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Growing Gardens and Nurturing Community in the Urban Environment

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Abstract

The following literature will analyze how urban agriculture (UA), and more specifically community gardens, address the rising global pressures on urban areas by rebuilding local networks. First, it will present community gardening as a solution to the global food crisis. Second, five case studies will compare cities' community garden projects throughout the world: Accra, Shanghai, St. Petersburg, Havana, and Philadelphia. The next section will study the demographics of community gardeners, especially its impacts on marginalized members of society: children, women, elderly, immigrants and ethnic minorities, and physical and mentally challenged. And finally, the issues of city planning and green design will highlight community gardens' role in the creation of sustainable and engaged, civic communities.

The cookbook anthology that follows will examine these research conclusions, specifically UA's ability to rebuild local networks. Through histories, community stories, and gathered soup recipes, it will detail the programs of Southside Community Land Trust in Providence, Rhode Island: City Farm, Education: After-school, Urban Edge Farm, and Somerset Community Garden. Conversations with the staff will then study the avenues for social change through UA and the need for civic leadership.

INTRODUCTION

Inspiration: Community Gardening in the City

The motivation for my research into UA resulted from an enduring passion for environmental awareness and a recent internship experience. This past summer I worked in an elementary learning garden at a bi-lingual public school in Houston, Texas, and also volunteered at various community gardens. This opportunity allowed me to see the development of a sustainable, local community. It showed me the immense potential of fostering environmental stewardship at an early age, and how one child's newfound respect for nature can impact his or her family and create wide-spread benefits to the community. These gardens provided fresh produce for sale at farmers' markets, donated to local food pantries and shelters, and created bonds between gardeners.

This experience developed my understanding of food as a great equalizer. I especially grew to believe in gardening's power to unite the diverse populations of cities. As a result, I continued my participatory research through a commitment to Southside Community Land Trust (SCLT) in Providence, Rhode Island. SCLT was created with a mission to teach urban residents how to grow their own food, sustain the land, and sell their produce. Its original programs, City Farm and Somerset Community Garden, began when five acres of vacant, inner-city lots were turned into community gardens, to serve the influx of immigrants from agricultural backgrounds; consequently, immigrant communities continue to play a major role at SCLT. The land trust also holds camps at City Farm's Children's Garden, sells at local farmers' markets, and educates volunteers and community members about the benefits of small-scale agriculture.

In working directly with this organization, I was able to witness the challenges and benefits of UA firsthand. The final product of this experience, a cookbook anthology, speaks to the collaborative nature of this non-profit and of its community focus. My objective was to create a collection of stories that capture the various voices of UA through histories, interviews, and food. To supplement the literature review's global case studies, I wanted to give a local face to UA and explain its impacts on the Providence, R.I. community. Thus, each SCLT program is highlighted in its own section, and community reflections on SCLT experiences are included. The free telling of these stories directed my project and spoke to the relevance of UA on an immediate, local level.

The research that preceded this community engagement focuses on community gardening and its impact on the marginalized members of society: children, women, elderly, immigrant and ethnic minorities, and physically and mentally challenged. Specifically, the literature highlights the cultural, physical, and generational divides that often weaken the food security of marginalized individuals more severely than the rest of society. While critics might belittle UA as a hobby, unsanitary practice, or oxymoron, I hope to articulate its value within the context of the global food crisis. The five case studies I chose (Accra, Shanghai, St. Petersburg, Havana, and Philadelphia) span the globe to reveal obstacles specific to culture and climate, but their overarching successes present UA as a world-wide solution; gardening programs that address local needs through a committed membership, are compatible in any urban area. In conclusion, after a thorough review of the available literature, I will argue that community gardening not only directly combats the world's food insecurity, but it does so in a way that restores local communities and mobilizes individuals towards expansive, social change.

LITERATURE REVIEW

Prologue: Cultivating Change

“Growing food is the common thread throughout the world because everybody eats. It connects everyone across party lines, ethnic and religious differences. It would be different if people did not have power over others to manipulate them with food” - Rovyn Van En (Brown & Carter, 2003 p. 6).

The International Development Research Centre predicts that within the next twenty years “nearly all population growth will be in the cities of developing countries, where some cities are growing two or three times faster than the country’s overall population” (Luc Mougeot, *Growing Better*, 2006 p. 2). And in the next ten years, the number of ‘megacities’ of at least 10 million citizens will more than double to reach 23 world-wide (*Growing Better*, 2006 p. 3). The rising influence of globalization, technology, international markets, and industry, links these dense populations through systems of dependency that tax the local peoples and environment.

UA, as defined by Katherine H. Brown and Anne Carter, refers to “the growing, processing, and distribution of food and other products through intensive plant cultivation and animal husbandry in and around cities” (2003 p. 3). Thus, by definition, UA relies on practical and adaptable systems to combat urban development and food insecurity. Gardens appear in various locations, such as “rooftops...roadsides, beneath railroads...in vacant lots, on steep slopes and banks of rivers” (*Growing Better*, 2006 p. 5). Sustainable practices such as organic growing, compost generation, and wastewater recycling, increase efficiency. But most

importantly, UA reconnects urban individuals to their shared environment, through the universal need for food.

Community gardens particularly exemplify UA's ability to integrate citizens from diverse backgrounds and encourage dialogue. Each garden generally consists of allotment plots shared between families or neighbors, which add a green space to the city and generate a seasonal, nutrient rich source of food. As a result, the gardeners reconnect with nature and establish a bond with one another through their common aims. Community gardening especially helps the urban poor and often marginalized members of society, such as women, children, and immigrant groups. Gardens can be adapted to any climate and space, and their produce reduces growers' dependency on government subsidies or food shipments from abroad. Community gardening also restores the importance of mutual responsibility, and empowers the individual to act for social change. It provides a local means to address the global imperatives prioritized in the UN Millennium Goals, especially world poverty/hunger and environmental sustainability.

Setting: The Global Food Crisis

“One of the worst paradoxes in human history and one of the consequences of the economic structure of the current food system is hunger in the midst of plenty” (Brown & Carter, 2003 p. 4).

Modern society finds itself dependent on a highly impractical food system. The links in this system depend upon technology to grow more food, ship food greater distances, and improve food's appearance. But as the world's population continues to grow exponentially, the supply of fossil fuels diminishes, and climate change affects crop production- the need for domestic food

production reappears. Urban agriculture presents an effective solution for diverse, dense, and often impoverished city populations. Specifically through community gardens, UA designates a physical space for dialogue and planning, city greening, and improved health.

Dependence on Distance Travel

Elizabeth Rosenthal attributes the current system to the rise of “better transportation networks” and “cheaper labor costs” (Environmental Cost, 2008 p.2). These realities allow food production to occur thousands of miles away from its consumers and commercial destinations. She explains that “imported foods generate more emissions than generally acknowledged because they require layers of packaging, and, in the case of perishable food, refrigeration” (Environmental Cost, 2008 p.3). Thus, farmers have little incentive to assume pollution’s cost, and simply produce as much as possible to profit on the world market and compete with other nations’ subsidies.

Nations grow dependent on this system for their very sustenance, and consumers learn to “expect food whenever they crave it, with no concession to season or geography” (Environmental Cost, 2008 p.1). For example, the average shopper desires “washed lettuce and cut vegetables” even if picked before ripe and shipped from around the world (Environmental Cost, 2008 p.1). For example, “Italy has become the world’s leading supplier of New Zealand’s national fruit” in order to satisfy demand during New Zealand’s winter months (Environmental Cost, 2008 p.1). These consumer expectations, therefore, prove as much of a problem as the reliance on fossil fuels. In the words of the economist Paul Watkiss: “we are not paying the environmental cost of all that travel” (Environmental Cost, 2008 p.1).

