden run by the Chicago Botanic Garden's Windy City Harvest program. Instead of facing lengthy prison sentencing, nonviolent offenders between the ages of 17 and 35 have a chance to participate in a program that provides them with socialization and teaches environmental sustainability. The garden program is one of several green vocational training tracks offered. The program provides structure and skills, which become useful when

transitioning into a career path after completing the program. In collaboration with City Colleges of Chicago, program participants can earn certificates in horticulture and urban agriculture. The 9-month certificate program teaches about outdoor and greenhouse horticulture, business, and marketing. The first 6 months consist of hands-on training, and the following 3 months are a paid internship.

In addition to the vocational aspect of the program, participants are also provided comprehensive drug and alcohol counseling. The VRIC recidivism rate is 30% compared to the 67% average. A grant provides pay (approximately \$9.50/hour) to the graduates while they work at Windy Harvest urban garden sites, picking and delivering produce and selling produce at farmers markets. The graduates expressed gratitude for the opportunity to get their lives on track and serve the community at the same time. The program appears to have helped the young men see the choices they have and how they can positively impact their community.

Cedar Creek Correctional Facility in Washington state participates in the Sustainability in Prisons Project, which involves farming moss, in addition to examining how a vermiculture and thermophilic composting system reduce kitchen waste. The program, “Sustainable Living—Sustainable Lives” includes a lecture series provided to inmates and prison staff by visiting lecturers from universities and government agencies. The program provided valuable research data around moss farming, sustainability, waste reduction, and direct inmate rehabilitation. One inmate participant enrolled in the horticultural program at a community college upon release, with an interest in pursuing a career path. The program also produced a forum where prison administrators, inmates,

and academic faculty discussed how the inmate's experiences may translate into opportunities upon release (Ulrich & Nadkarni, 2009).

### **Employment and Recidivism**

Recidivism is heavily dependent upon familial ties, social networks, and employment opportunities that provide a living wage. Employment prospects are dismal in a harsh economy where former inmates have to compete in a market saturated with experienced individuals who do not have a criminal record. The War on Drugs has sent disproportionately large numbers of men of color to prison for primarily marginal offenses related to possession of drugs and low-level sales; a criminal record impedes their ability to find employment if and when they are released. A study conducted by the Urban Institute revealed that 50% of former inmates return to their old neighborhoods (La Vigne & Samuels, 2012). This magnifies the need for community support and local job opportunities in order to help prevent individuals from returning to crime out of economic necessity.

Formerly incarcerated individuals are barred from various benefits associated with employment, education, social services, housing, and voting rights. Disenfranchisement from public services is a device that reinforces the alienation of political voice and assimilation back into society. People with criminal backgrounds have been barred from working in certain professions. Finding employment is one of the most difficult hurdles offenders face. Having a criminal record automatically eliminates individuals from many candidate pools. Recidivism rates are strongly linked to employment.

### **Part III – Diffusion of Innovation**

#### **Perceptions of the Innovation**

Rogers (2003) argued the decision process on whether to accept or reject an innovation incorporates a cost-benefit analysis approach where people tend to adopt the innovation if they feel it will be more favorable than the status quo. Uncertainty can hinder the adoption of an innovation; many questions arise when individuals are considering change. The perceptions of the potential adopters to the following characteristics of the innovation will determine whether it is accepted and the timeliness of its induction.

**Relative change.** The degree to which an innovation is perceived as an improvement to the status quo. The downfall of this characteristic is the lack of scientific or substantive facts about the innovation may be insufficient to gain support and adoption. Innovative programs may not have been established long enough or have the resources to monitor the program and collect data for an in-depth analysis.

**Compatibility.** Alignment with values, experiences, and needs of the institution or society that are potentially adopting it. The question of whether the innovation is socially acceptable. An innovation that presents an exhaustive divergence from the status quo and requires tremendous effort for adaptation may cause uncertainty and deter the decision to adopt.

**Complexity.** Practicality and the degree to which there is difficulty comprehending and employing the innovation. If the innovation can be broken down and adopted incrementally, it is more likely to be adopted (Rogers, 1995). Many of the

gardening programs started out small, whether it was contained within a few square hundred feet or at a single facility; and as time progressed, they added different plants, vegetation, and additional space and spread to other facilities. Also, once the techniques and curriculum were developed, they could be shared and/or replicated at other institutions.

**Trialability.** The extent to which the innovation can be utilized and piloted for a limited period of time. The decision to adopt is more likely if the trial period does not require a substantial investment of time and resources.

**Observability.** Visibility of results; do people recognize a positive change? In the context of inmate gardens, the visible results could be aesthetic, behavioral, and cost savings.

Geoghegan (1994) asserted that identifying and addressing the differences of early adopters and early majority adopters is the recipe for a successful adoption and diffusion strategy. An inclusive approach that considers differences in terms of needs and perceptions of the early majority is a method to introduce the innovation and deter any aversion that may be the result of technophobia. Technophobia is resistance which can be addressed through training, support, and alignment of the innovation with a purpose directly related to their discipline. Geoghegan's research was rooted in computer technology, but the fear of new and advanced ideas in relation to policies and programs is an issue across disciplines. Minimal risk of failure in conjunction with institutional sponsorship and support helps promulgate the diffusion of the innovation.

## Innovation-Decision Process

The process by which knowledge of an innovation is conveyed, attitudes are formed, a formal decision is made on whether to embrace or reject implementation and final confirmation is known as the innovation-decision process. The diagram in Figure 4 illustrates the stages, followed by a description of each stage.

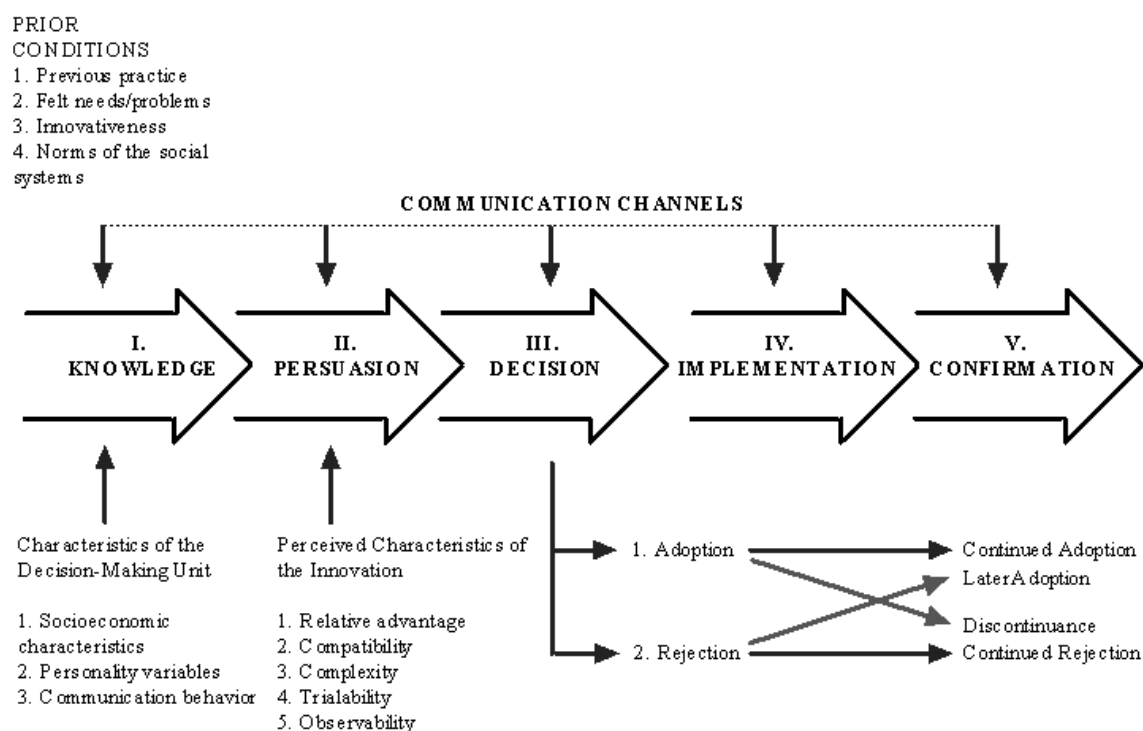


Figure 4. Innovation-decision process. From *Diffusion of Innovations* (4th ed.), by E. M. Rogers, 1995, p. 162, New York, NY: The Free Press.

**Knowledge.** Understanding and awareness of how an innovation functions, why it works, and overall general exposure to the new concept. Jail and prison administrators are likely to understand certain benefits associated with agriculture, such as training inmates with useful skills and cost savings by growing produce onsite; but they may not

have considered the therapeutic benefits of working in gardens. Horticulture therapists can educate laypersons on the beneficial and therapeutic components associated with gardening in a wide range of settings.

**Persuasion.** Favorable or unfavorable attitude or perception of the innovation. This component has more to do with feelings and how the individual is able to apply the innovation to his or her situation. The individual may also look to see whether colleagues or associates hold a similar view. It is particularly beneficial if leadership and influential people are in support of the innovative program; other colleagues will be more inclined to back the program. Persuasion can be particularly challenging in a correctional setting where the employee mindset tends to be focused exclusively on punishment. Framing the conversation in a manner to ensure everyone understands the benefits of rehabilitation provided by the innovative program is critical.

**Decision.** Engaging in activities to determine whether the innovation will be accepted or rejected; potential commitment to adopt. The process can involve multiple discussions with stakeholders or holding a forum where people can express concerns, ask questions, and engage in a healthy discourse. Approval is granted when the decision makers discern the innovative program is worthwhile and has propensity to bring a desirable outcome.

**Implementation.** Putting the new concept or program into practice or utilizing a new technology. Obstacles to implementation include cost, systemic resistance, lack of infrastructure, and rigid bureaucracy. Implementation can become challenging if the



individuals who decide to adopt the innovation are not actually the ones utilizing, administering, or applying it.

**Confirmation.** Evaluation of the results, reinforcement through positive results. Tracking progress assists with developing metrics for benchmarking. Measuring the performance and impact of the innovative program bolsters its integrity and provides evidence of its effectiveness. Also, late majority adopters and laggards prefer to see how the innovation worked out for others before making a decision on whether or not to adopt it.

### **Adopter Categories**

The innovation decision hinges on the personal characteristics of individuals and the degree to which diversity exists. The process of adopting change is described as a bell curve, slow going at first, and as momentum gains there a tipping point that occurs near the middle; then adoption trickles off toward the end. The adopter categories innovativeness rating under normal circumstances is illustrated in Figure 5. Adopter categories include the following:

**Innovators.** Can be characterized as venturesome personalities that imagine the possibilities and benefits of being on the cutting edge. They may be viewed as a gatekeeper and generator of new ideas, on occasions considered eccentric, and may lack respect by the social system. In 1982, Katherine Sneed of the Garden Project in San Francisco was an innovator by introducing gardening to the correctional setting with rehabilitation and program enrichment in mind; she was a visionary and not afraid to try something different.

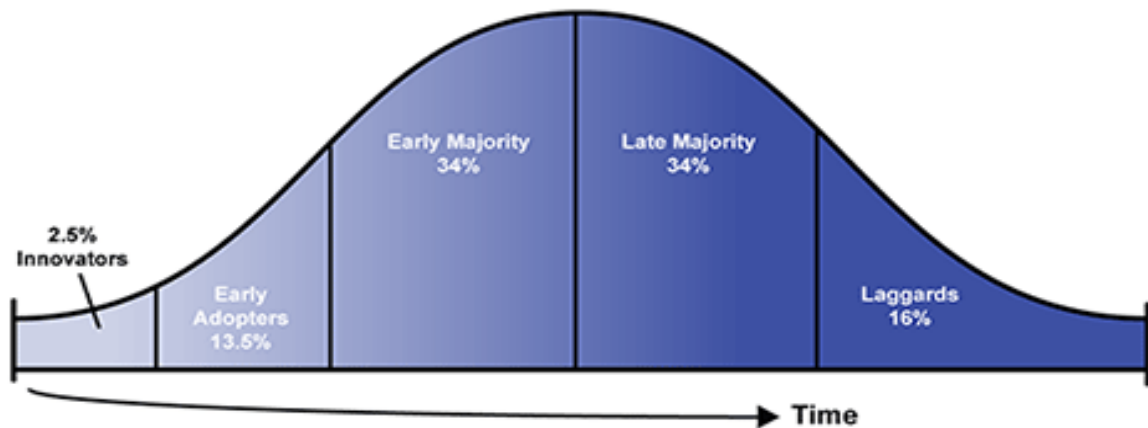


Figure 5. Innovation adopter categories. From *Diffusion of Innovations* (4th ed.), by E. M. Rogers, 1995, New York, NY: Free Press.

**Early adopters.** Characterized as well-informed decision makers, the most elite of opinion leadership reside in this area. The decision of whether or not to adopt the innovation bears a good deal of weight when it comes to influencing the decisions of potential early adopters. They utilize the data furnished by the innovators to inform their own adoption decisions. They are transformers that tend to be the forward-thinking members of the mainstream and are the main target of change agents. At the inception of the Insight Garden Project at San Quentin, Warden Jeanne Woodford was open to the program, and her willingness to experiment helped garner support and make the program a success.

**Early majority.** The larger subsection tends to deliberate before making a decision and rely on the trusted opinion leaders. This junction is the “tipping point”

where the inclination to adopt is greatly increased once this group is on board. Once the saturation level piques, the innovation is widely adopted.

**Late majority.** The domino effect prevails; even those who are apprehensive of the innovation tend to adopt due to social pressure and/or economic benefits of keeping in synch with the larger group. This group waits until it is evident that the social majority is supportive before adopting.

**Laggards.** This group is usually traditional or socially isolated. Their disposition is not accepting of change; they are suspicious of innovations or may not be aware of the benefits of an innovation. They can also be so set in their ways that any deviation from the historical modus operandi is incomprehensible.

Communication is central to the diffusion of innovation. The media and interpersonal communication are the most effective ways to spread awareness and influence opinions and decisions on whether or not to adopt an innovation. Early adopters will be more likely to accept an innovation if they are included in the planning and policymaking process and efforts are made to address differences in relation to their perceptions and needs. Late majority adopters' and laggards' chances of adoption are increased when the early majority is involved because of their shared vertical communication style (Eneh, 2010). Diffusion theory argues affecting opinion leader attitudes toward an innovation is a powerful way to impact the adoption of an innovation. Interpersonal ties tend to be most effective when informing and influencing a change in attitude, exchanges with trusted peers and opinion leaders diminish resistance. The nature of the social system determines what type of opinion leader a change agent should

interact with. Table 1 describes attributes associated with early adopters and early majority adopters.

Table 1

*Characteristics of Early Adopters and Early Majority Adopters of Innovation*

Early adopters	Early majority adopters
Technology focused	Not technically focused
Proponents of revolutionary change	Proponents of evolutionary change
Visionary users	Pragmatic users
Project oriented	Process oriented
Willing to take risks	Averse to taking risks
Willing to experiment	Look for proven applications
Individually self-sufficient	May require support
Tend to communicate horizontally (focused across disciplines)	Tend to communicate vertically (focused within a discipline)

*Note.* From “Technology Transfer, Adoption and Integration: A Review,” by O. C. Eneh, 2010, *Journal of Applied Sciences*, 10, 1816.