World Bank, WTO, and IMF Pressures

Nations are also forced into the role of food importer as the World Bank, World Trade Organization (WTO), and International Monetary Fund (IMF) demand that developing countries make debt reparations their top priority. Walden Bello, the president of the Freedom from Debt Coalition, discusses how these organizations sacrifice food security through their involvement in governmental structures. For instance, in the late 1980s these organizations cut the Mexican government's system of agricultural subsidies and price supports in order to direct all funds to pay the international debt. Without this government assistance, the small-scale farmers struggled to compete against the low price of U.S. corn. This intervention created a shortage of the dietary staple, the tortilla, and left many Mexican farmers dependent on cash sent from relatives in America. Interest payments rose alongside unemployment. And, as similar situations occurred, these interventions also devastated the Philippines' rice production and Africa's farmland (Bello, 2008 p.1).

Ironically, U.S. crops like corn maintain their low price on the world market because of government subsidies and the protection of the North American Free Trade Agreement (NAFTA). This double standard of food subsidies not only jeopardizes the political integrity of the developing nations and their local cultural traditions, but it also contributes to a sharp increase in the world's population of hungry and impoverished peoples (Bello, 2008 p.3). In the words of environmental activist Vandana Shiva: "a farmer is now a 'consumer' of costly seeds and costly chemicals sold by powerful global corporations through powerful landlords and money lenders" (Bello, 2008 p.4). Specifically, Oxfam cited that since 1981 "the number of people living on less than a dollar a day more than doubled to 313 million people," largely because of such imposed, "structural adjustment" within governments (Bello, 2008 p.5). And as

developing nations channel all revenue to reparations rather than social programs, they directly worsen the global food crisis. Their food sovereignty, namely “the right of a country to determine its production and consumption of food and the exemption of agriculture from global trade regimes,” disappears (Bello, 2008 p.6).

Fertilizer and Fossil Fuel Food

WWII and the emergence of the automobile broke down small community networks and normalized long distance transportation (Hanna & Oh, 2000 p.208). Especially in the United States, families left cities for more spacious suburbs (Hanna & Oh, 2000 p.208). Globally, populations boomed and demanded more food. In 1970 an American scientist named Norman Borlaug created nitrogen pellets that fertilized fields. This invention launched the Green Revolution that dramatically increased crop production and allowed the exponential population growth to continue (Bradsher & Martin, Shortages, 2008 p.4).

Society’s dependence on this praised technology proves a main factor in the global food crisis; according to Keith Bradsher and Andrew Martin, fertilizer is universally the “most essential ingredient of modern agriculture” (Shortages, 2008 p.1). In fact, “overall global consumption of fertilizer increased by an estimated 31 percent from 1996 to 2008” (Shortages, 2008 p.2). Its nitrogen runoff increases algae populations in the oceans, which leave so little oxygen in the water that other marine life perish (Shortages, 2008 p.4). Robin Finn writes that fertilizer’s chemical cousin, petroleum-based pesticides, might even play a role in the decline of bee populations (Colony Collapse Disorder), upon whom crop pollination depends (2007 p.1). David Barboza also cites the agricultural giant Monsanto, who patents and sells Terminator seeds that cannot be replanted; instead, these seed varieties either act as a weed killer or require

fertilizer to grow (2000 p.2). Thus, without fertilizer the world's scale of food production could not persist.

This hypothetical describes the modern reality. The past five years have shown steady "shortages and soaring prices for fertilizer" which has limited farmers' production despite the growing demands for food (Shortages, 2008 p.1). Accessibility and transportation worsen the problem. Fertilizer is completely fossil fuel dependent because it is made from ammonium nitrate which, as author Michael Pollan points out, is also the main ingredient of bombs (2008 p.4). Nitrogen pellet production also requires large amounts of natural gas. As a result, the majority of fertilizer mines are in the Middle East and pellets are shipped abroad to farmers. The fact that fertilizer, like oil, cannot be produced fast enough translates into prices that have "nearly tripled...in the last year" and "insufficient food for 40 percent of the world' population" (Shortages, 2008 p.1). Also, most fertilizer users live within developing countries and cannot adapt to rising prices; consequently, their governments struggle to maintain the fertilizer subsidies upon which their farmers depend. The UN predicts that this fertilizer shortage alone will "push tens of millions of poor people into malnutrition" (Shortages, 2008 p.1).

Fertilizer and fuel used for packaging and transportation underlie the impracticality of the food system: the world depends on diminishing natural resources for its daily sustenance. Consumer expectations and changing global diets also play a role. For example, as more societies begin to eat meat or increase their consumption of meat, more arable land must be used to grow grain for feed (Pollan, 2008 p.7). Lisa Stiffler remarks that certain types of biodiesel made from local soybeans or algae reduce greenhouse gas emissions and have the potential to create a sustainable, recycled system (2008, p.2). However, the rising industry for ethanol made from corn and sugarcane often diverts arable land away from food production. The process of

creating (harvesting, refining, transporting) ethanol from corn also emits the same amount of greenhouse gases as diesel and slightly less than gasoline (Stiffler, 2008 p.2). Farmers, therefore, focus more on quantity rather than quality or environmentally conscious techniques. In the words of fertilizer producer Michael R. Rahm: “markets are asking farmers to step on the accelerator” without concern for the long-term effects (Shortages, 2008 p.2).

As farmers face a “more competitive...global market” and the increased anxiety of “volatile” food prices, Diana B. Henriques argues that the incentive is to produce the most profitable, stable crop (2008 p.1). Beat Balzli and Frank Hornig argue that even private speculators manipulate food prices to benefit their investments in agricultural markets (2008 p.1). And as the cost of fossil fuels increases, the agricultural industry grows more dependent and financially burdened by non-renewable energies. For example, Michael Pollan notes that it “now takes 10 calories of fossil-fuel energy to produce a single calorie of modern supermarket food” (2008 p.1). Britain “imports 95 percent of its fruit and more than half of its vegetables” (Environmental Cost, 2008 p.3). And, “almost 50% of the food transported is lost to spoilage” (Brown & Carter, 2003 p.4). “Cod caught off Norway is shipped to China to be turned into filets, then shipped back to Norway for sale...Argentine lemons fill supermarket shelves on the Citrus Coast of Spain, as local lemons rot on the ground” (Environmental Cost, 2008 p.1).

The emphasis, in the words of Katherine H. Brown and Anne Carter, turns to which crop varieties best respond to “industrial harvesting equipment and extended travel, (not to) their taste or nutritional value (Brown & Carter, 2003 p.4). In the U.S., “federal policies...promote maximum production of the commodity crops (corn, soybeans, wheat, and rice)” that create the “supermarket food” (Pollan, 2008 p.1). And as supermarkets move out of cities, the urban

population's food choices decline even further. This muddled system directly increases the cases of hunger, oppression, and social unrest.

Climate Change

Climate change proves another consequence of industrial technology, and similarly impacts food production. Scientists even reference the rising cost of food as proof of climate change's widespread effects (Bradsher, Drought, 2008 p.1). For example, Keith Bradsher reported that Australia's rice production has reduced by 98 percent as the result of six years of drought (Drought, 2008 p.1). Consequently, between February and April of 2008 the price of rice doubled worldwide (Drought, 2008 p.1). Australian farmers sold their rice properties and transitioned to the shepherding and vineyard industries that require less water (Drought, 2008 p.1). Their former network of consumers, however, still depend on imported rice and protested its rising cost: the event "spurred panicked hoarding in Hong Kong and the Philippines, and set off violent protests in...Cameroon, Egypt, Ethiopia, Haiti, etc." (Drought, 2008 p.1).

Across different continents and oceans, a global food crisis unites societies, threatening their health and stability. The Middle East has begun fifty projects to create new nitrogen fertilizer plants in hopes of capitalizing on the huge demand and its natural gas reserves (Shortages, 2008 p.3). And scientists have ramped up the search for hardier crops to resist the climate's changing temperature and moisture levels, as well as the rise in disease carrying insects (Drought, 2008 p.4). UA proponents particularly worry for children and individuals with HIV/AIDS, as "poor nutrition in these groups increases the risk of serious disease and death" (Rosenthal, World Food Supply, 2008 p.2). In terms of economics, rising food prices are driving some farmers to change industries or continually increase production to keep up with demand.