Heterophilous systems are diverse, have an interest in new ideas, and are open to interactions with individuals with different backgrounds, attitudes, and values. Socially dissimilar individuals link up and exchange information about innovations; as the term “weak ties” implies, a greater information flow occurs when communications are heterophilous (Valente, 1996). Change agents can hone in on several opinion leaders held in high regard; if they are persuaded to adopt the innovation, it will have a

trickledown effect on the rest of the population. Their diffusion process is indicative of a centralized, linear, top-down system.

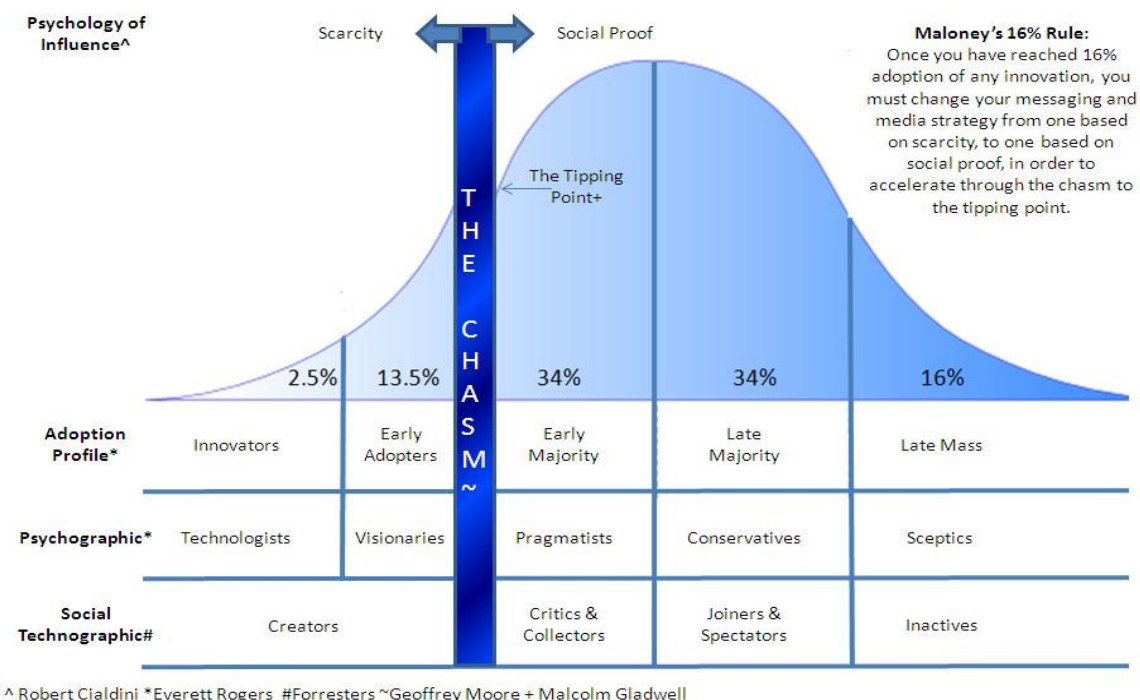
Homophilous systems tend to be more closed off to ideas that do not fit with their established social norms and are most comfortable interacting with similarly minded individuals. These groups have less innovation because opinion leaders are apprehensive of innovation, in addition to having strong numbers of people standing by established beliefs. Change agents must broaden their scope and target a larger number of opinion leaders, because the innovation is not likely to trickle down since preexisting norms influence attitudes more than an opinion leader. Their diffusion system is decentralized and slow moving.

It is favorable for change agents to frame the adoption of an innovation in a context that complements and is compatible with existing norms. An outsider looking to advocate change in a homophilous opinion leader may need to initiate a dialogue with a person in the homophilous group in order to gain access or be introduced to the opinion leader. Organizations do not necessarily always fall into one group or the other; there are combinations with different degrees of both homophilic and heterophilic communication styles. Persons with social ties internal and external to the organization have been referred to as “boundary spanners,” and they play a pivotal role in linking the innovation and organization (Greenhalgh et al., 2004).

Issues can arise if early adopters and early majority do not effectively communicate; many innovative ideas and programs have floundered because they were not able to successfully transition into the mainstream (Moore, 1991). If a chasm

develops, it hinders, if not completely stops, the diffusion of an innovation. The chasm typically occurs around the 16% adoption mark, just between the early adopters and late majority (see Figure 6). The groups have different needs and behaviors; devising an inclusive strategy helps reduce the risk of disconnect, which can interfere with diffusion. Chasms have been researched most commonly in the high-technology sector, but it can be applied across disciplines. Internal and external factors influence the crossing of a chasm. Institutions can devise strategies to address internal factors; factors external to the organization are more difficult to address.

### Accelerating Diffusion of Innovation: Maloney's 16% Rule<sup>©</sup>



*Figure 6.* Accelerating diffusion of innovation: Maloney's 16% rule. From "The Secret to Acceleration Diffusion of Innovation: The 16% Rule Explained," by C. Maloney, 2014, retrieved from <http://innovateordie.com.au/2010/05/10/the-secret-to-accelerating-diffusion-of-innovation-the-16-rule-explained/>

## **Roles in the Diffusion and Innovation Process**

Technology and media can assist in bringing awareness of an innovation and expedite the diffusion process at a rapid rate. The heightened sense of awareness may place pressure on opinion leaders to make a decision on whether or not to adopt the innovation. If peers have already experimented with an innovation resulting in successful outcomes, the acceptance of an innovation is more likely, in addition to a rapid diffusion rate. Critical roles in the process include the following:

**Opinion leaders.** Ability to influence the social system and sway a decision on whether to adopt or reject an innovation.

**Change agents.** Positively influence the process by mediating change within a social system. This role acts as a champion advocating for the innovation and a promoter of the innovator's idea. Their role is to demonstrate a need for change and initiate an information exchange. With the identification of issues, the change agent creates intent for change that is then turned into action. The change agent shepherds the client through the adoption process until it is stabilized and then enables the client to become self-reliant.

**Change aides.** Complement and compensate the change agent by having more direct contact with clients and establish a greater amount of trust and credibility. In the context of gardens in correctional settings, an officer overseeing the inmates or a gardener working with the inmates on regular basis are likely to be advocates who can identify with their peers, as well as relate to the incarcerated individuals.

The innovation process in an organization entails the following:

**Agenda setting.** The problem creating the need for innovation is defined. Steps to address the problem are laid out, identifying the key items that need to be discussed. The agenda provides a formalized process where stakeholders are able to express their viewpoints and ask questions.

**Matching.** A problem identified on the agenda is partnered with an innovation or in the context of inmate gardening, an action item can be assigned to a particular individual or group best suited to address the problem. The expectation is the individual or group will return with progress updates, suggestions, and feedback at the following meeting.

**Redefining/restructuring.** The innovation is tailored to the needs of the organization; the structure of the organization is adapted to fit the innovation.

**Clarifying.** This stage involves delineating the connection between the organization and innovation. The process of refining the innovation in order to tailor it to the needs of the organization is undertaken at this stage.

**Routinizing.** Integration of the innovation into the organization as it becomes a routine and the foreignness fades. The innovation has been embraced and institutionalized by the organization. The organization implements processes and assigns roles and responsibilities in a conscious effort to sustain the innovation.

#### **Part IV – Innovation, Adaption, and Diffusion**

The chances of an innovation being adopted and diffused depend a great deal on the institutional culture and whether leadership is supportive. Gardening is not an excessively complex innovation, but the idea of inmates gardening may be regarded as an



innovative concept. Rigid homophilous organizations with strong punitive traditions could pose a great challenge to a person interested in introducing a gardening program, because it is not in alignment with the organizational norms. There are institutions that are heavily geared toward punishment and might not consider gardening an appropriate therapeutic and vocational medium. Initiating conversations to reframe the concept of a garden and presenting scientific data and success stories from other institutions that established gardens is a good step to break down resistance.

Trialability is another factor that either encourages or discourages experimentation with an innovation. An institution could establish a pilot garden for a period of time without taking any major risks. Luckily the cost for experimenting with a garden in a correctional setting is not very expensive to the institution. Donation of supplies and seeds may be provided if there is collaboration with community members and groups. Nurseries, Master Gardener programs, colleges, and citizens can all be helpful resources when it comes to obtaining equipment and teaching inmates lessons on gardening.

Security and space can be reasons for correctional facilities to oppose an inmate garden. The institution can adapt its protocol to ensure tools are accounted for and possibly screen inmates before they are allowed to participate in the gardening program. Many different types of gardens can be planted and maintained within a correctional setting: ornamental shrubs and plants, produce, flowers, herbs. Working with community groups experienced with urban gardening can help maximize the use of space if land is limited.

Communication is the central determining factor of whether the horticulture program will be embraced, implemented, and diffused. Connecting with and persuading the right people can expedite the diffusion of an innovation, as can pressure from the public or government. Tailoring the gardening program so it fits with the needs of the organization can increase the chances of diffusion. Being creative helps to further refine and adapt the proposal. Perhaps there are existing initiatives to have more therapeutic programming or to introduce vocational training; these can be tied to the benefits of having a garden.

The speed of diffusion is dependent upon various factors, including agenda setting and the amount of political attention that is garnered by public demand and federal mandates. Policies with exogenous influence such as direct federal government involvement diffuse at a faster rate, producing an R-shaped curve. A number of researchers assert that incremental learning, emulation, and evaluating emerging innovations drives the diffusion process (Berry & Berry, 1990). Straightforward policy issues that appeal to a broad audience have an accelerated diffusion rate in comparison to complicated issues. Diffusion processes with endogenous characteristics are cumulative and produce an S-shaped curve (Boushey, 2012). Decision makers under pressure to hastily adopt a policy will often emulate an innovation if it has been successfully implemented by their peers (Foucault & Montpetit, 2011). When a policy issue and the solution are concurrently recognized in a public manner, it is common for many states to adopt the innovation through imitation versus an incremental approach (Boushey, 2012).

## Summary

The benefits of diffusion of innovation theory are that it categorizes clients and demonstrates the need to persuade innovators and early adopters to make a push to build interest around an innovation to make it successful. The theory also gives insight into potential pitfalls with certain groups and how to address communication challenges. Challenges identified with innovators is they often want the technology at no cost and like to have access to developers so they can provide input and help set the standards. Early adopters tend to be interested in customizing the product or program, requiring a good amount of support. Early majority depends upon feedback from peers before accepting the innovation. The late majority prefer to have turn-key solutions available to any potential issues in order to feel they have minimized risk. Laggards are the last group to adopt an innovation, if they adopt. Laggards are content with the status quo. The theory also illustrates adoption patterns and breaks them down by characteristics in terms of socioeconomic status, attitude, values, and communication style.

Critics of this model argue it oversimplifies the adoptions of innovations because a person may fit within different categories depending upon the innovation. Also, the impact of the distinctly unique personality characteristics and life experiences associated with decision makers is said to be understated. One cannot discern the impact personality and environment may have on the decision process. The lack of predictability is an issue with some critics, because it does not allow one to foresee how an innovation will be perceived prior to being launched.

## CHAPTER IV

### METHODOLOGY

#### **Overview**

The researcher employed a mixed methods research design to explore how community organizations and correctional facilities collaborated to bring horticulture programs to incarcerated individuals. The study includes elements related to the variation between programs, their perceived efficacy, challenges, and barriers. The programs examined operate in state- and county-run institutions; transitional wraparound service providers in the community were also included in the research. The research explores how food justice and drug policy intersect, examining the roles of classism and racism and taking note of factors influencing recidivism.

Chapter II, the literature review, established a historical foundation which included an overview of policies, studies, and data to support the necessity for this exploratory inquiry. The social construction of issues frames how they are depicted in the political process and also sets the tone for how institutions, organizations, and society perceive a population. This can manifest into a stigmatization that impacts programs and resources available to affected groups. Examining inmate horticulture programs helps to understand how groups, individuals, and institutions collaborated to shift constructs in order to bring therapeutic programs to punitive settings. Innovation of diffusion sheds light on whether the programs are spread or replicated, what factors made it possible or

acted as a barrier, and explores the roles of different participants throughout the process. In addition to second-hand data analysis, semistructured interviews were conducted with 10 individuals closely involved with horticulture programs in correctional settings. This chapter discusses the research methodology, design, protocol, and limitations.

### **Research Method**

The purpose of this qualitative piece of research was to identify inmate horticulture programs, how they came into existence, the role collaboration played, and the programs' perceived efficacy. The mixed method approach is aimed at inductive inference through the creation of consistent explanations and meanings (Tashakkori & Teddlie, 2003). This research is qualitative in nature and attempts to make inferences and interpret the data collected through secondary data analysis and semistructured interviews. Strengths of the mixed method approach include the ability to use numbers, photos, words, and narratives simultaneously to bolster arguments. Also, the researcher has the latitude to pose a wider variety of questions, which makes for richer content and more robust conclusions (Cronholm & Hjalmarsson, 2011). By gathering data through open-ended questions, researchers are able to explore and evaluate interviewee responses more in depth (Frels & Onwuegbuzie, 2013).

Qualitative analysis is descriptive and paints a picture of processes, perceptions, and behaviors that impact the subject. Inferences are made about patterns, trends, and commonalities encountered through the research process. If the information gathered and analyzed through a qualitative approach contains identifiable patterns, there is a possibility the findings can be generalized across a wider spectrum.

Mixed methods approaches yield powerful results in social justice research; publishing articles and bringing awareness to issues can act as a catalyst for change. An important consideration, stated Fassinger and Morrow (2013), is that “research can be used either to perpetuate or to disrupt the social status quo, to oppress or to empower marginalized groups, to provide an experience that blames people for their victimization or seeks to liberate them and transform their lives” (p. 70). Cokley and Awad (2013) underscored the value of social justice research in that it exposes constructs and serves both policy and advocacy goals.

The semistructured interview format establishes questions to guide the researcher during the interview process so similar data are collected from all of the participants (Holloway & Wheeler, 2010). The interviewer has a series of questions that are more general in comparison to a structured interview; the interviewer is able to vary the sequence to adapt to the flow of the conversation (Bryman, 2004). The semistructured interview format allows the researcher to ask the interviewee clarifying questions and establishes a conversational tone which enables the respondent to elaborate on various ideas (Patton, 2002). Semistructured interviews afford a fair amount of flexibility in the event that clarifying questions need to be asked or the respondent needs to expand on pertinent details; the researcher is not bound by a strict script.

### **Research Design**

Second-hand data provided historical information on horticulture therapy and the therapeutic benefit of gardens in a multitude of settings. The political landscape and social constructs based on race and class were also found through secondary data

analysis. Absent was how policy, race, social justice, class, criminal justice, communities, and horticulture intersect and impact the diffusion of innovation. The researcher elected to implement a semistructured interview technique to obtain data on the perceptions of individuals working with horticulture programs in correctional settings.