Some European economists even argue for a shipping tax or tradable permits that would make industries responsible for their food's carbon footprint (Environmental Cost, 2008 p.3). In turn, consumers spend more of their incomes on food, and humanitarian organizations, such as the Gates Foundation and the World Food Program, expend their budgets to bring food or seed/fertilizer vouchers to poor communities. According to columnist David Rieff, the Bill and Melinda Gates Foundation even donated over 306 million dollars in grants for agricultural development and innovation in Africa (2008 p.1). However, debate continues over the efficacy of such large donations. Critic and author Raj Patel argues that such donation heavy programs place "excessive confidence in technology and market-based solutions" rather than transforming the capitalism system that fostered such global disparity (Rieff p.3).

Global vs. Local Economies

The current food system not only proves unsustainable, but it also directly contributes to global hunger; the Green Revolution created an addiction to synthesized fertilizers and pesticides that now visibly cripples the agricultural sector. Consequently, the world hangs in a shaky balance as farmers struggle to make ends meet and consumers demand more, affordable food.

Acclaimed writer and Kentucky farmer Wendell Berry calls for a new agrarianism to repair the injustices of this global, industrialized food system (Berry; Freyfogle, 2001 p.71). He argues that the "overriding impulse of agrarianism is toward local adaptation of economies and cultures," which must be free of the historical pressures of colonialism or the global market (Berry; Freyfogle, 2001 p.71). "An agrarian economy is always a subsistence economy before it is a market economy (which)...assures its stability and its survival," and creates a connection between individuals and the land (Berry; Freyfogle, 2001 p.68). Local communities defend the

family unit because generations pass down valuable knowledge about the land that determines their daily survival (Berry; Freyfogle, 2001 p.69). Globalization's intangible resources of money and technology (Berry; Freyfogle, 2001 p.67), are replaced with a relatable, "diverse and particularizing vocabulary" that societies know intimately: "*community, ecosystem, watershed, place, homeland, family, household*" (Berry; Freyfogle, 2001 p.73).

Berry responds to the criticism of his "attractive but hopeless" argument, with an explanation of the current system's failures; the global economy prevents accountability and denies consumers' knowledge about their food's production (Berry; Freyfogle, 2001 p.75). "This (global economy) is an economy, and in fact a culture, of the one-night stand," where the world community seeks satisfaction in a never-ending, blind cycle of consumption (Berry; Freyfogle, 2001 p.64). Local economies, however, invest community members in the decision making process, and preserve a diversity of occupations- such as "farming and gardening"- that allows the system to adapt to challenges and respond to community needs (Berry; Freyfogle, 2001 p.68).

Thus, urban agriculture presents one especially cost-effective solution to this global crisis. It focuses on recreating a system of local nourishment in which communities regain the power to decide what and how to grow their food. And specifically through community gardens, UA holds the potential to reconnect communities to nature and to each other in a way that directly combats the impractical, impersonal current model of feeding the world.

Acts I-V: Case Studies from Around the World

“...Many large cities have become vulnerable as more countries are unable to feed themselves and fewer countries produce exportable surpluses” (Examples of UA in Asia, 2008 p.1).

The following case studies highlight the potential restoration of community. They present a range of programs such as water conservation, raised-bed cultivation, and gardens in public institutions, which emphasize community gardening’s adaptability and economic promise. Also, amidst each city’s vastly different social and geographic contexts, similar struggles arise and point to grassroots initiatives as a highly effective means towards urban renewal.

Africa: Accra, Ghana

Urban agriculture and recycling organic materials prove especially important for “arid environments” like sub-Saharan Africa (Kwaku Obosu-Mensah, 2008 p.1). And the pressures of an extreme climate only intensify as more of the African populations move into cities. Obosu-Mensah’s study on Accra argued that this migration from rural to urban centers reflects the fact that Africa’s population growth “has not been matched by infrastructural and economic development” (2008 p.1). Thus, even in developing cities, the problems of unemployment, poor health, and inadequate transportation and education intensify the numbers of urban poor.

Few citizens can afford property rights in Accra, so the type of UA that most directly impacts the community is “open-space cultivation” (Obosu-Mensah, 2008 p.2). Community gardens utilize the unused land within the city center and, unlike in private gardens, their excess produce is sold at market. This type of UA, therefore, provides an income to many of its unemployed citizens. It also capitalizes on the agricultural skills of its rural migrants to

efficiently produce 90 percent of the city's vegetables with 3 percent of the population farming (Growing Better, 2006 p.246). The lack of adequate roads and refrigeration to transport and store food, and the inability of rural regions to produce enough food, makes this city's contributions imperative.

Accra's success in UA required citizens to overcome the prejudices of their officials. Obosu-Mensah's study specifically cited the following concerns of authorities: that the gardeners would dangerously apply pesticides to the crops, that food grown in the city was "inherently unhealthy," and that the rainwater collected by plants would increase the mosquito population (2008 p.3). They also worried that gardeners would use unclean water to irrigate crops because of Accra's "high fees for the use of tap water;" consequently, policies still forbid individuals to purchase land for agricultural use in the cities (Obosu-Mensah, 2008 p.4). Officials even claimed that UA was dangerous because the tall crops offered criminals a place to hide (Obosu-Mensah, 2008 p.5).

However, gardeners have implemented water conservation and recycling initiatives. Often uneducated themselves, they gained the support of several knowledgeable and respected members of society to gradually change public opinion (Obosu-Mensah, 2008 p.6). And as Ghana's economy continues to suffer after the collapse of its stable colonial rule, UA's potential to provide local food, create employment for men and women, and rally esteemed members of society, has made officials unofficially recognize community gardening as a "permanent practice" (Obosu-Mensah, 2008 p.7). Obosu-Mensah even stated that officials now consider UA as a means to quell social dissent since citizens with a steady food supply are less likely to "agitate for an increased salary" or fight against "the realities of their exploitation" (2008 p.8).

Alexandra Woodsworth highlights citizens' challenges of "land acquisition, tenure, and allocation" (2001 p.1). She also emphasizes the critics claims that UA is "idealistic and impractical" as a community strategy because of these challenges and its gradual pace (Woodsworth, 2001 p.1). However, Woodsworth argues that the potential benefits of UA far outweigh these potential setbacks; it brings "flashes of life and color (to) the concrete jungle" (2001 p.2). Specifically in the case of Accra, community gardening has improved the diet, education level, and self-esteem among the urban poor (Obosu-Mensah, 2008 p.7). These individuals remain determined in their efforts to unify, sway influential citizens, gain access to more resources, and work with the Department of Parks and Gardens to legally protect their industry (Obosu-Mensah, 2008 p.7).

Asia: Shanghai, People's Republic of China

Shanghai recognized that a city's food supply determines its ability to expand, and currently reserves 42 per cent of its land for UA (Herbert Giradet, 2004 p.241). According to Herbert Giradet, Shanghai's projects include greenhouses for hydroponics as well as the more common, raised-bed gardens (2004 p.241). These projects provide a local food source for the 15 million city residents, and draw upon the skills of rural farm workers relocating to find work (Giradet, 2004 p.241). According to Lester R. Brown, government management has "in effect created a nutrient recycling zone around the city," overseeing 300,000 hectares of land (p.1). His study stated that "half of Shanghai's pork and poultry, 60 percent of its vegetables, and 90 percent of its milk and eggs come from the city and the immediately surrounding region" (Brown, 2008 p.1).

Shanghai's success stems from its early UA projects in the 1930s (Examples of UA in Asia, 2008 p.4). Specifically, its combination of government involvement, farming techniques, and city planning, has allowed agriculture to expand with the population. The UN study of UA in Asia explained that Shanghai's policies included "officials at the city, county, and farm levels," which unified communities rather than left official decisions to individual farmers (Examples of UA in Asia, 2008 p.4). One example of this strategy is the co-ordination of cross-province companies that direct "the flow of agricultural goods to the city and industrial goods to the countryside" (Examples of UA in Asia, 2008 p.4). Second, Shanghai implemented modern techniques as well as intercropping, which conserve the city's water and have increased the production of traditional crops (Examples of UA in Asia, 2008 p.5). Third, Asia's emphasis on city planning also boosts UA. Shanghai is divided into an inner zone and an outer zone that separates the city's center from its surrounding regions (Examples of UA in Asia, 2008 p.4). One quarter of the inner zone alone produces "76 per cent of the vegetables consumed in the city," according to UN statistics (Examples of UA in Asia, 2008 p.4). This production makes Shanghai self-sufficient in vegetables and grains, which allows them to export their surplus to outlying provinces (Examples of UA in Asia, 2008 p.5). The city has kept food prices stable and relatively low through direct contracts between merchants and sellers, such as "advance purchasing" agreements (Examples of UA in Asia, 2008 p.5). And, the combination of these practices creates an overall, sustainable system that encourages agriculture diversity and growth.

Shanghai proves one strong example of success while other, rapidly industrializing Asian cities struggle to organize UA projects (Examples of UA in Asia, 2008 p.2). Despite Asia's cultural tradition in small-scale agriculture and medicinal garden plots, the huge population boom within its cities increases home construction and decreases arable land (Examples of UA in

Asia, 2008 p.1). Often the available land remains under government speculation as city officials perceive agriculture as a rural occupation (Examples of UA in Asia, 2008 p.2). The shift away from cultural foods also decreases the demand for native crops and continues the global system of imports/exports. Shanghai's success and the recent trends in aquaculture and home gardening thus hope to restore cultural traditions and food independence within the region (Examples of UA in Asia, 2008 p.2).

Eastern Europe: St. Petersburg, Russia

When the Soviet Union collapsed, "food production on large-scale rural farms fell by 40 percent" (Brown & Carter, 2003 p.10). Katherine H. Brown and Anne Carter explain that this breakdown forced citizens to rediscover the small plots of land within their cities (p.10). Russia's cities now produce 30 percent of its overall food needs and 80 percent of its vegetables (p.10). St. Petersburg in particular has overcome bureaucratic resistance and persuaded its conservative citizens to adopt and budget for UA projects (Brown & Carter, 2003 p.10).

Vermicomposting, a process in which worms breakdown food waste and natural materials to produce compost, has been particularly successful. This process produces little odor, requires little space, reduces waste, and produces nutrient rich soil (Urban Agriculture in St. Petersburg, 2000 p.10). Many citizens have launched small businesses and a network of information has formed across national borders to link garden experts and share advice (UA in St. Petersburg, 2000 p.11). A study conducted by the World Health Organization (WHO) noted that the city also adopted a horticultural therapy project "to teach new skills to people possessing a reduced ability to work" (UA in St. Petersburg, 2000 p.11). The raised beds at St. Petersburg's Prothesis Institute combine instruction and rehabilitation within the garden setting; the garden

beds facilitate residents' access the crops, open "peaceful dialogue with nature," and build moral (UA in St. Petersburg, 2000 p.11).

This WHO study also cited St. Petersburg's implementation of roof-top gardens within the city's prisons. For example, the garden at the Kresty men's prison began in 1995 and transformed the overcrowded, hostile conditions (UA in St. Petersburg, 2000 p.12). The men found "a creative outlet for their energy" and the number of riots reduced; they learned valuable agricultural skills that eased their reintroduction into society (UA in St. Petersburg, 2000 p.12). The roof location even facilitated high yields because the building protected crops from the wind and cold (UA in St. Petersburg, 2000 p.12). The crops, in turn, helped the prison with its "serious financial problems;" they provided food for the inmates and the surplus could be sold to purchase farming tools or directed towards upkeep (UA in St. Petersburg, 2000 p.12).

The success of this location sparked the desire for a garden at the women's prison, and launched a garden at the boys' prison and at a secondary school. "The boys competed for the right to work in the garden, which became a privilege and a reward" (UA in St. Petersburg, 2000 p.13). Their nutrition improved among the prisoners, and they also gained valuable life skills. The plot at the school proved another success which surprised the doubtful teachers and raised supplementary funds for more teaching resources (UA in St. Petersburg, 2000 p.13). In fact, the teachers came to view school gardens as a viable teaching tool, and plan to expand their garden and implement gardens at other schools (UA in St. Petersburg, 2000 p.13). Thus, while the teachers' first required proof of UA's potential, St. Petersburg has since rallied around UA and even convinced the media to promote gardening as a useful, city investment (UA in St. Petersburg, 2000 p.14).

Latin America: Havana, Cuba

Havana's status as the leader in UA stems from its ability to act in times of crisis. The immediate collapse of the Soviet Union in 1989 obliterated Cuba's successful sugar cane market, left the nation uncompetitive under the U.S.'s trade embargo, and reduced its fuel supply to practically nothing. The oil shortages translated into no public transportation, little electricity, and no more "glorious heroic machinery" that had reigned over Cuba's agricultural system (McKibben, 2005 p.2). In the words of Bill McKibben, the country became "an island outside the international economic system...whose supply ships had suddenly stopped coming;" the people were forced to adapt (2005 p.2).

McKibben's article, "The Cuba Diet," highlights the ramifications of this forced transition. Within the first four years, the Cuban diet changed from "eating 3,000 calories per day...to 1,900" (p.2). The citizens dramatically reduced their meat consumption and once again used oxen for farm work. The older generations taught the community how to farm without pesticides or fertilizers (McKibben, 2005 p.7). The city took advantage of the arable land available and used vermicomposting as a means to revitalize the soil organically. In fact, vermicomposting even provided business opportunities for some individuals to sell their excess compost (McKibben, 2005 p.4). Consequently, Havana's urban gardens now produce 50 percent of its vegetables (Brown, 2008 p.2).

Cuba's single party system helped to enforce this rapid transition and involve every citizen in the effort (McKibben, 2005 p.4). In this political system, freedom of speech, and therefore dissent, does not exist (McKibben, 2005 p.4). Arguably, this reality limits civic engagement, a potential result of urban gardening that this literature review will later discuss in depth. In McKibben's words, the government works by "allowing" farmers to sell their

“surplus” crops; workers do not earn high wages, but respect hard work in and of itself (2005 p.5). Furthermore, the government guarantees every citizen an affordable monthly ration of food and even oversees the city’s farmers’ markets (McKibben, 2005 p.5). The universities teach strong curriculums in practical, agricultural knowledge, such as oxen management, that rival the United States’ agriculture and forestry programs (McKibben, 2005 p.6). Because of these practices, skilled professions like blacksmithing returned in great numbers, tourists returned, and foreign trade partners reappeared after the Soviet’s collapse (McKibben, 2005 p.7). McKibben dubs Cuba’s efforts the “reverse...of the Green Revolution;” he emphasizes that their rapid change to a local food system promises hope for other nations (2005 p.6).

North America: Philadelphia, Pennsylvania, USA

When questioned, community gardeners in Philadelphia said they participated in urban gardening for “recreational reasons...mental health...physical health...spiritual reasons...cost and convenience...a sense of community” and, of course, more nutritious food (Brown, 2008 p.2). Philadelphia’s success represents the potential for UA in the United States, despite its still regionalized projects. These U.S. projects particularly emphasize UA’s ability to unify diverse populations and peaceful, conflict resolution. And, as hypothesized in the Pennsylvania State study by Autumn K. Hanna and Pikai Oh, UA addresses the social as well as economic roots of poverty (2000 p.207).

Hanna and Oh emphasized how the post-WWII rise of suburbs weakened the steel city’s industrial center, in particular West Philadelphia (2000 p.208). The wealthy residents left the city and “discriminatory housing and loan policies segregated Black populations...to specific inner-city areas” (Hanna et al, 2000 p.208). Jobs also left the city and created a new type of

unemployed, unprivileged urban poor (Hanna et al, 2000 p.208). Ironically, while WWII provoked this negative shift, it also popularized modern UA's American ancestor: the Victory Garden Program (Hanna et al, 2000 p.209). This program was federally funded by the War Food Administration and supervised by local PTAs (Hanna et al, 2000 p.209). It promoted local, urban gardens as a means to alleviate the struggling economy and provide an immediate, war-time food source.