Preliminary information was gathered from two individuals involved with inmate gardens through several e-mail exchanges and an informal exploratory interview. The preliminary e-mail exchange was conducted with a garden program founder/facilitator at a state prison. A founder of a community organization that assists former inmates gain employment upon release from prison agreed to meet with the researcher for an informal discussion about the program, how it came into existence, and challenges. The information gathered provided background on the program's conception, funding, and barriers faced during inception and implementation. The information helped generate ideas for interview questions.

The semistructured interview format was conducted so each interviewee was asked the same questions; this enabled the responses to be compared. Respondents represented three county-level inmate horticulture programs, six state-level inmate horticulture programs, and one community program that collaborated with a state prison to provide wraparound services to gardening program participants upon release. The interviewees were from seven different states. Personnel interviewed consisted of law enforcement, horticulture therapists, individuals with law and gardening backgrounds, and people with an interest in social and economic justice. Table 2 illustrates how the

research questions are linked to a theoretical framework and the specific interview questions.

This dissertation attempts to answer the following three research questions:

1. What are the perceptions of those involved in developing these horticulture programs about the program's efficacy and its challenges and benefits to those served and to the community?
2. How do the programs vary?
3. What role has collaboration played in establishing horticulture programs in correctional facilities?

One assumption of this study is that programs with a higher degree of collaboration are more prone to successful implementation and diffusion in a timelier manner. The second assumption is that the horticulture programs will have distinct features that differentiate them. A third assumption is individuals who participate in horticulture programs are less likely to return to prison or jail.

### **Research Protocol**

An extensive search was conducted and involved the analysis of articles, peer reviewed publications, Internet documents, legislation, academic papers, and books. The Internet was canvassed, and reports from government and nongovernmental agencies were reviewed. The second-hand data provided a historical timeline of legislation and policies that impacted the criminalization of certain substances, the incarceration rate, and length associated with nonviolent offenses. Also there were states that passed legislation requiring the establishment of inmate gardening programs for various reasons,



Table 2

*Theoretical Framework of Research Questions in Relation to Interview Question*

Research question	Theoretical framework	Interview questions
1. What are the perceptions of those involved in developing these horticulture programs about the program's efficacy and its challenges and benefits to those served and to the community?	Social construction	2. What specifically stood out about gardening to be considered for an inmate program? a) Ask whether they believe there is an impact on recidivism, whether they believe there is a therapeutic component to gardening, and whether they believe there is job training for future employment component to this program? 3. What barriers/challenges surfaced around the program? a) How were these overcome? b) Where does funding come from, and has it changed since the inception of the program? 6. How do inmates benefit from the program? 7. How does the community benefit from the program? a) How the community has accepted the program?
2. How do the programs vary?	Diffusion of innovation	1. How did the idea of an inmate garden come about? 4. Is there a classroom component? a) If so, how was the curriculum developed? By whom? b) Has it changed over time? 5. How many inmates have participated in the program? a) What do they grow and on how much land? b) Do inmates consume the food? If not, how is it distributed to consumers?
3. What role has collaboration played in establishing horticulture programs in correctional facilities?	Social construction	8. What other agencies/community groups does the program collaborate with? a) Has this network of groups changed over time? b) Are there any special challenges associated with this network of groups? c) What do they see as the strengths of the networks?

mostly for cost savings and sustainability. Second-hand data also provided figures to illustrate the monetary costs of implementing an excessively punitive model to address nonviolent offenses. Scholarly and governmental research related to gardens in correctional settings and horticulture therapy was reviewed. Internet-based archives were used to locate government reports.

James Jiler's (2006) book *Doing Time in the Garden* provided information in great detail about inmate gardening programs. The researcher scanned the Internet, searching for garden and horticulture programs in correctional settings in order to create a comprehensive database, focusing on adult institutions. The researcher took inventory of horticulture programs across the United States. The researcher visited facility websites directly and gathered as much information as was available and also tried to identify a person to contact for further questions. Information and leads were obtained through newspaper and magazine articles. A spreadsheet was created to capture as much detail as possible about each program. Categories on the spreadsheet included the location of the program (city, state), when it was established, type of institution (state, county), size of the garden, funding, recidivism rate (if available), whether there was a classroom component, contact, and other miscellaneous notes (the mission and goals). Information on the community collaborators that helped make the inmate gardens possible was also catalogued.

The researcher was interested in examining the gardening programs, their efficacy, the role collaboration played, and whether there was a therapeutic component. After studying the database, the researcher noticed common themes among the

horticulture programs that went beyond therapeutic. Five archetypes were identified: therapeutic/rehabilitative, vocational, punitive/retributive, cost savings, and sustainability. The researcher became interested in programs that were not focused on penalizing inmates but instead sought to rehabilitate, train, and produce a meaningful impact.

The researcher interviewed 10 individuals involved with inmate gardening programs via telephone from August 6, 2013 through September 10, 2013, using a semistructured interview. The interview primarily consisted of open-ended questions. The researcher selected to perform telephone interviews, because interviewees were located throughout the United States; this was the most feasible option, considering the travel costs would have been hefty in addition to the amount of time needed to visit each individual in person. The respondents occupied various roles; selected participants helped found and develop the program, and others were responsible for overseeing the day-to-day operations of the gardening program or coordinating wraparound services and aftercare in the community. Table 3 lists and describes the interviewees.

Interviewees were selected because of their experience and involvement with horticulture programs in correctional facilities. The respondents were recruited for the interview because of their programs' collaborative, multiorganizational partnership approach. The researcher selected approximately a dozen programs from across the country and initiated contact by first calling the facility. In most instances, the researcher was able to locate the name of an individual prior to calling the facility; a few times the researcher called and asked to speak with the person responsible for facilitating the

Table 3

*Horticulture Program Interviewee Descriptions*

Program & year horticulture program established	Location	Description	Archetype
Challenge Incarceration Program, 1996	Willow River Moose Lake, MN	The program was established by prison staff in an effort to provide meaningful work and build skills. Also, they saw an opportunity to reduce waste and food costs. Any excess food is donated to community food banks.	Vocational & cost savings
Federation of Neighborhood Centers, 2012	Philadelphia, PA	The Federation of Neighborhood Centers (FNC) collaborates with the city, Philadelphia prison system, and many institutions and community groups to provide childcare, healthcare, transportation, housing, etc. FCN supports clients overcome barriers to obtaining and sustaining employment. The FCN partners with Roots to Re-Entry to help citizens returning to the community find employment and keep their life on track by providing the entire family access to integrated services.	Rehabilitative & vocational
Greenhouse, 1996	Rikers Island, NY	Greenhouse is a product of a partnership between the Department of Corrections and the horticulture society. The program helps inmates shift their mindset and deal with challenges through horticulture therapy. Greenhouse also has a vocational component that educates participants on seeding, gardening, and landscaping. Additional training and transitional employment is offered upon release through the Green Team, allowing flexibility so participants can attend aftercare.	Rehabilitative & vocational

Table 3 (continued)

Program & year horticulture program established	Location	Description	Archetype
Insight Garden Program, 2003	San Quentin, CA	The Insight Garden Program (IGP) provides rehabilitation and interpersonal growth through horticulture therapy. The classroom curriculum focuses on sustainability and covers emotional work, basic gardening skills, human/ecological connection, food & urban agriculture, and green technology. The IGP partners with many community groups to provide wraparound services and transitional employment upon release	Rehabilitative & vocational
Jail Industries Program, 1994	Santa Rosa, CA	The Jail Industries Program works with numerous outside agencies, including schools and nonprofit organizations. The program serves inmates as a vocational program with a rehabilitative component. Inmates volunteer to participate and learn through classroom curriculum and hands-on training. Inmates gain self-esteem and develop skills which are useful when seeking employment. The community benefits by receiving donated plants, seedlings, produce, and materials.	Vocational
Jefferson County Inmate Garden, 1993	Jefferson County, CO	The garden is a result of collaboration between the Denver Rose Society, Colorado State University, and a number of community groups and volunteers. Inmates plant seeds in the greenhouse and transplant the flowers around prison grounds in the spring. They have also build seating, a gazebo, and tables for the gardens. Inmates are educated though informal instruction and hands-on learning.	Vocational

Table 3 (continued)

Program & year horticulture program established	Location	Description	Archetype
Lettuce Grow Foundation, 2008	Oregon state	The Lettuce Grow foundation provides inmates training on organic gardening and sustainability. The program partners with the Oregon State University Master Gardener extension program and the Department of Corrections, a local college, and numerous community groups and nonprofits. There is a classroom curriculum and hands-on training provided by guest lecturers and community volunteers. The food grown is consumed by inmates, and any surplus is donated to local food banks.	Vocational & sustainability
Mendocino County Jail Inmate Garden, 2007	Ukiah, CA	The inmate garden is certified organic and helps reduce food costs during the growing season. The vegetables grown on site are used by the kitchen in meals prepared for inmates. Inmates volunteer to work in the garden, which allows them to be outdoors several hours. Inmates help civilian staff with landscaping and vegetable gardening around the jail complex. The garden starts vegetables which are later given to nonprofits and schools.	Cost savings
Roots to Re-Entry, 2006	Philadelphia, PA	Roots to Re-Entry is led by the Pennsylvania Horticultural Society in collaboration with the Philadelphia prison system and several other nonprofits and community organizations. The program includes behavioral workshops and lessons on tools, equipment use, maintenance, safety, plant identification, and turf management. Throughout the program, participants continue to	Rehabilitative & vocational

Table 3 (continued)

Program & year horticulture program established	Location	Description	Archetype
Sustainability in Prisons Project 2008	Washington state	<p>receive life-skills education, and career coaching. Postrelease social support services begin at the time the trainee is paroled. Networks of employers in the community have been identified by program partners to secure job placement opportunities for the graduates.</p> <p>The Sustainability in Prisons Project (SPP) is a result of a collaborative partnership between the Washington State Department of Corrections, several colleges and universities, and numerous community and conservation organizations. The program aims to provide quality low-cost programs for inmates and reduce the cost of incarceration. The SPP strives to connect inmates with science and nature by developing sustainable practices. The food grown is used to feed inmates, and any surplus is donated to food banks. The curriculum covers the ecosystem, plant identification, and propagation.</p>	Sustainability & cost savings

inmate gardening program. If no one answered the phone, a voice message was left explaining the purpose of the call, highlighting that the researcher was interested in learning more about the program for research purposes related to her dissertation. The researcher also asked for the person's availability for a 20-minute phone call and advised the interviewees they would receive a consent form to review via e-mail (Appendix A).

Once an individual agreed to participate in the research, the researcher called the interviewee on the scheduled date/time and confirmed they reviewed the informed consent and agreed to participate. Once the interviewee verbally agreed to participate, the researcher commenced to ask the interview questions. The researcher conducted one to two interviews per day so the interview notes could be typed and analyzed that same day. Out of respect for the interviewee's schedule, phone interviews were scheduled for 20 minutes; some lasted up to 45 minutes. The researcher was able to identify additional probing questions to include in future interviews.

The research discusses variation among the horticulture programs, noting differences and similarities resulting in the development of five archetypes. The study also explored the formality of the program and whether there was a curriculum or classroom component. Interviewees were asked their view of the therapeutic and vocational aspects of the program. The study examines how different factors influence collaboration in relation to establishing horticulture programs in correctional settings along with the perceptions of the programs' efficacy, challenges, and benefits.

The research identifies best practices based on the experiences of interviewees. A result produced by the research is five archetypes of horticulture programs in correctional settings. The archetypes describe the different areas of focus: rehabilitative/therapeutic, punitive labor/retributive, vocational, cost savings, sustainability. A number of the programs display characteristics of more than one archetype; these hybrid programs' innovativeness appears to give them an advantage.



### **Limitations**

The limitations of the study included distance, time, and interpreting the data. Programs were spread out across the United States; time and cost prevented the researcher from having in-person interviews with a vast majority of interviewees. Geography was one of the determining factors for the researcher to elect a phone interview for data collection. It is more difficult to build rapport when an in-person meeting is not an option. This can hinder the candidness of the discussion and prevent a person from speaking freely and openly. Also, interviewees were volunteering their time to be interviewed; and in order to be considerate of their schedules, interviews ranged from 20-45 minutes. There are only so many topics and questions that can be answered in that amount of time.

Interpreting the results of data collected through a qualitative approach is challenging, because the subjective interpretation of the research can be tainted by the researcher's own biases. Each researcher brings with them his or her own lens shaped by the human experience, which includes attitudes, views, and values (Fassinger & Morrow, 2013). The interviewees represented themselves, correctional institutions at different levels of government, and nonprofits; their responses could be biased based on their experiences. Critics of the mixed method research approach argue that it can be too complex, time consuming, and expensive for a single researcher to use multiple methods concurrently (Cronholm & Hjalmarsson, 2011).

## CHAPTER V

### FINDINGS

#### **Part I - Archetypes**

##### **National Landscape**

Correctional facilities across the nation have devised strategies to reduce spending and waste, provide vocational training, and rehabilitate and punish incarcerated individuals. Research findings reveal that inmate horticulture programs fall into different areas of focus, while innovative programs have blended components to provide integrated services. Approximately five horticulture program archetypes were identified through the analysis of the catalogued gardening programs the researcher compiled and responses from the interviewees: vocational, therapeutic, punitive/retributive, cost savings, and sustainability. Several of the programs had an integrated approach that spanned more than one archetype. The variation of programs is a result of adaptation through diffusion of innovation. The shifting social construction of the target population and the role of horticulture have led to more robust programs.

The researcher first began to notice trends in the data while looking at the vast catalogue of horticulture programs across the nation which described the programs in detail. Several programs expressed that horticulture therapy was a focal point of the program. Trained therapists used the process of planting, caretaking, and growing plants and produce to work on behavioral issues and substance abuse. A handful of facilities

indicated that they needed to cut expenditures on inmate food costs and provide low-cost programming, so they developed the extra land around the facility into a garden. A couple states had legislation which was driving for more sustainable ways to operate the prisons and directed correctional institutions to establish gardens when possible. Institutions also indicated they had a curriculum to accompany the horticulture program to provide inmates with knowledge and skills that were transferrable once they were released. There was definitely an awareness and promotion of sustainability, cost containment, and preparing inmates for green jobs. Interestingly enough, the Southern states had several institutions utilizing chain gangs and hard labor, viewing long hours in the massive fields as part of the retribution process.

### **Legislation and Programming**

In 2003, Washington state Governor Locke mandated reduced spending and pushed the Washington state Department of Corrections to conserve natural resources and construct green institutions in an effort to become sustainable and environmentally friendly. The Sustainability in Prisons Project was created by a professor from Evergreen State College and the superintendent of prisons in 2008, with a goal of providing inmates exposure to the sciences through low-cost programs. The program provides inmates a connection with science and nature through lessons in native plants, ecosystem, biology, habitat restoration, and endangered species and assists in conducting research. The metamorphosis undergone by the species observed by the inmates gives insight into the process of change and transformation that can take place in their own lives (Shaw, 2012). The program has less of a vocational focus and provides inmates with a connection to

science and nature. Participation in the program is voluntary; inmates have to go through an interview process and are paid \$.42 cents per hour if they are selected for the job.

In 2009, Roots to Re-Entry was established in Philadelphia, Pennsylvania and has blossomed into a partnership between the Pennsylvania Horticultural Society, Bartram's Garden, Awbury Arboretum, Friends Hospital, Thomas Jefferson University & Hospital, KJK Associates, and the Philadelphia Prison System that delivers training and services through a whole-systems approach. Roots to Re-Entry provides inmates several months of training in landscaping and gardening while they are incarcerated. Seedlings are grown in the prison greenhouse and later transplanted in community gardens, whereupon underprivileged families benefit from fresh produce. Once released, the organization helps provide access to healthcare for the re-entering citizens and their families and also assists them with obtaining housing, transportation, and other critical services pre- and postemployment. The program identified a number of areas that pose challenges to an incarcerated person as they transition from prison to re-entering society and conducted extensive work to remediate barriers by engaging a wide range of representatives from institutions and the surrounding community.

Roots to Re-Entry collaborates with the Federation of Neighborhood Centers (FNC) to provide support and access to the integrated services essential for inmates making a successful transition from prison and sustaining themselves in the community. The FNC approach is described as innovative and holistic, encompassing health services, job training, and a wide array of classes and services through their network of 13 neighborhood centers. The centers are in low-income areas where the formerly

incarcerated often return after prison; the centers are accessible and provide a supportive network. The programming implemented through the partnership helps individuals succeed, in addition to building a sense of community. It is a win-win situation for the program participants, their families, and society. Strategy Arts is a consulting firm that is conducting an in-depth analysis of the partnership, data collection, and challenges and ideally will provide a model for replication (Pennsylvania Horticultural Society, 2013).

In 2011, California passed AB 109 Criminal Justice Realignment Act to reduce the number of inmates in state prison by amending statutes that previously would send a person to prison and by increasing offender programming. The bill transitioned responsibility for lower level offenders from the state to counties and community supervision. Also, most former inmates under supervision (parole or Post Release Community Supervision) are not sent back to prison for nonviolent, nonsexual or nonserious offenses but could serve up to six months in county jail or community supervision for violating conditions of their release.

Advocates assert the counties are given more discretion to develop and oversee programs which will better serve inmates in the communities they ultimately return to. Opponents are concerned about the discrepancy between how counties allocate resources and whether the programs they fund are appropriately evaluated for effectiveness. It is important that counties focus their resources on providing sustainable rehabilitation programs and building community partnerships, given that California prisons spend approximately \$52,000 per inmate each year; of that only \$926 (1.8%) goes toward rehabilitation (Petersilia, & Snyder, 2013).

In 2012, the Ohio Department of Rehabilitation and Corrections (DRC) developed a 3-year strategic sustainability plan geared toward reducing consumption of water and electricity and cutting costs associated with waste disposal. The program trains offenders on environmental issues and green job skills. The program's goal is to save money, protect the environment, and prepare inmates to lead sustainable lives upon release (Ohio DRC, 2012).

A program called Roots of Success (n.d.) developed a curriculum specially designed for incarcerated men and women; the program has been widely supported by institutions, re-entry programs, and botanical gardens across the nation. Roots of Success teaches inmates about sustainability and conservation and employs a train-the-trainer approach, where certain standout inmates are selected as master trainers to teach other inmates. In addition to saving money and increasing sustainability at prisons, the program strives to empower inmates by building skills that will carry into sustainable careers as they re-enter society (Roots of Success, 2013).

### **Identifying Archetypes**

The five archetypes are reviewed and described in detail; Table 4 was developed to illustrate characteristics and themes relative to each archetype. The researcher identified the archetypes after examining the details of the programs in the database she compiled. Themes and trends appeared as the researcher studied the horticulture programs' activities, goals, and curriculum. It became clear that the programs were established for various reasons; some of them served several purposes and blended elements from more than one archetype. Examples of programs that represent a specific

Table 4

*Horticulture Program Archetype Characteristics*

Archetype	Characteristics
Rehabilitative/therapeutic	<ul style="list-style-type: none"> <li>• Voluntary</li> <li>• Horticulture therapy</li> <li>• Socialization</li> <li>• Restorative justice</li> <li>• Self-reflection</li> <li>• Transformative</li> <li>• Personal accountability</li> <li>• Wraparound services</li> </ul>
Punitive/labor	<ul style="list-style-type: none"> <li>• Not voluntary</li> <li>• Hard labor</li> <li>• Long hours</li> <li>• Harsh working conditions</li> </ul>
Vocational	<ul style="list-style-type: none"> <li>• Voluntary</li> <li>• Job training</li> <li>• Skill development</li> <li>• Preparation for employment</li> <li>• Earn certification</li> <li>• Job placement</li> </ul>
Cost savings	<ul style="list-style-type: none"> <li>• Reduce food costs</li> <li>• Low-cost programs</li> <li>• Mandated through legislation</li> <li>• Revenue generated from selling produce and livestock</li> </ul>
Sustainability	<ul style="list-style-type: none"> <li>• Reduce environmental impact</li> <li>• Habitat restoration</li> <li>• Conservation</li> <li>• Green facilities</li> <li>• Organic farming</li> <li>• Research</li> </ul>

archetype are provided to give an idea of what the programs look like operationally and collaboratively. There are numerous characteristics associated with each archetype; the

list compiled by the researcher is not exhaustive but encompasses the elements observed most frequently after reviewing dozens of programs and conducting multiple interviews.

It is also important to note that a number of programs exhibited more than one archetype (secondary archetypes). A prevalent combination involved programs that strived to rehabilitate participants through a therapeutic approach, in addition to providing vocational training. In a similar vein, another fusion coupled sustainability efforts with vocational training. It is not uncommon for programs with a specific focus, cost savings for instance, to discover exposure to horticulture produced an unintended but welcome byproduct in terms of personal transformation.

**Rehabilitative/therapeutic.** Horticulture programs designed to rehabilitate provide inmates with insight into their triggers and how their behavior impacts their life, family, and future. Empathy is learned by nurturing a living thing; reconnecting a person to nature simultaneously connects them to themselves. Gardening brings people together, and normally withdrawn individuals have become increasingly social by participating in horticulture programs. Sandel (2004) noted juveniles at a detention facility worked noncompetitively in teams tending to the garden and were noticeably relaxed and less aggressive. The juveniles also marveled at the cycle of life and were able to apply the metaphorical teachings to their own lives.

There are varying degrees of formality associated with the rehabilitative and therapeutic horticulture frameworks; depending on the setting, certain terms may be used interchangeably. The American Horticultural Therapy Association (2014) describes horticulture therapy as one engaging in activities with a trained practitioner, often with a



documented treatment plan or specific goals. Horticulture therapy focuses on the healing aspect of activities and views this process as the crux of where the transformative work takes place. Therapeutic horticulture is less clinical; the instructor is typically not a trained therapist but does have knowledge of the healing properties of plants.

Therapeutic and social horticulture introduce plants and plant caretaking to individuals in hopes of improving participants' well-being and social interactions.

In 2002, the Insight Garden Program (IGP) began in San Quentin and focuses on inner healing and reflection by giving participants a connection with nature. Comprehensive curriculum in horticulture practices, food systems, personal accountability, and green technology provide participants with a well-rounded education on horticulture and self-improvement. The IGP established partnerships with community organizations that provide wraparound services and transitional employment to program participants once they return to the community. The program has made a tremendous impact on the men who have participated as well on society, because the transformational program prevents them from returning to prison by teaching them to become self-reflective, take ownership over their actions, and contribute to society in a meaningful manner. The IGP's reputation has prompted the Solano State Prison to invite the program to establish a sustainable re-entry program at their facility.

**Punitive labor/retributive.** The information for this archetype was obtained through the literature review and the inventory of horticulture programs. Hard labor is currently legislated in a number of states; whether inmates are paid for their labor varies state to state. Exploitation concerns around inmate labor involve wages and work

conditions. Inmate labor supports the agricultural component on large-scale prison farms. Prison labor can easily be exploited when it is under the guise of punishment. The safety standards and working conditions tend to be less favorable, and there is little oversight to ensure individuals are not being mistreated or overworked. Jing (2010) asserted southern states imposed harsher penalties and had higher incarceration rates in comparison to northern states.

Inmates sentenced to hard labor work long days tending to the land and in food production. The farms are located primarily in southern states, and several occupy land that was previously the site of plantations. Angola State Prison in Louisiana once was a plantation and still operates very much like one. Historically the prison had been notorious for the mistreatment of inmates and a violent atmosphere. Still infamous today, Angola exploits the labor of the inmates by paying them next to nothing to work the prison fields in the extreme Louisiana heat. For .02 to 20 cents an hour, inmates labor diligently harvesting approximately 1,000,000 pounds of produce each year (Schrift, 2008).

**Vocational.** Programs designed to provide inmates with job training and skills which can be utilized for employment upon release. A handful of programs offer certifications in horticulture or as a Master Gardener, for example the Lettuce Grow program in Oregon. Participants must demonstrate a certain level of knowledge in order to earn the certification, and this can distinguish them while seeking employment. Curriculum across programs includes but is not limited to seeding, plant identification, permaculture, pruning, sustainability, ecology, green technology, landscaping, irrigation

systems, urban farming, food justice, food systems, and production. Well-rounded programs assist participants with job placement after release.

The Vocational Rehabilitation Impact Center run by the Cook County Botanical Garden's Windy City Harvest program offers vocational training in horticulture and urban agriculture to nonviolent offenders. After 6 months of hands-on training, graduates are eligible for a paid internship. In addition to earning a certificate, participants have access to alcohol and drug counseling. Lettuce Grow Foundation in Oregon established gardens at all but one of the state's 13 facilities. In addition to vegetables and fruit, Lettuce Grow partnered with a habitat restoration project to grow native plants for an endangered butterfly (Patterson, 2013). The program has fostered many partnerships with the community, and a good number of volunteers have come forward to share their expertise and teach courses.

**Cost savings.** Initiatives designed to reduce spending on inmate food. The size of gardens varies at institutions; in some instances the gardens produce enough produce to feed the inmates and donate to the local community. A number of gardens do not grow enough produce to make a sizable reduction in the food budget but certainly complement the inmate diet with fresh vegetables.

In 2012, Minnesota passed the Omnibus Corrections Bill, a portion of which directs facilities to establish gardens where space and security permit. The sponsors of the bill cited how gardening programs in other states have reduced recidivism and food costs and have taught inmates skills. Aside from reducing food costs at institutions,

horticulture is an inexpensive way to provide inmates with programs so they are not sitting idle.

**Sustainability.** Reducing the environmental impact has become a focus for a number of programs. There have been partnerships to restore habitats by growing native plants. Several states, including Washington and Oregon, have initiated efforts to become more efficient and reduce water usage, energy consumption, and waste. Oregon implemented the use of hybrid vehicles to perform security controls to reduce carbon dioxide emissions. Organic gardening, composting, recycling, and growing plants for habitat restorations are just a handful of sustainability efforts.

The Sustainability in Prisons Project (SPP) in Washington state has successfully implemented robust sustainability programs at all the state prisons. The program includes a lecture series and contributes data for research in addition to providing inmate rehabilitation. The SPP has reached out to institutions in other states in an effort to encourage them to explore sustainability in prisons.

The research revealed that several states have established programs that encompass the variables required for sustainable therapeutic re-entry programs. The SPP was initiated at a single institution and has since been adopted in all 12 Washington state prisons. SPP also hosted a conference in which representatives from 11 states attended to learn about the program. Partnerships were developed with nine of the attendees in hopes of establishing similar programs. San Quentin's IGP has been invited to expand to another state prison. Lettuce Grow was piloted at a single Oregon Prison in 2008 and rapidly expanded programs to 12 of the state's 13 prisons. Philadelphia's Roots to Re-

Entry tirelessly works to build partnerships and deepen the understanding of interdisciplinary dynamics so they can continue to provide comprehensive services and develop framework which can be replicated in other regions.

## Theory

The following diagram and discussion highlight the adoption of inmate gardening programs related to elements of the diffusion of innovation process (see Figure 7).

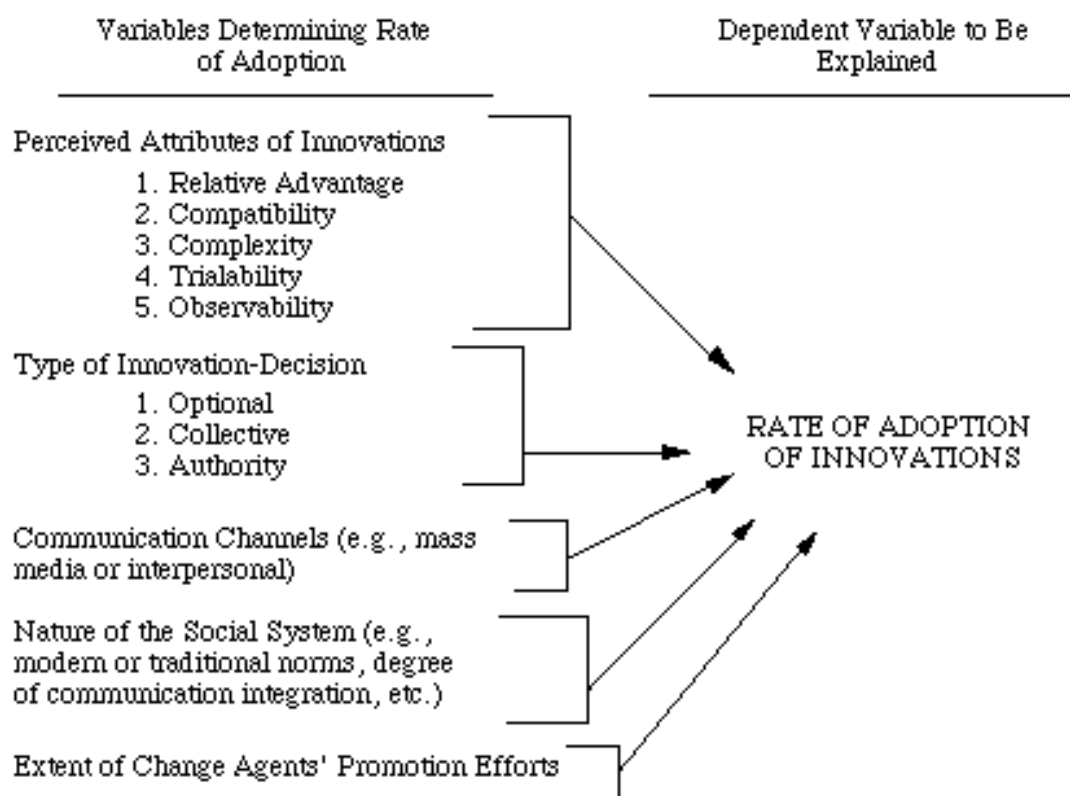


Figure 7. Variable determining rate of diffusion. From *Diffusion of Innovations* (4th ed.), by E. M. Rogers, 1995, p. 207, New York, NY: The Free Press..