A series of UA projects in West Philadelphia have built up natural habitats and attracted wildlife, such as birds and butterflies into the city (Hanna et al, 2000 p.210). They have provided a space to connect city residents with nature, which has been shown to reduce the hostility in "troubled children" and improve "children's values" (Hanna et al, 2000 p.210). UA has increased the property values of residents, motivated the creation of gardening clubs and community meetings, and created a common space that the residents mutually wish to protect (Hanna et al, 2000 p.210). Diverse communities from African, Korean, and European descent have shared traditional agricultural practices and recipes to bridge divides (Hanna et al, 2000 p.213). And these community organizations and success stories prove crucial in the search for meaningful sources of funding (Hanna et al, 2000 p.211). Motivated and funded, these communities reestablish more social networks that transfer and sustain valuable knowledge (Hanna et al, 2000 p.211).

Patricia H. Hynes book *A Patch of Eden* presents another community garden project in Philadelphia's neighborhood of Norris Square. This inner city location transformed itself from a drug-filled 'Badlands' in the early 1980s to a natural refuge under the impetus of two women (Patricia H. Hynes, 1996 p.73). Norris Square's community members rallied, recognized the need for community restoration, and created the United Neighbors Against Drugs to proactively

change their surroundings (Hynes, 1996 p.73). Las Parcelas was created with sixteen family vegetable plots and an orchard (Hynes, 1996 p.73). La Casita, a traditional Puerto Rican house, was constructed by a team of neighbors (Hynes, 1996 p.73). The public space also included a perennial and herb garden, a patio for outdoor cooking, and decorative flower gardens (Hynes, 1996 p.73).

This garden network integrates various green spaces and shares the multi-ethnic, multi-cultural identity of its gardeners. It provides life skills, natural landscape, and healthy produce to the largely underserved Hispanic and Latino neighborhood (Hynes, 1996 p.75). The space also welcomes the many “German, Irish, Korean, Polish...Vietnamese, and Palestinian” immigrants as part of the community (Hynes, 1996 p.76). Cultural traditions, such as Puerto Rican medicinal herbs, Taino Indian symbols, and various festivals encourage mutual respect and reduce stereotypes (Hynes, 1996 p.77). And children are also able to express their creativity and build friendships, by designing pots for the container garden (Hynes, 1996 p.82).

Norris Square’s community garden has since created an environmental learning center specifically geared to children and the need for conservation (Hynes, 1996 p.81). Composting and vermicomposting are taught as a practical way to challenge Philadelphia’s expensive waste disposal problem in the absence of a local landfill (Hynes, 1996 p.81). The garden network has “led to clean-ups of vacant lots, yards, and streets” (Hynes, 1996 p.107). And as most of the gardeners are women and children, community members have partnered with local non-profits and faith groups to serve “homeless women and children” in particular (Hynes, 1996 p.83). Hynes argues this expanding evidence of Philadelphia’s success epitomizes “a new kind of urban renewal, one defined by beauty, nature, and culture coexisting” (1996 p.80).

Actors: Who Benefits from Community Gardens

“We came from the earth and we will go back to the earth, but between those two destinies we must care for ourselves and reach out to others” Wangari Maathai (Hynes, 1996 p.157).

Although community gardens benefit the community as a whole, more gardeners tend to come from marginalized groups of society. These oppressed outsiders find a new sense of confidence through the skills and produce of the garden. They enter into social relationships with neighbors and join the decision making process of their community organization. Community gardening empowers these particularly marginalized groups within the urban poor and lifts the whole of society at a grass-roots level.

Children

Howard D. Leathers and Philips Foster state that “children as a group are by far the most vulnerable to Undernutrition, especially at weaning time” (2004 p.87). They are less capable of growing their own food without adult aid, and in the early stages of growth depend solely on their mother’s milk (Leathers et al, 2004 p.87). Children especially suffer from a lack of food and their mother’s inability to lactate during times of war, feminine oppression, or economic struggles; they are often abandoned in desperate situations and left all the more helpless (Leathers et al, 2004 p.87). Thus, when community gardens and WIC (Women, Infant, and Children) or food stamp accepting farmers’ markets bring fresh, affordable produce into children’s families, their diet and quality of life simultaneously improve; however, there is often

a gap between eligibility and use of WIC and food stamps, especially since supermarkets and outdoor markets rarely exist in low-income neighborhoods (Brown & Carter, 2003 p.12).

As children's motor skills develop, they too become invaluable contributors to the community garden concept. They learn life skills, increase their appreciation for nature, interact with various cultures and generations, and build self-esteem (Hynes, 1996 p.82). Specifically, Dilafruz Williams, professor of Educational Leadership and Policy at PSU, explains how school gardening programs directly impact the children's sense of responsibility and lifestyle health (2008 p.45). They see first hand the origins of their food and taste fresh produce often for the first time (Williams, 2008 p.44). A sense of pride and ownership develops from their experiences in the garden (Williams, 2008 p.45). The garden highlights the practicality of a local food source, teaches a range of disciplines, and reconnects a young, urban community to nature (Williams, 2008 p.44).

Williams' article "Listening to Nature: Cultivating Ecological Literacy through Learning Gardens" relates one particularly successful, working model: the Learning Gardens Laboratory project in Portland, OR. This program includes several outdoor classrooms in public schools as well as an Urban Forest Farm and an 8-acre teaching garden. It relies on university students, teachers, Portland public schools, gardeners, and families, teaching children the importance of team-building and shared goals (Williams, 2008 p.48).

Every site uses organic, permaculture techniques, which create a chemical free and sustainable space for the children (Williams, 2008 p.43). The gardeners learn to observe nature, write their reflections, measure and hypothesize, and appreciate the life cycles of their ecosystem (Williams, 2008 p.48). They are free to express themselves, while they also work in community to satisfy the garden's needs. As a result, the realities of pollution and climate change are taught

to the older children, but only after healthy relationships form between the earth and the students (Williams, 2008 p.43-44). This project prepares children to act as agents of change to improve their communities. They learn to appreciate the diversity of their cultures, economic status, religions...just as their work depends on the diversity of plant and animal life (Williams, 2008 p.48).

Women

“Women...are always among the most vulnerable” within a society because they tend to work close to home, are subject to specific social roles (Growing Better, 2006 p.6-7), and have limited access to resources even in cultures of “matrilineal inheritance” (Van Veenhuizen, Gendering the Urban Agriculture Agenda, 2006 p.3). World-wide women receive less education than men and face legal restrictions as to what jobs they can hold or what materials they can purchase. Leathers and Foster also explain that cases of Undernutrition directly increase in relation to a mother’s education level, income, and age at childbirth (2004 p. 87). For instance, during times of war or famine in developing nations, young girls often starve so that any food might sustain the boys of the community (Leathers et al, 2004 p.87). Thus, within this marginalized group lies a great potential for increased food security through local production. Not surprisingly, women “make up half- if not the majority of urban farmers” (Mougeot, Urban Food Self-Reliance, 1997 p.4).

Hynes traces women’s role as gatherers and gardeners back to the roots of human society and to the traditions of agricultural goddesses (1996 p.152). While men built private, expansive “estates as symbols of wealth,” women grew plants for food, medicine, decoration, and perfume, in community (Hynes, 1996 p.153). Gardens provided agricultural women a “lifeline” to

community in rough, rural societies (Hynes, 1996 p.154). They allowed for direct participation in nature and “solace in an alien (patriarchal) world” (Hynes, 1996 p.154).

The same need for green space exists in the world’s modern, male-dominated cities. Hynes argues that community gardens fill the need for a space free of critique and open for artistic inspiration (Hynes, 1996 p.154). Consequently, women prove leaders in these initiatives because such projects address their needs to work close to home, feed their children and themselves, and gain valuable training (Growing Better, 2006 p.7). According to United Nations statistics, women hold title to one percent of the world’s land while they produce more than 50 percent of the world’s food (Hynes, 1996 p.155). In sub-Saharan Africa women produce more than 80 percent of the food, and in Asia between 50 and 60 percent (Hynes, 1996 p.155).