**Relative change.** Examining the cost and benefits associated with implementing a robust horticultural program for inmates indicates a relative advantage. A program that harvested 10,000 pounds of fruits and vegetables reported the production costs to be under \$.08 cents per pound. An institution has a 1.5-acre certified organic garden which produces 50 to 60 pounds of vegetables each day; food costs for the jail have been reduced by approximately \$10,000 during the growing season. The early start-up costs are not substantial, most equipment is inexpensive, and at times seeds and tools have been donated. Preparing the land, greenhouses and growing space and developing a curriculum are more time intensive at the onset and stabilize once the program has been established; leveraging relationships with community groups and volunteers can disperse the required work so it is manageable.

**Compatibility.** Several gardens started when institutions had vacant space they wanted to do something with or were interested in developing an inexpensive means to occupy inmates' time. Gardening programs require the use of tools, and correctional facilities view this as a threat to security; developing thorough inventory control mechanisms helped alleviate opposition.

**Complexity.** The average person has basic knowledge of gardening or landscaping; some may practice it as a hobby. Potential adopters that have first-hand experience in gardening are more likely to understand the therapeutic benefits received from working with the land and connecting to nature. Also, being able to grow something from seed and care for it to fruition is a rewarding process that can teach skills related to responsibility, discipline, patience, nurturing, and environmental awareness;

and the result is a beautiful plant or delicious fresh produce. Gardening does not have to be complicated; it can be taught easily and adapted to work in many climates and settings. In cooler climates, greenhouses were constructed to enable programs to grow plants while the elements were too harsh to allow crops to thrive outside.

**Trialability.** Innovative garden programs often began with the agreement the institution would pilot the program during a growing season and if it went well, it would be allowed to continue or expand. There was not a huge monetary risk to give the program a chance either.

**Observability.** Aside from noticing the aesthetically pleasing sight of flower and plants, the changes observed and cultivated through a garden in a correctional setting involve decreased disciplinary occurrences, providing a racially integrated space, and giving inmates a sense of responsibility and pride. The IGP reported the garden as one of the only nonsegregated areas on the prison yard.

The number of inmate garden programs focused on providing an integrated approach to improving behavior and self-reflection and teaching vocational skills and a sense of community has not reached the point of critical mass. There are a handful of innovators that have practiced therapeutic gardening in a correctional setting for an extended period of time or have developed thorough programs encompassing a multitude of factors, including wraparound services. The research indicates there are a few dozen early adopters that have implemented various forms of gardening programs which are beneficial, although they may not have a formalized therapeutic component.

Efforts to diffuse the use of gardening for therapeutic and sustainability reasons have occurred recently. SPP started at single institution and has since expanded to all 12 state prisons. SPP also held a conference; in attendance were representatives from 11 states to learn about the program, and nine correctional agencies have partnered in establishing similar programs. The IGP which was conceived at San Quentin is in the process of expanding to nearby Solano State Prison. In 2008, Lettuce Grow began at a single prison in Oregon, and in a matter of several years it has expanded programming to 12 of the 13 prisons in the state. Roots to Re-Entry is continually working with stakeholders and expanding its network to build solid relationships and an in-depth understanding of how to make these kinds of partnerships work so the program can be replicated in other regions. This strategy focuses on changing systems aims to communicate lessons learned on a broad scale by innovative policy entrepreneurs (Mintrom & Norman, 2009).

The programs mentioned have crossed the chasm and diffused their programs to the early majority. Several of the programs have jumped the chasm and diffused by employing inclusive strategies that address the needs, perceptions, and concerns of the early majority. The late majority and laggards look to their peers before adopting a new innovation; they share a vertical communication strategy which increases the likelihood of the innovation being accepted by the remaining groups.

Challenges to diffusing therapeutic and sustainability-focused gardening programs are around social and political inflexibility. Institutions in states that have a long history of harsh punitive practices are not receptive to programs geared toward



rehabilitation; also, officials do not want to be viewed as lax on crime. There is money to be made by having people incarcerated. With the large number of private correctional companies contracted to provide services, implementing programs that reduce recidivism do not favor their profit margin. Also, the lack of knowledge about the benefits of gardening may impede institutions from experimenting with alternative programs.

## **Part II - Interviews**

Telephone interviews were conducted with 10 representatives from institutions and organizations from across the United States that were involved with inmate gardening programs. The participants were selected because of their experience with inmate gardens. State prisons, county jails, and community organizations were contacted for a telephone interview; the interviews lasted from 20 to 45 minutes. Conversations with the interviewees are paraphrased as follows:

Program A stated the gardening program was proposed by an education coordinator and case worker to provide meaningful work and transferable skills to the offender population. It was also suggested that it may save the institution money in food costs and garbage service, since the organic waste generated by the kitchen would then be composted. The garden was approximately 1,050 square feet the first year; about six years ago, the facility began expanding the garden and now vegetable gardens occupy 20,000 square feet in addition to almost two dozen fruit trees. In 2012, approximately 10,000 pounds of produce were harvested, excluding the newly planted fruit trees that had yet to mature and produce fruit.

A gardening job is highly sought after among inmates, because the role enables them to be outdoors 4 to 6 hours each day. Funds from inmate fees (commissary, fines, inmate welfare fund) were used to create a garden area in a former construction zone/retention pond in an area next to the jail. For most offenders, working in the gardens provides them an opportunity to get outside and do some quiet reflection. One big incentive enjoyed by all is the consumption of the fruit and vegetables (raspberries, hot peppers, corn, cherry tomatoes, etc.) grown and served in the dining facility that typically would not be available if it had not been grown in the garden. The garden has been an incentive for inmates to behave, because they can be removed from the job if they have disciplinary issues.

Program B indicated that gardening program participation is voluntary, and an individual must qualify based on the criteria for inmates who are allowed to work outside a secured perimeter. The classification officer screens the inmates to make sure they do not have violent offenses, because they are indirectly supervised. If anyone tried to escape, they would get a 2-year sentence. The inmates in the facility are there for misdemeanor offenses and usually sentenced for 6 months to a year for low-level drug offenses, DUIs, fraud, and theft. They also cannot have pending charges in other jurisdictions.

Approximately eight to 10 inmates make up the outside crew; over the course of a year around 70 inmates work in the garden. There is a 30-day trial period where inmates are trained on the various job duties to make sure they are competent. There are 12 areas of competency, including watering, weeding, planting, and maintenance. Inmates are

able to reduce their sentence by 1 day for every 3 days worked in the garden. Another facility reported there are usually 12 offenders whose primary assignment outside of programming is to work in the gardens. Though at times when they are moving and turning in a lot of compost, mulch, and so forth, they may have as many as 60 to 80 offenders working in the garden.

Participation is voluntary for many of the horticulture programs; inmates elect to work in the garden. Some of the programs have a selection criterion in order for inmates to be able to work in the garden; this was most common at facilities where the gardens are outside a secure perimeter. A few of the facilities granted inmates time off their sentence for working in the garden, although this was not the standard. It appears the main draw for an inmate to participate in the garden is the opportunity to get outside and also to enjoy some of the fruit and vegetables harvested.

### **Collaboration and Education**

Through interviews the researcher was able to get detailed information on what collaborations took place in order to bring the horticulture programs to fruition. It was interesting to see how the ideas were conceived; there was a great deal of variety among the individuals leading the efforts. Several horticulture programs were run by a horticultural society in partnership with the institution; those programs tended to have more formalized training on plant identification, propagation, and such. A couple programs started when individuals decided they wanted to make a difference in a meaningful way and approached the institutional leadership with their visions; those

programs had a robust therapeutic component as well as a very comprehensive curriculum.

Programs established through collaborations had more success providing in-depth formal training. Collaborations between correctional facilities and a horticultural society, Master Gardener program, conservation groups, and universities were able to galvanize support on a broader level and spread the gardening program to other institutions in their respective state. Table 5 lists collaborators and benefits as a result of partnerships; the list is not exhaustive but gives an indication of the associations and the value of leveraging resources.

Table 5

*Collaboration and Education*

Collaborators	Education and benefits
Correctional facility	Structured curriculum
Horticultural society	<ul style="list-style-type: none"> <li>• Horticulture therapy</li> <li>• Plant identification</li> <li>• Ecosystem</li> <li>• Food production/agriculture</li> <li>• Landscaping</li> <li>• Propagation</li> </ul>
Master Gardeners	
University	
Conservation groups	
Office of education	
Nursery	
Other prison programs	Vocational training
Community organizations	Job placement
Nonprofits	Lectures from subject matter experts
Employers	Skilled volunteers
Public defenders	Restorative justice
	Wraparound services

At Program C the office of education partnered with the sheriff's office to develop curriculum specifically for the inmates. A dedicated employee runs all aspects

of the program, including teaching in the classroom on topics such as irrigation, plant identification, composting, greenhouse production, landscaping, pruning, and sustainability. Three agricultural/horticultural programs operate on the three acre lot: (a) nursery horticulture which focuses on ornamental plants, (b) food production, and (c) landscape and maintenance. The inmates grow a variety of plants, trees, fruits, and vegetables. The produce grown is distributed between the two jail facilities which house approximately 1,000 inmates.

Program C reported the program partners with Master Gardeners through the university agricultural program extension. Volunteers go through training in order to obtain certification as a Master Gardener. Part of their certification requires volunteer time. The participants come to volunteer at the facility once a week, providing training on propagation. The Master Gardener program is supported by having space to grow. Also, four times a year approximately 10 volunteers from the program volunteer to answer questions to the public during open house sales events where 500 to 1,000 people attend. Typically 10 to 15 inmates work and assist with the plant sales. The garden also partners with schools and nurseries by growing plants cheaply as well as donating plants. They deter competition with local nurseries by taking recycled pots off their hands.

Program D reported there is a classroom component and the course materials have been developed over a period of years and it's relevant to the season. Landscaping, seeding and pruning are covered in a manner that enables the inmates to apply the skills they learn to their own life within prison and beyond. The program aims to produce mature, empowered gardeners. Courses are mostly taught by horticulture society

employees that are trained in horticultural therapy and landscaping. Individuals with backgrounds in City Planning and Master Gardeners have also been guest lecturers. The program is open enrollment, there are not any certificates awarded so they try to be flexible with the curriculum since people are entering at different stages. The minimum amount of time a person is expected to participate prerelease is 4 to 6 weeks; the participants consist of sentenced inmates who are usually incarcerated for no longer than a year.

Program H discussed how the core class structure consists of five modules: (a) basic landscaping, (b) internal garden (eco/hort therapy), (c) human ecological connection, (d) food farming, agriculture, and (e) green jobs. The curriculum covers how nature can reconnect a person to himself or herself by recognizing behavioral triggers and how to react differently. Also food systems, food justice, and organic farming are covered in great detail. The program focuses on a holistic integrated approach to promote sustainability internally and externally.

Program B has two employees trained in horticulture and landscaping; they have books on flower and seed identification as well as educational videos for the inmates to use. The inmates learn through informal instruction and hands-on lessons taught by two civilian employees. At Program E, a manager recently met with a colleague over food services to build a relationship and find out what kind of produce would be beneficial to the kitchen. Their program also assists the inmates with resume writing and reflecting on their experiences working in the garden. The program provides reference letters and is

looking to develop a program to identify conservation organizations that will employ program participants once they are released.

Program D reported the Department of Corrections, city, and horticulture society collaborated to figure out how they could reduce the high recidivism rate; they explored what role horticulture could play in reducing recidivism. Inmates were being released with no marketable job skills and finding difficulty obtaining legal employment upon release. At first the program was designed to be vocational. The first program was established in the mid-1980s and had two groups participating: those who had been sentenced and those individuals who were detained while awaiting sentencing. The program ended up closing due to lack of funding. In the mid-1990s, the program for sentenced inmates reopened; the main garden is 2.5 acres with a number of smaller gardens throughout prison grounds. There are raised vegetable gardens, herbs, a rose wheel, bird and butterfly area, native woodland maple grove, and more.

Program D included an aftercare job placement component. Job placement was not always successful, and program administrators were interested in exploring why some former inmates were successful and others reoffended. They realized more work needed to be done with the inmates. Many inmates had substance abuse issues, exposure to violence, and lack of opportunity. The program began collaborating with other prison programs to provide more comprehensive care. Instead of direct job placement, a transitional job placement program was created. It continues training individuals on skills upon release that they were learning in prison. The transitional program allows prisoners to earn money as they transition to regular employment. The program allows

them flexibility and support to attend other aftercare programs to address substance abuse and get their personal affairs in order, such as obtaining housing and identification cards and setting up bank accounts.

The program has three components: (a) vocational, (b) education, and (c) horticultural therapy. Inmates benefit by getting exposure to horticulture therapy and are able to deal with issues and find their mindset shift in a positive way. Many participants are new to gardening, and the program tries to make it intriguing through sensory stimulation, appealing to smell, taste, aesthetic beauty, and interesting names. The program tries making gardening appealing so it intrigues and captures the interest of program participants. The food grown is eaten by the inmates and also distributed to the families of graduates and those who have supported the program within the facility. The kitchen benefits with access to fresh herbs.

Program G explained how collaboration is working to promote a systems change in partnership with the city and prison. The partnership model can be difficult, because the horticulture society, social services, healthcare, defender association, and prison are involved in the collaboration. Difficulties arose around language, systems, and philosophical foundations. The groups ended up raising money to hire a consultant to conduct a workflow analysis, evaluate how information was shared, and develop common goals. The partnership requires the founders to invest in it, or it will not be successful; supportive leadership is also important. The group walked through the workflow of each participating agency/organization from the point of view of an inmate from being in prison to paroling and seeking and gaining employment. With the



assistance of the consultants, the group hopes to establish a sustainable setup that can be disseminated to other areas/institutions.

Program F responded that they have collaborated with many groups and organizations. A professor at a local college developed a greenhouse class for the inmates. Last year 200,000 pounds of produce was grown; 20,000 pounds went to community food banks. A community organization has initiated a partnership with the program so they can assist the inmates with conflict resolution. Facilitators work with inmates and review every aspect of their crime: the impact it had on their victim, society, and family with the possible end goal of facilitating a discussion with the victim. The inmate writes a letter; the district attorney reviews the letter and, if approved, invites the inmate to participate in a discussion with the victim about his or her crime. There is also a program that involves community members attending classes at the prison gardens.

Program H indicated those with the garden vision needed to devise a strategy to overcome the resistance they face. Fortunately, the prison administration supported the garden project in this instance and collaborated with the program founder and others to bring the garden to fruition. Collaboration was a crucial component which involved building trust and getting to know guards, administrators, and other decision makers and providing them research evidence showing the positive impacts gardens have with at-risk populations. Many staff members were gardeners themselves and understood the relaxing and restorative impact being in nature and working with the land had in their own lives. It took about a year and a half from the initial conversation until the first garden of native flowers and herbs was constructed and planted.

Program H collaborates with many community groups and organizations, one of which helps newly released inmates' transition into landscaping/horticulture jobs. They have worked with green employers to bring career fairs to the prison so inmates can network with prospective employers. A variety of groups have collaborated with the gardening program to bring awareness and teachings around horticultural therapy, meditation, and the healing connected to horticulture. The local Master Gardeners have also volunteered time to the garden. Some challenges to collaboration are that time is limited. Also, prison programs do not always have adequate internal communications, so they are not working with each other as well as they could be.

Program E reported the gardens are part of a larger sustainability program that has been established at all of the prisons in their state. Native plants are grown at two facilities; a third facility is in the process of getting trained so the native plant garden will soon be up and running. There are prairies that have a certain ecological makeup, and animals and insects have become endangered. A local conservation organization has identified a need to have the native plants raised and transplanted in order to preserve the native ecosystem. Inmates have been trained about the ecosystem, plant identification, and propagation and assist in research. Inmates learn how to grow native plants that are essential for the endangered species to exist.

The interviews revealed that programs that are a collaborative effort tend to have developed a curriculum which is structured to provide therapeutic lessons, in conjunction with vocational and horticultural knowledge. Ties with community organizations appear to benefit the horticultural programs in several ways. Affiliations with Master Gardeners,

the horticulture society, and conservation groups can be fruitful in providing access to pro bono lecturers and a plethora of knowledge. Collaborations with other entities and organizations may also help with restorative justice efforts as well as wraparound services for participants once they are no longer incarcerated.

### **Benefits to Society and Returning Citizens**

Horticulture programs benefit individuals participating in the programs by providing them a transformative experience and developing skills and ties to the community. The community benefits by having therapeutic programs that return people to society better off than when they left. The participants of the horticulture programs are able to address unhealthy behaviors and learn how to be productive, contributing members of society and less likely to return to prison. Table 6 illustrates the main benefits that surfaced during the research.

Table 6

#### *Benefits to Society and Returning Citizens*

Societal benefits	Participant benefits
Receive produce grown by inmates	Learn skills that lead to the constructive use of time
Participants return to society as contributors	Skills can transfer to employment and volunteering
Reduced recidivism saves money	Socialization, build interpersonal skills
Habitat restoration/environmental sustainability	Transformation and character development
	Access to fresh produce
	Get to spend time outdoors

Program C reported the benefits received by participating in the program depend on the individual. There is a vocational training component, and the skills learned through the garden also gives inmates an alternative way to spend time in a constructive manner once they are released. The program teaches inmates how to garden with family and kids. They are taught a skill like pruning roses, which enables some individuals to help out family members maintain their yards as well as prepares them for volunteer opportunities in the community. Inmates have pursued additional classes and training to further their knowledge in order to find employment in landscaping or irrigation which would enable them to earn a decent wage and support their family.

Program I reported that the benefits reaped by the inmates involved with the garden are immeasurable to a large extent. Twenty percent of the inmate population is dealing with varying degrees of mental illness; 12 inmates had become very withdrawn and were not socializing on any level or even coming out of their cells. A registered nurse heard of a socializing program that brings the mentally ill inmates together in a room where they interact and discuss current events. The facility decided to designate a special place in the garden for them to grow things. Providing them a place in the garden has not cost anything but has been tremendously beneficial, because many of the inmates now look forward to getting out in the garden when before they did not even want to leave their cells.

Program B reported that the garden provides socialization among inmates and also with community members from the outside. Last year about 100 pumpkins were given to several schools in the community. One batch went to a middle school/high

school mentoring program where the kids carved the pumpkins together. Two other batches went to a school for disabled adults and an elementary school for developmentally disabled children. One year pumpkins were donated to the symphony orchestra for a fundraiser. Inmates are often able to help deliver the pumpkins and see who they are benefiting directly.

Program D reported the community benefits by having offenders home, which keeps families intact; overall there is a positive ripple effect. Public safety is increased because there are more jobs and food security. The inmates are contributing to society with the skills they learn, making a positive impact, and paying taxes. A vast majority of participants are re-entering society; and one must ask, how do we want them to re-enter the community? Inmates receive social interaction through the program which helps to create conditions so they do not return to prison. Society saves money by keeping individuals out of prison. The public is safer when people return to the community skilled, motivated, and hopeful versus being angry. The program builds interpersonal skills and educates participants to make them more successful.

Program B indicated the inmates take responsibility for the areas they care for and maintain. They plant seeds in the greenhouse in the winter, and by March and April they are able to transplant the plants in the flower beds around the facility grounds. They have constructed a gazebo, picnic tables, benches, and lighting for the gardens. Since the gardens are outside the secure perimeter of the facility, the community has access to them. Weddings have been held in the garden, and a local cable television station shot

there when the flowers were in bloom. The inmates have arranged bouquets for events and have made hanging baskets for raffles.

Benefits to society include the returning citizens coming back in a positive and supportive way. The family-centered approach helps ensure the needs of the family unit are taken care of; securing employment helps former inmates stay out of prison. Program F reported that there is not a formal therapeutic component, but it has definitely made a positive impact on inmates. One inmate who was housed in solitary confinement was allowed to work in the garden and wrote an essay to share how the experience impacted him. Of the 57 inmates who graduated from the program, 23 have been released and none have returned to prison. There were 100 more inmates who would graduate between January and June that year. There is also a restorative justice aspect; the guys take pride in the gardens.

Program F indicated all of the gardens are edible; inmates are allowed to consume the food they grow. Eighty percent of the food is consumed by inmates, and 20% goes to food banks. The prisoners benefit by having healthy, nutritious food and a more positive mental outlook. Seventy-five men have been through the program out of a population of 600, so there is discussion among the inmates and a passive education component. They are able to see the food they are growing and have something to show for their hard work. There is up to 15,000 square feet under cultivation

Program H stated the external community benefits from the garden in that it helps inmates work on themselves so they are contributing to society in a meaningful way once released. The former inmates are less likely to commit crimes or victimize people; and

they have an understanding of food, farming, leadership, restoration, and healing. The program works with offenders by teaching them to communicate, giving opportunities to correct mistakes or behaviors which help them grow as individuals. Also, the program is helping to keep people out of prison. A review of inmates who participated in the program found that less than 10% had returned to prison, which pales in comparison to 70% of those in the general population who did not participate. The program is working to conduct an in-depth scientific study on how it has impacted recidivism.

Inmates learn empathy through nurturing living things, and they take pride in their work because they produce food they can consume. Inmates benefit by learning new skills and having the opportunity to get outdoors; and some find working with nature relaxing. The inmates care for the garden in hopes of a large yield, since they are able to incorporate what is grown into the prison kitchen and donate produce to local food banks. Local zoos have benefited by having the inmates assist with endangered species recovery. The inmates have made amazing contributions because they think about issues differently and have a new perspective and fresh set of eyes.

Horticulture programs benefit inmates because they grow into compassionate and responsible individuals through the process of taking care of a living plant. Inmates learn about socialization and how to be mindful of unhealthy behaviors and thoughts and how to express themselves through constructive channels. Skills are learned that can lead to certifications and volunteer and employment opportunities upon release. When inmates are provided genuinely therapeutic programs and develop meaningful skills, they have a real chance at establishing legitimate employment and successfully assimilating back into

society. Society benefits by recognizing most of the incarcerated men and women will return to the community so it is wise to invest in programs that rehabilitate them and prepare them to function in society.

### **Integrated Holistic Approach**

Running inmate horticulture programs in an integrated holistic fashion provides a robust array of wraparound services that increase the chances of a person succeeding in the program while incarcerated and on the streets once they are released. There are multiple factors that impact an individual's life once they are released; having assistance to navigate through challenging circumstances helps a person become better prepared for long-term success. Investing in wraparound services saves money in the long run, because people will be less likely to resort to criminal behavior. Table 7 lists organizations that were an integral part of providing services for several of the programs interviewed during the research.

The researcher interviewed a community organization (Program G) that provides supportive services through neighborhood service centers; services provided include childcare, afterschool programs, healthcare, parenting classes, housing assistance, and so forth. They have an integrative approach and provide healthcare through a university hospital for chronic disease management. The integrative approach views health as a part of job training. The organization helps to address barriers to obtaining and sustaining employment by providing assistance with transportation. The holistic approach includes support services up to one year postemployment in addition to job training. The entire family gets linked into the program, because family members with health issues can



impact the ability of the returning citizen to maintain employment. The program provides emergency assistance; one example is of a family that had fallen 3 months behind in their rent; the program helped them so the individual could stay in training. The program fosters and maintains relationships with participants, because they may need some form of assistance down the line.

Table 7

*Integrated Holistic Approach*

Type of organization	Services provided
Neighborhood service center	Childcare, afterschool programs, healthcare, parenting classes, housing assistance, transportation, job training
Horticultural society	Comprehensive training in landscaping and horticulture
Probation and parole	Open communication channels to address barriers Encourage operational changes to reduce recidivism
Third-party organization	Develop a strategic plan Analyze communication and how resources are leveraged Examine how data are collected, shared, and evaluated Redefine how recidivism is measured
Employers	Job training and placement

Program J has grown produce in the greenhouse and taught inmates basic landscaping skills. Inmates were serving sentences of 11 to 23 month on average, and

there was no concrete tracking of recidivism for individuals who participated in the program. In 2009, the prison expressed interest in connecting the skills inmates learned to jobs once they were out in society. An individual was brought in to look at the extension of services and how to provide comprehensive job training in landscaping and horticulture, as well as how to transfer these skills to employment upon release. The horticultural society provided approximately four weeks of training in addition to the 6 weeks provided by the prison garden program. The program starts prerelease while inmates are getting ready to re-enter society and then transitions to postrelease services and support. The inmate garden grows vegetable seedlings which go to community gardens and are grown into produce that is distributed to food banks. The prison campus has a greenhouse and several hoop houses and a large outdoor space.

Much of the collaboration involved framing the conversation, determining the skillsets of those involved, and the best way to leverage resources. Having lines of communication was imperative, and the person the researcher spoke with had an advantage by providing a fresh perspective on barriers since he came from the outside. Operationalizing a strategy for a systems change requires an evolution. The systems change focus requires organizations to examine how things can be done differently operationally. An example provided by Program J was when a parolee had an appointment to meet the parole officer at 1:00 p.m. but he had acquired employment and was supposed to be at work. The program was communicating with parole officers before the inmate was released to give them a heads-up about inmate job prospects and such; but with the high number of cases and individuals the parole officer had to look

after, it often was hit or miss. The program continued to place pressure on decision makers on how to address the issue. As new staffing came in there was interest in making changes and a genuine interest in wanting to reduce recidivism. This collaboration involved the parole office, employers, and service providers.

A third-party organization has been brought in to help develop a strategic plan for the program and map out a flow to identify how it works operationally and use it as a guideline as it evolves. The group is also looking at how they communicate, leverage resources, and make everyone involved feel engaged and empowered. They are also examining how data are collected, shared, and evaluated. Recidivism is based on a prison measurement which they are working to redefine. A university will be conducting research to help evaluate the rate of recidivism in comparison to the general population of prison offenders.

An integrated approach looks at the entire picture and takes into account all the factors that impact individuals from prior to the time they are released from an institution through postrelease. The complexity of what needs to be in place in order for a person to successfully transition from an institution to employment requires a tremendous amount of collaboration among correctional facilities, community organizations, healthcare providers, parole/probation, employers, and the citizens returning to the community. Many former inmates have families and children; making sure the needs of the entire family are addressed is an important indicator of whether a person will succeed upon release. Basic life necessities such as having enough food and a place to live, in addition to access to healthcare and childcare, can distract individuals away from being able to

focus on job training and finding employment. Ultimately, not having support mechanisms in place to provide a safety net for basic necessities may cause a person to resort back to criminal behavior.

### **Challenges and Barriers Encountered**

The research identified numerous challenges programs encountered from their inception through implementation and the delivery of services. Gaining support from the institution, getting buy-in from staff, and establishing trust and effectively communicating were several of the first barriers faced by horticulture programs. The lack of resources impacted the ability to provide support services in relation to job placement and assistance with basic life necessities upon release. Table 8 lists common challenges and barriers identified through the research.

Program D expressed that recidivism is difficult to track because it is hard to measure what kind of impact the program had on an individual; because once inmates are released, they may relocate. They are not able to follow up with individuals because of lack of resources and other reasons. For those who have completed the postrelease program, Program D has been able to see who has returned to prison; and the recidivism rate is about 10% compared to the average of 65% for the general population and other institutions.

Some challenges presented by Program D have to do with the internal agenda; at a facility their focus is to provide security, which is a different focus from the horticulture program, which aims to teach and involves tools. Concerns were around safety and security; prison staff were concerned about managing equipment and tools and the

oversight of the inmates' movement. There is a great deal of support from the Department of Corrections, and over the years they have established good relations. The program is now treasured, and there is an understanding between the internal community and the program; but it was not an overnight development. Communication has been paramount to getting the groups to work together.

Table 8

*Challenges and Barriers Encountered*

Challenges	Barriers
Measuring recidivism	Difficult to measure the impact of the program; lack of resources makes it difficult to follow up
Competing agendas	Different areas of focus between correctional facility and horticulture program; learning to work together to achieve goals and maintain security
Gap in support services	Wraparound services such as healthcare and job placement were lacking and recidivism was high.
Probation and parole restrictions	Landscaping jobs often require employees to travel between counties, and it can be difficult for participants to get permission to travel from their parole or probation officers.
Creating win-win situations	With a number of organizations, individuals and institutions involved making sure that everyone involved benefits can be difficult
Length of growing season	Cold climates with harsh winters have a reduced growing season and must plant, grow, and harvest on a small timeframe.

Program J reported that at the beginning of the program there was a huge gap in support services. This was revealed when a pilot program consisting of five inmates went through the skills-development training. The cohort received the training and did okay at first, then one of them was back in prison within 2 weeks. It was determined that social services and other supportive wraparound services were needed. The horticulture society and the city collaborated for 2 years after that to bring re-entry services such as job placement, but it was inadequate because the recidivism rate was still high. In 2012, they integrated with another nonprofit to provide support services where former inmates received healthcare and job and career development in addition to other services.

Once released, a majority of inmates are under supervision and report to a parole or probation officer. Securing employment within days of release is an enormous obstacle for the formerly incarcerated; a community organization was able to employ former inmates part time in their landscaping program. The program was envisioned to provide the participants with more in-depth training in permaculture for a period of about six months as they transformed yards in five area counties. It can be challenging for the program participants to get permission from their parole or probation officer to travel out of the county.

Program E reported challenges include making sure everyone involved benefits. There are inmates, students, the correctional facility, academic partners, and volunteers which makes finding balance difficult. They had not measured recidivism yet, because most data look at inmates 3 years postrelease. A graduate student has taken on the task of looking at individuals who have gone through the program.

The length of the growing season presented a challenge to institutions gardening in the areas with harsh winters. In areas where the number of frost-free days is under 100, everything to be grown must be planted, grown, and harvested between May and September. Legislation has impacted horticulture in the correctional facility various way. It acted as a catalyst for some state prison systems to establish gardens in order to cut food costs or promote sustainability, while inmates in other states are not permitted to consume the food they grow under health and safety regulations. Safety and health department regulations put such restrictions on how the crop is harvested, processed, and delivered. Legislation allowing hard or retributive labor enables states access to cheap, expendable labor which can lead to exploitation and abuse of the inmates.