Patriarchal societies often discount the efforts of women gardeners because their labor does not generate an income (Van Veenhuizen, Gendering the UA Agenda, 2006 p.1). “Cities Farming for the Future” even notes that society relegates women to the domestic sphere of production and to renewable resources, such as leaves rather than “the tree itself” (Gendering, 2006 p.7). These classifications discredit women’s economic and political impact; ironically, in times of economic crisis, many societies blame women for high food prices with harassment and physical punishment (Gendering, 2006 p.4).

While often overlooked, daily agricultural efforts contribute significantly to the preservation of the world’s biodiversity and land, not to mention the food supply (Hynes, 1996 p.156). Women cook, prepare, purchase, grow, and store food for most global families (Gendering, 2006 p.2). They recognize these responsibilities and, as a result, flourish in the opportunity of urban gardening. For example, researchers Katherine Alaimo, Elizabeth Packnett, Richard A. Miles, and Daniel J. Kruger published a study in the *Journal of Nutritional Education*

and Behavior that focused on the impoverished city of Flint, MI. The results revealed that female gardeners consumed 3.8 times more fruits and vegetables per day than men at 3.2 (Alaimo et al, 2008 p.97). The data came from biannual telephone interviews with a sample of 845 residents, including individuals who chose not to respond (Alaimo et al, p.95). One possible interpretation that the study suggested was that individuals with the habit of eating fresh produce might be more inclined to participate in community gardening (Alaimo et al, p.99). If true, this hypothesis would still speak to women's overwhelming role as a family provider in terms of food.

Furthermore, community gardens provide women with a productive space that forms relationships and increases their sense of self-worth. These bonds create action organizations that rally for women's rights and challenge gender roles (Gendering, 2006 p.5). They gain a sense of ownership of their labors, and they contribute nutritious food to their families. Women also launch small-scale businesses to sell their excess food or compost (Urban Food Self-Reliance, 1997 p.3). The Urban Agriculture Network's research particularly highlighted the fact that women benefit the most from micro-credit loans (Urban Food, 1997 p.4). Thus, through women's priority to feed their families, they achieve self-empowerment and increased social worth through community gardening (Gendering, 2006 p.9).

Elderly

The Community Food Security Coalition's research states that "there are twice as many farmers over the age of 65 as under 35" (Brown & Carter, 2003 p.11). These gardeners often come to the city from a rural farming background that either they or their parents directly experienced (Brown & Carter, 2003 p.11). As a result, these elderly citizens often prove

committed gardeners with more unscheduled time and expert knowledge. Leathers and Foster list the elderly as the next group after pregnant and lactating mothers to suffer from Undernutrition (2004 p.87). Community gardening alleviates this reality by providing fresh produce that might otherwise prove unaffordable or inaccessible. Furthermore, gardens allow these aging citizens to pass down their traditions, interact with a variety of ages, and contribute their gifts to the community (Berry; Freyfogle, 2001, 2001 p.69).

Immigrants and Ethnic Minorities

For immigrants in particular, land use policies are often discriminatory and loans very difficult to obtain (Urban Food Self-Reliance, 1997 p.4). Many immigrants move into the cities from rural areas looking for employment opportunities; consequently, they bring agricultural traditions that make them valuable assets to their new neighborhood (Urban Food, 1997 p.4). Thus, gardening provides a familiar space for these relocated peoples and allows them to establish relationships across cultural, language, and religious differences (United States, Office of Housing-Multifamily, 1999 p.2). The common need for food lends social cohesion.

Community gardening contains “multiple linkages and benefits” that, in turn, unite various ethnicities that otherwise would not have a voice in their urban community (Canada, Urban Agriculture Notes, 2008 p.1). Specifically, UA promotes the “dissemination of knowledge” that diverse populations require (Canada, 2008 p.1). Dialogue encourages partnerships and gardening realizes individual skills that promote self-esteem and social well-being. A community garden and CSA in Seattle even uses interpreters to facilitate discussion; in the words of a volunteer: “for many recent immigrants, (the garden is) their first interaction with people outside their own culture” (United States, 1999 p.3). Through such interaction, solidarity

replaces stigmas, and the garden provides a physical space to share cultures, celebrations, and agricultural traditions (Hynes, 1996 p.74).

Physically and Mentally Challenged

Container gardens, Braille labels, and narrow, raised beds that are wheel-chair accessible allow individuals with physical limitations to participate in the community gardening experience. Horticultural therapy gardens, in fact, rely on the manual skills of gardening to improve the dexterity and emotional state of patients. Gardens that are tailored to the specific needs of children, elderly, or physically challenged individuals further exhibit UA's power to include social groups and foster connection.

Hester Parr traced the relationship between gardening and mental illness to the historical belief that madness "was an unnatural 'absenting' from nature itself" (2007 p.540). This understanding grew more popular as the industrial revolution decreased the presence of nature in the city; mental health patients were removed to rural gardens to "encourage calm, rational reflection" and regain moral direction (Parr, 2007 p.540). Parr argues that the underlying concept of this system persists today: time spent directly in nature is "inherently healthy- with social, physical, and mental benefits" (2007 p.540). Just as a garden produced more healing than an indoor mental institution, green space also offers a reprieve from the cement city for any urban citizen.

The example of the Coach House Trust in Glasgow reflects the healing properties of UA on men with "mental-health problems, addiction problems, and learning disabilities" (Parr, 2007 p.550). Through this program, men channel their personal battles into efforts to green their community (Parr, 2007 p.551). Property values increase, relationships between workers and the

community develop, and urban pollution decreases (Parr, 2007 p.552). The men's social reputation also improves because society views them as "working *for* the community" rather than as dangerous people (Parr, 2007 p.552). Their efforts even motivate other members of the community to participate (Parr, 2007 p.554). The workers gain self-esteem as the tangible improvements of community gardens and clean-ups reveal their personal progress (Parr, 2007 p.552). They also develop life skills, responsibility, and "sustainable friendships" that prepare them for the next stage in life (Parr, 2007 p.554). One volunteer beautifully explains that the participants "realize their full potential as opposed to everyone being at the lowest common denominator" (Parr, 2007 p.552).

World Stage: City Planning and Green Design

"A hungry world is a dangerous place. Only when food policies begin with the hopes- as well as the knowledge and skills- of the urban and rural poor of the world, true food security will be built and this will be a huge step toward national security and world peace" - Peter Mann (Brown & Carter, 2003 p.6).

UA requires organization in both the human community and city landscape. It creates networks of individuals, companies, schools, and faith based communities to implement goals and overcome start-up costs. For example, some projects rely on tool banks to borrow supplies or donations from agricultural companies (Brown & Carter, 2003 p.15). For other projects, micro-credit loans make the difference in a neighborhood's ability to fund seeds and begin planting (Brown & Carter, 2003 p.15). Non-profit or for profit groups as well as governments also provide a source of funds through grants of supplies or money (Brown & Carter, 2003 p.15).

Insurance companies protect growers from accidents and unforeseeable changes, while school and faith based communities often supply man-power help (Brown & Carter, 2003 p.15).

Maximizing Healthy Growth

While training programs and committees organize neighbors, city planning also delegates different roles to the physical land. Efficient design strategies account for the urban, ecological, social, and economic systems of the city with the purpose of integrating each system's specific needs (Jac Smit, 2005 p.1). Consequently, the impact of UA depends more on the use of space than the size of the space. For example, Anne C. Bellows, Katherine H. Brown, and Jac Smit explain that a "10X10 meter plot can provide most of a 4-person household's total yearly vegetable needs" (2008 p.1). The grower, in turn, has more free income to spend on non-food items, and experiences a better diet thanks to the accessible produce- which often includes hard-to-find cultural favorites (Bellows et al, 2008 p.1).

Gardening also provides a regime of physical activity that combats the risk of obesity, hearth disease, diabetes, and depression (Bellows et al, 2008 p.1). The "Health Benefits of Urban Agriculture" particularly cites gardening's ability to build strength and provide therapy for "pregnant women, cancer survivors," and the elderly (Bellows et al, 2008 p.1).