### **Funding**

The research revealed programs obtain funding through a variety of sources, including public institutions, nonprofit organizations, grants, and philanthropic foundations. Many of the inmate horticulture programs relied heavily on donations of equipment and supplies. Committed volunteers also made enormous contributions with their time and sweat equity to make the horticulture programs a success. Figure 8 lists funding sources that surfaced during interviews with the inmate horticulture programs.

Funding is an issue with a number of inmate horticulture programs and changes over time. Program C indicated a portion of the classroom funding comes from the state office of education based on average daily attendance. The facility funded the remaining balance through the Inmate Welfare Fund, which raised revenue through the sale of commissary to inmates. The money would go to the Inmate Welfare Fund which was

diverted to provide inmates with programs. Approximately seven years ago the county discontinued the funding from the Inmate Welfare Fund. The entire vocational program was in jeopardy of closing; the portion consisting of auto body and carpentry were closed. The agricultural/horticultural program was able to sustain itself by selling plants, trees, and other items grown by inmates to the public, cities, and counties. Eighty percent of the program is funded through plant sales; 20% is funded through the average daily attendance provided by the office of education. The garden is open to the public 180 days a year by appointment. Last year they sold 40,000 1-gallon ornamental plants.

- Office of Education
- Inmate Welfare Fund/commissary
- Donations
- Department of Corrections
- Horticulture society
- Grants
- Community foundations
- Charitable trusts
- Philanthropic foundations
- Department of Defense
- Kiwanis Club

*Figure 8.* Funding sources.

The funding for Program I is supported through the inmate commissary, which requires money made through the sale of items to inmates goes to benefit inmates. The



gardener was hired using funds from the commissary sales. One of the challenges is that the garden demands a tremendous amount of water, and currently water is supplied by the city. Next year they hope to put in a well which will cut costs in half. The community is supportive; many donations of tools and materials come from the community. Hoses, tool, and compost have been donated by members of the community. Eighty tons of compost was donated by a commercial business; the squash and beets have grown huge since the compost has been utilized. The nursery regularly drops off shovels and hoses. They have also given broken bags of soil to the program, since they are not able to sell them at the nursery. The garden grows vegetable starts which are provided to nonprofits and schools.

Program D responded that the program is funded through the Department of Corrections by providing officers, land, equipment, and buildings. The horticultural society supports the program by providing staffing and plant material. They also obtain grants and do a fair amount of grant writing. They also apply for funding through organizations that are geared toward mental health and supporting employment efforts for disadvantaged populations. Individual contributions from donors and members of the board of directors provide generous support toward the program.

Program J reported funding comes from the prison as well as a community foundation that focuses on behavioral health and the impact the program has on individuals. The program was awarded a federal grant that focused on building capacity around workforce development and providing ex-offenders jobs and long-term sustainable work. Charitable trusts and philanthropic foundations have contributed as

well as individuals. The program had to gauge how interested funders were in being at the table. The program had to provide information on what impact their contribution would have and what kind of return on investment they would have.

Program G shared that their funding has been received primarily through foundations; they are on the tail end of a 3-grant. It is difficult to get funding through the government, because the program is too innovative. Foundations interested in health promotion and disease management understand the premise of the program and are open to supporting it. The program is looking at how to sustain the program and has talked with various unions.

Program F reported there is barely any funding; the program is basically run by volunteers. Fundraising is very time intensive; they have received small grants and donations from individuals and churches. A different program indicated a wide range of collaborations enables the program to operate. The Department of Defense is a substantial contributor. The Kiwanis Club provides materials; they are able to raise money by selling plants grown by the inmates.

Funding among the inmate horticultural programs varies. A number of groups were able to secure funding through grants and charitable contributions. Several institutions had partnered with the Department of Education, city government, and other government or nonprofit organizations. Money raised through inmate commissary supported a few programs, at least temporarily. Overall, the programs appeared to be underfunded and relied heavily on volunteers and donations in order to sustain their gardens.

### **Summary**

The interviews provided valuable insight into the effort and collaboration that was needed to establish gardening programs in correctional facilities. The planning, implementation, and execution depended heavily upon the commitment of individuals with a vision and their ability to gain buy-in from administrators, the community, inmates, and other stakeholders. There were often hurdles to overcome, because the horticulture program operates under a unique set of circumstances in correctional settings. When financial challenges presented, individuals from the community and various organizations came together to lend support through donations of time, tools, and equipment. Program administrators also were creative in finding ways to operate on minimal budgetary resources. The benefits of horticulture programs are felt beyond prison walls; the inmates make a meaningful impact with the produce, shrubs, and plants they grow because they often donate a portion of what they grow to schools, food shelves, and other community groups. The intangible benefits of the program are difficult to quantify but certainly do not go unnoticed. A transformation happens when humans are connected to nature and are allowed to nurture a living plant.

### **Additional Insights**

A large segment of the prison population is serving excessively long sentences for nonviolent crime. The number of people incarcerated for drug law violations has increased 1,100% since 1980; nearly six in 10 people in a state prison for drug law violations have no history of violence or high-level drug sales (Mauer & King, 2007). Reducing the number of people sent to prison should be taken into consideration, and this

could be done through sentencing reform and reallocating funds to community programs where citizens are rehabilitated. Building more prisons and allowing private companies to profit from incarceration is a practice that is costly and has disparate harmful implications for society. It appears there is a lack of accountability for the failing penal system; leaders are encouraged to open discussions between groups to develop an integrated approach to address the root causes of crime and how they can be addressed and to implement programs that work.

CHAPTER VI  
SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

**Overview of Chapter**

The purpose of the study and the findings are summarized in this final chapter. These findings are discussed in relation to innovation diffusion theory covered in Chapter III. The five distinct archetypes associated with inmate horticulture programs are reviewed. Suggestions for future research are offered, as there are many unexplored dynamics related to the impact of horticulture programs on incarceration, rehabilitation, and recidivism. Suggestions for developing effective programs in the future are offered.

**Summary**

The research revealed horticulture-related programs have a perceived positive impact and foster qualities indicative of leadership, responsibility, accountability, compassion, and resilience. The programs also serve a dual purpose by providing program participants rehabilitative activities in conjunction with a restorative justice component. For example, inmates have grown seedlings that were later transplanted to community gardens and raised plants that were sold to the public, donated to schools, and used by cities. The program participants learned to grow produce that was sold at farmers markets and donated back to their own communities. Teaching the program

participants how to grow their own food is a skill they can take back to their community and share.

The first research question addresses the perceptions of those involved in developing the horticulture programs, its efficacy, challenges, and benefits to those served and the community. Horticulture programs can give inmates a constructive way to spend time and can help secure employment once they are released. The garden provides socialization among inmates and also with community members from the outside, developing interpersonal skills. Several of the programs have a therapeutic component that can give inmates insight into their behaviors and how to stay on the right track.

Difficulties arose around language, systems, and philosophical foundations. Some challenges presented have to do with the internal agenda. A correctional facility is focused on security, which is a different focus from the horticulture program aiming to teach using tools. Concerns were around safety and security; prison staff were concerned about managing equipment, tools, and oversight of the inmates' movement. Funding is an issue with a number of inmate horticulture programs. A few horticulture programs reported dedicated resources, but a majority relied on donations, volunteers, community foundations, grants, and charitable trusts.

The benefits to society and those participating in horticulture programs are evident in several areas and magnified when wraparound services are provided upon release. An inclusive family-centered approach benefits inmates by ensuring the needs of the family unit are taken care of so they are not distracted by worrying about how they are going to provide food, shelter, and care for the medical needs of their loved ones.

Finding and securing employment helps former inmates stay out of prison; partnering with agencies that have established relationships with employers solidifies the chances of connecting with employers that are willing to work with felons.

Public safety is increased because people are employed, earning money, and have a sense of pride, which are deterrents to returning to criminal behavior. The community benefits from horticulture programs because participants gain knowledge and skills that can be brought home and shared, thus increasing food security. Former inmates are less likely to commit crimes or victimize people if they have been exposed to rehabilitative programs that prepare them for job opportunities upon release. Well-rounded programs give participants an understanding of food justice, horticulture, leadership, restoration, and healing.

The redistribution of revenue from asset forfeiture would better serve the community from which the asset was obtained versus the funds going to law enforcement agencies. Allowing police departments and federal agencies to reap the profits of asset forfeiture encourages corrupt practices around seizing property; these institutions are already funded by taxpayers. It makes sense to funnel money back into the community from which the asset was seized to fund social programs, services, and training that could assist community members with improving their quality of life. Reinvesting into the communities impacted by illicit activities uplifts and enriches the environment, empowering citizens to do better. Creating urban gardens and edible landscapes in parks, schools, and vacant lots would provide jobs for those returning to the community after incarceration and make fresh produce more accessible to citizens who need it most.

Spending on outsourcing prison operations should cease and the money reallocated toward community-based programs and rehabilitation services. The research revealed the enormous contributions and dedication of community groups and organizations. Many of the groups are run by volunteers on a minimal budget who found a way to leverage what little resources they had to make a meaningful impact. The expertise, knowledge, and breadth of the organizations' work could be increased exponentially if the government recognized the value of community-level intervention and funded the programs accordingly.

The second research question identifies the ways in which the horticultural programs vary. The research revealed horticulture programs fall into different areas of focus; innovative programs have blended components to provide integrated services. Five primary archetypes were identified during the course of research: rehabilitative/therapeutic, punitive labor/retributive, vocational, cost savings, and sustainability.

It is also important to note that a number of programs exhibited more than one archetype (secondary archetypes). In some instances the program was designed to serve several purposes; other times it just naturally evolved that way. Programs focused on rehabilitating participants through a therapeutic approach often ended up taking on vocational characteristics based on the skills inmates were picking up. It was not uncommon for programs with a specific focus, cost savings for instance, to discover exposure to horticulture produced an unintended but welcome byproduct in terms of personal transformation.



Rehabilitative horticulture programs involve a comprehensive curriculum in horticulture, food systems, personal accountability, green technology, and self-improvement to provide participants with a well-rounded education. These types of programs tend to be voluntary and may include horticulture therapy to assist with transforming the individual through self-reflection and socialization in relation to working with plants. Participants are taught to recognize their triggers and how their actions impact their life, family, and future. Through the rehabilitative process participants learn to be self-aware; there are often wraparound services in place to assist individuals upon release.

Punitive labor/retributive programs tend to be large-scale farms where inmates have been sentenced to hard labor. Participating in these programs is typically forced and not voluntary. The working conditions are an area of concern as is the propensity for the exploitation of prison labor. There is minimal oversight in this area to look out for the well-being of inmates sentenced to hard labor. Inmates often work long hours in extreme weather tending to the land and in factory-style food production. Hard labor is most concentrated in southern states. Common features noted in punitive labor/retributive style programs include the following: participation is involuntary, hours are long, and the working conditions are harsh.

Vocational programs tend to be voluntary and provide participants with skills that can be utilized for employment once they are released from the correctional facility. Participants are trained on specific skills that will hopefully make them competent and more competitive when they enter the job market. There are varying degrees of formal

instruction; some programs include a classroom component in conjunction with hands-on training. A few programs offer a certification as a Master Gardener, which distinguishes the individual as having a certain level of knowledge in the field. Robust programs have collaborated with employers to assist former inmates with job placement once they are released.

Several programs were developed as a cost-saving mechanism. Some states faced legislative mandates to reduce expenditures on food at correctional facilities. A number of institutions were looking for a way to provide inmates with low-cost programs to keep them busy; since they had land available, they opted to start a garden. The amount of space needed to grow enough food to make a sizeable reduction in food costs is not available in many areas. Also, the weather impacts the length of the growing season in certain climates. A few facilities generated revenue from selling produce and livestock. A handful of programs were able to grow enough produce to feed inmates and donate the surplus to the community.

Concerns about the environment and sustainability have prompted states to focus on conservation and initiate efforts to reduce energy and water consumption, in addition to waste. There has been a push to build green facilities and reduce the environmental impact. Established institutions have implemented alternative energy sources, including solar, wind, and thermal energy. Kitchen waste is being composted to reduce the amount of waste going to landfills. The compost is also used for organic gardens on prison grounds. Inmates have played a role in growing plants used in habitat restoration and research.

In addressing the third research question, collaboration played a critical role in establishing gardening programs in correction settings interviewed for this study. Collaboration was a crucial component which involved organizations building trust and getting to know guards, administrators, and other decision makers. Much of the collaboration involved framing the conversation, determining the skillsets of those involved, and the best way to leverage resources. A community organization explained how collaboration is working to promote a systems change in partnership with the city and prison.

Providing stakeholders scientific evidence showing the positive impacts gardens have with at-risk populations helped make the garden a reality. Collaboration between correctional facilities, the horticulture society, Master Gardener programs, conservation groups, and universities helped galvanize support on a broader level. These partnerships were imperative to the adoption of horticulture programs at other institutions in their respective state. The success of any partnership is dependent upon the founders' willingness to invest in it; supportive leadership at the correctional institution is also important.

An interviewee reported the Department of Corrections, city, and horticulture society collaborated to figure out how they could reduce the high recidivism rate. Many inmates had substance abuse issues, exposure to violence, and lack of opportunity. The program began collaborating with other prison programs to provide comprehensive care. A community organization reported providing support services through neighborhood

service centers, including childcare, afterschool programs, healthcare, parenting classes, and housing assistance.

### **Theoretical Foundation**

Social construction of target populations enables negatively constructed groups to be alienated and disproportionately impacted through policy design (Schneider & Ingram, 1997). A distorted perception of a target group (drug offender) enables policy entrepreneurs to persuade the public to support punitive measures in lieu of rehabilitation or harm reduction. Over time, the disenfranchised population is systematically targeted by deceptive and confusing policies. The public are led to fear the target population; this blurred perception prevents the marginalized group from accessing resources or having a political voice. When degenerative policies are continually reproduced, the policy designs become institutionalized.

The social construction of an issue or population impacts the political response and diffusion rate of the policy or idea associated with it. Boushey (2012) referred to these policy dynamics as punctuated equilibrium; reframing the issue draws attention from new audiences and can accelerate the speed and scale of diffusion. This idea complements how social construction and innovation of diffusion coexist and impact the political landscape. The framing of issues, the type of media attention received, the amount of public demand to address the policy issue, and federal government involvement all influence the adoption and diffusion of innovations.

Social constructions of crime, punishment, and rehabilitation need to be reassessed. Many of the inmates are nonviolent offenders who have committed crimes

because they were impoverished and did not have the means to make a legitimate living or they suffered from addiction. The economic disparities in the United States disenfranchise large numbers of people; wages do not even come close to meeting the cost of living. At the same time, social programs and funding for food stamps are being reduced. Economic and social policy impact criminal behavior; citizens should have equal access to quality education, food, shelter, and employment. With very few alternatives, people are forced to supplement their income with illicit activities that risk their livelihood with hefty penalties, such as mandatory minimum sentences for first-time offenders. The criminal justice system leans toward incarceration by way of excessively punitive policies and strict sentencing guidelines, even for nonviolent offenders. Harsh punishment is overutilized, and rehabilitation is underutilized in the United States. Incarceration should be a last resource after other alternatives have been exhausted. Crimes associated with addiction land individuals in prison for long periods of time; these people have a condition that should be addressed in a medical setting. A shift needs to occur so that drug-related crimes, like possession, are treated from the public health perspective instead of the punitive stance which reigns supreme.