Gardens provide a green space that neighbors work together to protect, and provide natural play areas for children (Bellows et al, 2008 p.2). They "decrease air pollution, reduce crime, and enhance civic life" (Bellows et al, 2008 p.2). They reduce waste through composting and minimal food packaging, and also prevent ground erosion (Bellows et al, 2008 p.2). Holistically approaching the problems of the urban population, community gardens bring a new perspective: "by challenging the idea of *success* and accepted ideas of community well-being"

(Hanna et al, 2000 p.207), development and civic engagement proves the key to sustainable systems. This version of success breaks away from the modern focus on consumption and economic growth that Alexandra Woodsworth terms the “tragedy of the urban commons” (2001 p.3). As expressed in *Cities Farming for the Future*, “city farming is a prime poverty-reducing industry” because “the demand for food never fades;” a “healthier, socially and politically stronger community is better positioned to increase its wealth” (Van Veenhuizen, *Building Community Capital*, 2006 p.11). Community gardens create “cohesive neighborhoods of civic-minded people (which) are essential in the development of sustainable cities” (Woodsworth, 2001 p.3).

Place-based Community

In the words of Aristotle, any efficient city functions as a “single organism” (Giradet, 2004 p.107). Researchers Hanna and Oh emphasized this concept in their hypothesis of “reverse commuting”: as the people that once fled the city return to urban environments, UA offers them a renewed, place-based community (2000 p.208). City planner Ebenezer Howard also understood the city as a system, and set out to improve the layout of 20th century English towns. He called for a union of rural and urban in the creation of “self-contained settlements...linked to each other” through public transportation (Parsons & Schuyler, 2000 p.158). In order to keep communities efficient and close-knit, he argued that citizens should create a new city once the population reached 32,000 inhabitants (Parsons & Schuyler, 2000 p.158).

Within each city, multi-functional public spaces like gardens and pedestrian friendly streets founded the center of daily life (Giradet, 2004 p.158). While the rise of the automobile challenged Howard’s original plans, Kermit C. Parsons and David Schuler argue that UA’s

resurgence signals a return to this “smart growth” mentality (2000 p.166). *From Garden City to Green City* highlights the wisdom in this concept, referencing the “Aztecs, Mayans, and Incas (who) all produced food within their cities (built) on good-quality land with access to water” (Parsons & Schuyler, 2000 p.237). City planning also encourages regional adaptations, such as native plants that influence cultural diets, and local building materials such as bamboo in Asia (Parsons & Schuyler, 2000 p.242). Thus, through a careful design strategy, UA utilizes the unutilized corners of the city and makes them flourish with nourishing vegetation.

Despite regional differences, all green designs share in the desire to increase the community space and protect the natural environment. They challenge the “individual apathy” that urbanization creates, and re-establish the “value of small-scale businesses and communities” (Woodsworth, 2001 p.3). David Engwicht specifically argues for a re-localization movement that would return societies to the original, Greek definition of ‘city’: all groups, especially the marginalized members of society, would be “integrated” into the community as a whole (1999 p.52). Streets would transition from strict roadways to stages for dialogue, creative solutions, local commerce, and people-watching (Engwicht, 1999 p.46-7).

New Agrarianism

Wendell Berry calls for a new definition of city that expands beyond its constructed boundaries of streets and buildings, and includes the region’s neighborhoods, landscape, and watershed (Berry; Freyfogle, 2001, 2001 p.74). He also argues for a redefinition of agrarianism that emphasizes the “local adaptation of economies and cultures” (Berry; Freyfogle, 2001 p.71). Under this definition, not every member of the community would need to be a farmer, but the responsibilities of daily life would be shared; thus, citizens would “live with the results of their

decision(s)” (Berry; Freyfogle, 2001 p.74). Also, city residents would interact not as producer and consumer, but as “citizen, family member, and community member” (Berry; Freyfogle, 2001 p.77). Life’s diversity would be defended because the community’s shared needs and concerns- especially a safe and healthy food source- depend upon it (Berry; Freyfogle, 2001 p.78).

By designating space to grow healthy produce, community gardens set aside space to grow a healthy, empowered community. Through dialogue and careful planning, this community becomes the “polis” or public body of engaged citizens that voice their identities and unite for social change (Engwicht, 1999 p.54). Small but powerful pockets of UA extend the livable space of a community, unify neighbors, and celebrate the diversity of life. As aptly put in *Cities Farming for the Future*, “urban agriculture represents both an end in itself (harvesting nourishing food) and a means by which to strategically achieve additional social and community ends” (Building Community Capital, 2006 p.7).

SUMMARY AND CONCLUSION

This literature review has presented the challenges of the global food crisis, as well as the obstacles and potential of community gardens. While it is possible to study this variant of UA through the lens of its economic, political, or social impacts, I believe the strongest arguments unite all three views. The evidence of my personal experiences in the learning garden as well as my close examination of five case studies all highlight the interdependence between one’s financial resources, access to green space and fresh produce, relationship to mentors, and ability to safely assert his or her ideals in the public realm.

Such a systemic approach suggests community gardens’ unique ability to rebuild local networks through the grassroots empowerment of the most vulnerable, marginalized members of

society. These gardens educate diverse populations about the surrounding environment, and foster a connection to place and a commitment to conservation. More specifically, community gardens can rally individuals around the increasing struggle for food. This need often transcends social divisions and promotes civic participation; it encourages efficient development and improves the community's overall health.

The Southside Community Land Trust Cookbook:

Sharing Stories, Local Food, and Savory Soups

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Researched and compiled by Katie Shaw, in collaboration with Southside Community Land Trust, Providence College, and supporters of locally grown food.

To everyone who contributed to this learning experience:

“A garden is a grand teacher.” Gertrude Jeckyll

INTRODUCTION: SOUTHSIDE COMMUNITY LAND TRUST



Gandhi quotation on a fence at City Farm

HISTORY:

Twenty-eight years after its creation, Southside Community Land Trust (SCLT) proves the staying power of small-scale organic agriculture. It also speaks to the power of respect for the earth and for each other. This mutual respect lies at the heart of SCLT's mission: to improve the health of the environment and community through hands-on learning; resources are to be shared and directed towards the common need for food. In this way, SCLT empowers the individuals who participate in its programs by honoring community itself as the most treasured resource.

The programs of SCLT are as diverse as its community members. The original program, City Farm, consists of a $\frac{3}{4}$ acre urban farm in South Providence that grows produce for education, local restaurants and businesses, local food pantries and food banks, and two farmers' markets. Every summer an eight week Children's Garden takes place on site, and the farm also hosts field trips and volunteer apprenticeships year round.

Second, several local elementary schools benefit from SCLT's after-school gardening clubs. This program reintroduces students to the natural world around them, and teaches them the origins of their food. Third, a fifty acre farm in Cranston, called Urban Edge, has been part of SCLT since it began in 2004. It hosts its own Community Supported Agriculture (CSA), and assists new or immigrant farmers into the farming industry. Finally, Somerset Community Garden shares the same neighborhood as City Farm and continues SCLT's mission. This program has turned once vacated land into small garden plots, allocated to the surrounding families. Coming from a wide variety of backgrounds, these families are then able to reconnect to agricultural traditions and familiar produce, or simply benefit from the ability to grow fresh, affordable food.

The main reason I wished to work with SCLT in my study of community centered, urban agriculture was because of these connections; SCLT speaks to the

power of collaboration, the viability of urban agriculture in a state where only two percent of families grow their own food, and the immediate potential for restored human-nature relationships. Literature esteems urban agriculture's ability to curb hunger, address obesity, combat pollution, etc. The media now extols going 'green' and eating organic food as the new consumer trend. But, SCLT cuts through the morass of fads and statistics with undeniable results: urban agriculture works, has worked for over twenty-five years, and is at work the R.I. community's very backyard.