Therapeutic programs have an approach that empowers participants and provides them with the knowledge and skillsets to make a change in their lives. Also, they tend to be more innovative by providing vocational skills and recognizing that assistance is needed to ensure sustained success once the individual leaves prison and is back in society. Holistic, integrated programs that link up with community groups to assist the newly released citizens assimilate and adjust back into society appeared to be the most

successful in terms of reducing recidivism and benefiting society. The holistic approach addresses the complex array of needs from housing, healthcare, job placement, counseling, and transportation and assesses the needs of the entire family unit and not just the former inmate. Well-rounded programs reduced recidivism and truly helped individuals transform themselves. Society also benefits from these kinds of programs because people return to the community hopeful and motivated instead of hardened; the cycle of poverty, addiction, and incarceration is dismantled.

Society benefits when the programs are able to address several different issues; holistic horticulture programs impact employment, food justice, and recidivism at a minimum. Horticulture programs can increase accessibility to fresh produce by sharing fruits and vegetables with communities in need and can help to start seedlings for local gardens and schools. Those transitioning from inmate horticultural programs can be employed at neighborhood gardens; this provides them with an income, establishes ties in the community, and provides fresh, healthy food.

Innovation of diffusion analyzes the adoption of a new idea, technique, policy, product, or service, focusing on how it is communicated and adopted over time by a social system. The decision process on whether to accept or reject an innovation incorporates a cost-benefit analysis approach where people tend to adopt the innovation if they feel it will be more favorable than the status quo. The innovation decision hinges on the personal characteristics of individuals and the degree to which diversity exists. Technology and media can assist in bringing awareness of an innovation and potentially

expedite the diffusion process at a rapid rate by placing pressure on opinion leaders to make a decision on whether or not to adopt the innovation.

The number of inmate garden programs focused on providing an integrated approach to improving behavior, self-reflection, teaching vocational skills, and a sense of community has not reached the point of critical mass. The lack of knowledge around the therapeutic benefits of gardening may impede institutions from experimenting with alternative programs. Challenges to diffusing therapeutic and sustainability-focused gardening programs are around social and political inflexibility. Politicians do not want to be viewed as soft on crime. Contracted companies like Corrections Corporation of America and Geo Group do not want to get cut out of the lucrative business of housing and overseeing individuals under the supervision of the criminal justice system. Despite resistance, a noticeable effort to diffuse the use of gardening for therapeutic and sustainability reasons has occurred in recent years.

The social construction of nonviolent offenders needs to be shifted in order for there to be a change in policy. The framing of issues related to drug use should be framed as a public health approach in order to draw the attention of new interests and promote policy reform. A way to ignite renewed interest in an issue is to expose it to a new audience. The discussion around crime would be more productive if there was a shift in the dialogue from how we are going to punish people to what can we do to reduce crime by investing in community infrastructure and programs so people do not have to resort to criminal behavior. Resources expenditures for drug offenders should be reallocated from funding punishment to treatment under a medical model.

### **Developing Effective Inmate Horticulture Programs**

Research provided insight into practices that appeared to be contributing factors to building and sustaining effective inmate horticulture programs. Creating a well-rounded curriculum for inmates that includes therapeutic and vocational components can help make the program a truly transformative experience. Collaborating with community organizations and nonprofits helps inmate horticulture programs gain access to subject matter experts who are often willing to lecture and assist with the development of skills free of charge. It is also beneficial to provide a restorative justice aspect where the inmate can establish ties to the community through repairing harm and seeing how the produce or plants they nurtured and grew have benefited others and made a meaningful impact. A few examples of restorative justice efforts include victim/offender mediation, environmental restoration projects, donating produce to communities in need, and growing seedlings for schools or nurseries.

Horticulture programs should be adaptable to local environments and take into consideration issues related to space, climate, security, goals, and resources. In harsher climates greenhouses may be a preferred option, since the length of the growing season is limited and the elements can impact the type of crops produced. There are many options when it comes to designing gardens in order to make efficient use of space and resources. It is also a good idea to collaborate with the local community, because they may have tools and materials to donate along with expertise to share. Involving the community with the inmate horticulture programs also allows for exchanges and socialization



between the groups, which can dispel stereotypes and reduce stigmatization of the inmate population.

Providing wraparound services to support inmates as they transition from jail or prison is an important factor that reduces recidivism. Reintegrating back into society is complicated and can be overwhelming. Support services provided through partnerships with nonprofits and community organizations can help to identify challenges and potential barriers to success and assist former inmates navigate through difficult times. Finding employment, securing housing, addressing the medical needs of the family, and obtaining job training and transportation are areas where returning citizens struggle. Inmate horticulture programs should leverage institutional and community resources through collaboration so that a holistic approach can be implemented to address the needs of the returning individual in an integrated fashion. Programs that invest in participants and address their needs holistically provide the greatest chance for success. Robust inmate horticulture programs also benefit society by examining and addressing the behaviors that led individuals to commit crime so they are able to transform themselves, provide for their family, and become contributing members in their community upon returning home.

Successfully diffusing programs is dependent upon communication and collaboration with decision makers. Bringing the right stakeholders to the table and providing evidence of why the program is an improvement to the status quo helps persuade institutions to take an innovation into consideration. Framing the innovative program so that it is in alignment with the organizational goals increases the chances it

will be adopted and implemented. It is also helpful to involve decision makers throughout the planning and implementation process so they are invested in the success of horticulture program; their perception will set the tone on whether it is embraced by the rest of the institution.

### **Future Research**

Future research examining integrated efforts across disciplines to provide comprehensive support and rehabilitation services for nonviolent offenders would be helpful in identifying communication challenges and logistical and political barriers. Gaining an understanding of how cross-sectorial partnerships function will aid in developing models to assist with future endeavors involving collaborative frameworks. The mission, vision, communication style, and political climate of every organization are different; addressing common barriers and challenges will aid in fostering productive partnerships.

In order to understand why disenfranchising policies are continually passed, an in-depth economic analysis of which institutions and corporations profit from incarceration at every stage of the criminal justice system would be enlightening. It is important to identify the institutions and stakeholders behind the scenes holding the purse strings. Mapping out campaign contributions, company/institutional affiliations, and legislative backing would likely produce a matrix with notable coincidences.

A longitudinal study that follows the inmate participants of horticultural programs to determine how recidivism is impacted would be valuable. A scientific study producing credible evidence of the impact horticulture has on recidivism could make government

funding more accessible. It would also be interesting to see whether any of the former offenders pursued additional training or employment in horticulture upon release. Another interesting piece of research would be to examine programs focused on rehabilitation that also have a restorative justice component.

### **Closing Remarks**

Learning from the work of pioneering programs can serve as an example for the kind of steps that need to be taken on a broad scale. An integrated model similar to how medical providers have partnered together with different types of practitioners to deliver services illustrates how a whole-systems approach solidifies the chances for sustainable success. Citizens returning to society not only need jobs, but they also need to be healthy in order to work; they need to have a place to live, transportation, counseling, childcare, and other services vital to their success. Providing therapeutic programs to individuals while they are incarcerated in addition to wraparound services upon release greatly enhances the chances that a person will not return to prison.

Harsh punitive sentences for nonviolent offenses are ineffective and costly both monetarily and socially. First steps toward remediation require sentencing reform for nonviolent offenses. Mandatory minimum sentencing sends a disproportionate number of people of color to prison for an exorbitant amount of time and cost; Black men are charged with an offense carrying a mandatory minimum sentence at nearly twice the rate of Whites (Starr & Rehavi, 2013). Supreme Court Justice Anthony Kennedy candidly stated, “Our resources are misspent, our punishments too severe, our sentences too long,” urging the repeal of mandatory minimum sentencing and the revision of the Federal

Sentencing Guidelines (Batey, 2007). Serving time in prison has not demonstrated that it is effective at rehabilitating individuals or reducing crime or recidivism.

Consider a person in their twenties serving time in prison for a nonviolent drug offense and imagine the impact and repercussions that experience will have on the rest of his or her life. In contrast, contemplate how sending that same young adult to college or a rehabilitative vocational training program would change the trajectory for that individual and society. The latter would not only be cheaper but also an investment in the person and society as a whole. The young adult coming back into the community after a 10-year prison sentence is going to be drastically different than if he or she were educated and given skills and resources to go another direction. Regardless of whether you know anyone who has ever been incarcerated, addicted to drugs, sold drugs, or used them recreationally, every citizen is impacted by overly punitive policies.

The time to assess and address the broken criminal justice system is long overdue. Decades of ineffective and poorly written policies, misspent resources, and discriminatory practices have left a wake of shattered lives. Generations of families have been decimated and caught in a cycle of poverty, incarceration, and addiction. The individuals being disproportionately impacted by drug policies are silenced during the political process by not having adequate representation, resources, or in some instances, the right to vote. The social construction of issues and media coverage taints the perception of the involved parties so that the public fear for their safety and support overly punitive practices.

This research reveals that the root cause of over-incarceration lies in social, economic, and political inequities. People who are grappling with addiction are dealing with a medical issue and should be treated by medical professionals; locking a person in a cell does not address their disease. Continually implementing practices that clearly do not work is reckless. The best chance for promoting positive change is by having an open dialogue, seeking knowledge and truth. It is up to each individual to call out injustice and promote change.

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## APPENDICES



APPENDIX A  
CONSENT TO PARTICIPATE IN RESEARCH

## CONSENT TO PARTICIPATE IN RESEARCH

### Food, Justice: Farming for Freedom

You are being asked to participate in a research study conducted by Stacy MacCready, a doctoral candidate from the Department of Public Administration at the University of La Verne. The results of this research will contribute to a doctoral dissertation. You were selected as a possible participant in this study because of your experience with inmate gardening programs.

- **PURPOSE OF THE STUDY**

The research will explore how individuals, community organizations, and correctional facilities have collaborated to bring gardening programs to incarcerated individuals. The research will explore how food justice and drug policy intersect, examining the roles of classism, racism and taking note of factors influencing recidivism.

- **PROCEDURES**

If you decide to participate in this study, we will ask you to do the following things:

Provide a date and time you are available to participate in a telephone interview for approximately 15 minutes along with a phone number you prefer to be contacted at. Once the phone interview is under way, the researcher requests you answer each question to the best of your ability.

- **POTENTIAL RISKS AND DISCOMFORTS**

The interviews pose minimal risk to the dignity, rights, health, or welfare of the participants. The identities of the participants will be known to the researcher and held in confidence. Participants will be sharing their thoughts, experiences, and opinions confidentially. There are not any professional risks expected by participating in the research.

- **POTENTIAL BENEFITS TO PARTICIPANTS AND/OR TO SOCIETY**

Society will benefit from the research by having a greater understanding of the role collaboration played in establishing gardening programs in correctional facilities and how the programs vary. Society will also benefit from the interviewees sharing their perceptions in developing the garden programs and the program's efficacy, its challenges, and benefits to those served and to the community.

- **PAYMENT FOR PARTICIPATION**

There will be no payment for participation.

- **CONFIDENTIALITY**

Any information that is obtained in connection with this study that can be identified with you will remain confidential and will be disclosed only with your permission or as required by law. Confidentiality will be maintained by means of using study codes; each participant will be assigned a study ID before the collection of data. The study IDs will be securely stored on a password protected computer that only the researcher will have access to. The study ID will be used on the interview documents and questionnaires; no identifiable information will be recorded on study notes. All notes will be destroyed after they are transcribed.

- **PARTICIPATION AND WITHDRAWAL**

You can choose whether to be in this study or not. If you volunteer to be in this study, you may withdraw at any time without consequences of any kind. You may also refuse to answer any questions you don't want to answer and still remain in the study. The investigator may withdraw you from this research if circumstances arise which warrant doing so.

- **IDENTIFICATION OF INVESTIGATORS**

If you have any questions or concerns about the research, please feel free to contact Principal Investigator, Stacy MacCready (phone: xxx-xxx-xxxx/email: xxxxxxxxxx@xxxxx.xxx) or Faculty Sponsor, Dr. Keith Schildt (phone: xxx-xxx-xxxx/email: xxxxxxxx@xxxxxxxx.xxx).

- **RIGHTS OF RESEARCH PARTICIPANTS**

You may withdraw your consent at any time and discontinue participation without penalty. You are not waiving any legal claims, rights or remedies because of your participation in this research study. If you have questions regarding your rights as a research participant, contact Marcia L. Godwin, Ph.D., IRB Director, at 909-xxx-xxxx, extension xxxx, (xxxxxxx@xxxxxxx.xxx). University of La Verne, Institutional Review Board, 1950 Third Street, CBPM 123, La Verne, CA 91750.

<b>SIGNATURE OF RESEARCH PARTICIPANT OR LEGAL REPRESENTATIVE</b>
--

I understand the procedures described above. My questions have been answered to my satisfaction, and I agree to participate in this study. I have been given a copy of this form.

\_\_\_\_\_

Printed Name of Participant

\_\_\_\_\_

Printed Name of Legal Representative (if applicable)

\_\_\_\_\_

Signature of Participant or Legal Representative

\_\_\_\_\_

Date

<b>SIGNATURE OF INVESTIGATOR (If required by the IRB)</b>
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In my judgment the participant is voluntarily and knowingly giving informed consent and possesses the legal capacity to give informed consent to participate in this research study.

\_\_\_\_\_

Signature of Investigator

\_\_\_\_\_

Date

APPENDIX B

INSTITUTIONAL REVIEW BOARD APPROVAL LETTER



University of La Verne  
Institutional Review Board

TO: Stacy MacCready, Doctor of Public Administration Program  
 FROM: University of La Verne, Institutional Review Board  
 RE: **2013-CBPM-07-MacCready - Food, Justice: Farming For Freedom**

The research project, cited above, was reviewed by the College of Business and Public Management IRB Committee. It was determined that the research activity has minimal risk to human participants, and the application received an Expedited review. The application was approved with no additional conditions.

**A copy of this approval letter is required to be included as an appendix to your completed dissertation.** The project may proceed to completion, or until the **date of expiration of IRB approval, August 9, 2014.** Please note the following conditions applied to all IRB submissions:

No new participants may be enrolled beyond the expiration date without IRB approval of an extension.

The IRB expects to receive notification of the completion of this project, or a request for extension within two weeks of the approval expiration date, whichever date comes earlier.

The IRB expects to receive prompt notice of any proposed changes to the protocol, informed consent forms, or participant recruitment materials. No additional participants may be enrolled in the research without approval of the amended items.

The IRB expects to receive prompt notice of any adverse event involving human participants in this research.

There are no further conditions placed on this approval.

The IRB wishes to extend to you its best wishes for a successful research endeavor. If you have any questions, please do not hesitate to contact me.

*Marcia Godwin*

Approval Signature

Marcia Godwin, Ph.D.

IRB Director/Chair

August 9, 2013

Date

For the Protection of Human Participants in Research

[mgodwin@laverne.edu](mailto:mgodwin@laverne.edu)  
(909) 593-3511, ext. 4103