Through a cookbook format I hope to tell the stories of SCLT's programs (City Farm, Education, Urban Edge, and Somerset Community Garden) and of the amazing individuals who guide them. Soup became a common theme early on in this project because regardless of one's cultural background, economic class, or personal taste, there is a soup recipe everyone can enjoy. I also think there is something symbolic about ingredients allowed to mingle in a pot so that their flavors meld and complement each other; given time, the taste only improves. The richness of community improves with time in the same way that the effort of growing fresh ingredients and the conversation around a table improves the quality of a soup. Please savor each chapter, as I strove to highlight some individual voices who contribute to SCLT's network and its mission for healthy, affordable, local, and delicious food.

COMMUNITY CONNECTION:

I could not speak to SCLT's history without honoring its founder, Deborah Schimberg. In 1981 Deborah linked the large amounts of vacated land and the influx of Southeast Asian immigrants, many of whom came from agricultural communities. She saw through the potential barriers of language and diverse cultures, and put what she knew of sustainable agriculture into practice. Deborah purchased the land in South Providence that now holds City Farm and Somerset Community Garden, and, in doing so, allowed immigrants to cultivate their own food and contribute their expertise to a new society. The roots of community were established, and SCLT's programs have never stopped growing.

Please read the following Question and Answer session (Q&A), adapted from my conversation with Deborah. She was truly the first voice of SCLT, a voice that still speaks to the lasting impact one determined individual can make.

1. What prompted you to purchase the lots and start a land trust specifically for small-scale agriculture?

I had heard a speaker at Brown University talk about community land trusts. What he said about gentrification and how it creates an unequal access to resources really sparked my interest; I could see it happening in the neighborhoods around me. For instance, Foxpoint used to be a very Portuguese neighborhood, and I saw this community gradually pushed out by increasingly steep rents.

The fact that the same thing was happening in South Providence gave me some of my initial motivation for SCLT. I bought an abandoned house for

\$1,000 and with some friends, fitted it with what we called appropriate technologies. We installed a greywater system, improved the insulation, build a greenhouse, and added a small windmill. An interest in gardening evolved out of these other sustainable projects.

2. What was your area of study at Brown University? Were you able to integrate your studies with this post-grad venture? Please explain.

I graduated from Brown with an AB (their version of a BA) in comparative literature, which has nothing to do with sustainable agriculture. So, I wasn't really able to integrate my studies with the land trust, but I wasn't necessarily looking to combine them either.

At the same time, the comparative nature of my degree and my interest in different cultures definitely fit into my SCLT work. In the early 1980s Providence was experiencing a large influx of Southeast Asian immigrants: Laotian, Vietnamese, etc. These communities were tremendous farmers and a great motivation for me to look further into urban agriculture. The neighborhood community also included African Americans who had sharecropping or small farming roots. The communities really seemed to miss aspects of the subsistence farming culture that they had left; they found themselves in the city without a place to grow the food that was important to their traditions and survival.

3. Do you garden? If so, when did you begin?

I gardened much more when I was starting SCLT. Originally, my friends and I were producing all of our own vegetables and fruits. When I first moved to the neighborhood and started fixing up my house, the area housing was so devalued that my friends and I were able to purchase lots for \$50. I just thought, here's all this land so let's use some of it for agriculture rather than more development.

I would say that SCLT evolved from a combined interest in self-sufficiency and appropriate agriculture. I also had a political interest in community control of resources. The influx of farmers from agricultural backgrounds gave me an added push to start acting; here was all this land and a large group of people who could really benefit from its use. So, I began to raise money with the help of community members and churches. I would hold meetings in the area and explain my idea, and we the gradually started from there.

4. What challenges and improvements have you noticed at SCLT since it was founded? In the neighborhood or within the community?

Since I left SCLT, many of the original programs have continued and other new programs have been created. Urban Edge Farm and the plant sale at City Farm, for example, are recent projects that are already having a big impact in the community. City Farm and the adjacent Somerset Community Garden, are two original programs that are still in full force. The specifics within these programs might have changed a bit, but their overall philosophy is still strong.

For example, City Farm used to have a more extensive program in the schools and had regular classes coming to visit. The students would generally come three times a year and we had volunteer docents who would help them witness the seasonal changes. Students would measure a tree to compare its growth from spring to fall, or watch where the worms go in the winter. One of my favorite activities was for students to bury a piece of apple and a piece of Styrofoam in the fall, and mark each piece with a headstone; they would return in the spring to dig up the grave and compare the decay- or the lack of decay, in the case of the Styrofoam. As more of education's budget and focus turned to standardized tests, we had fewer and fewer school children coming to the farm, which affected our programs. Now we have after-school programs located at a couple local schools, or we work with other nonprofits to bring summer campers to City Farm.

I think that many of the challenges we faced at the start are still present. But the emphasis on local, organic agriculture remains. For instance, while we use to have an organic salad greens business to sell to restaurants, we now do more sales at farmers' markets. Over the years I have seen tremendous leadership and commitment on the part of the people who have taken the original SCLT foundation and adapted it, made it grow, and made it more accessible to more people. As the founder, it is very gratifying to me that the organization is still here and developing.

5. Do you have a favorite SCLT program: Children's Garden, City farm, Somerset Community Garden, or Urban Edge?

I would say City Farm is my favorite. While the community garden brings together so many different kinds of people, each family really does its own thing and the type of community is just different. What is great about City Farm is that it acts as a demonstration of what can be done with land in the city. Rich (Peterson, City Farm Manager) does an incredible job using City Farm as a working model through which others can learn about ecology and food production. It acts as an important site to bring together different kinds of people who have their own interest, backgrounds, abilities and disabilities, but who can all find a purpose and a way to contribute. City Farm's endless programs, such as its plant sale and farmers' markets, are so diverse in terms of community outreach.

6. What lessons have gardening or SCLT's gardens taught you about life?

Like gardening itself, SCLT has taught me that things unfold over time. When the organization was first started, there was already a back to the land movement. Now, over twenty-five years later, a lot of those ideas are much more in vogue. I think this process taught me patience because ideas, plants, everything really has to bloom over time; it's not always obvious where they're going to go or grow. Ideas get recycled.

7. What is your definition of sustainability? Have you seen SCLT contribute to this understanding? Please explain.

Sustainability has to do with an equilibrium between the present and future; systems have to take into account their inputs and outputs. In other

words, if we exploit too much in the present then the future is not going to be recognizable. We have to work in the present with an eye to the future.

I think sustainability is really important because when I started SCLT there was no planning for urban green space except for parks. I was lucky that the land for SCLT was so inexpensive that I was able to buy it with the help of the community. Thus, we were able to protect it from future development.

If we look at the city as a whole and analyze its contributions to sustainability, it needs to plan now for its future food and recreational needs. SCLT proves that some of the work that was done over twenty-five years ago is still really important. This work built an organization that still protects people's access to the same piece of land.

RECIPE:

This creamy treat was submitted by SCLT founder Deborah Schimberg. Find a spoon and enjoy!

Quick Cream of Split Pea Soup with Sliced Carrots

Ingredients:

- 1 cup yellow or green split peas
- 7 ½ cups water
- 1 tsp. scraped, minced fresh ginger root
- 1-2 hot green chilies
- ½ tsp. turmeric
- 4 Tbsp. ghee or a mixture of vegetable oil and unsalted butter
- 4 medium-sized scraped carrots, sliced
- 1 ¼ tsp. salt
- 2 Tbsp. minced fresh parsley or coarsely chopped coriander
- 1 ¼ tsp. cumin seeds
- ¼ - ½ tsp. yellow asafetida powder (this is an Indian spice)

Steps:

1. Soak the split peas in 3 cups of hot water for 5 hours, then drain.
2. Combine the split peas, water, ginger root, green chilies, turmeric, ground coriander and a dab of the ghee or oil-butter mixture in a heavy 3-quart/nonstick saucepan. Bring to a boil over high heat.
3. Reduce the heat to moderately low, cover with a tight-fitting lid and boil gently for 1 hour. Add the carrots, cover and continue to cook for 30 minutes or until the split peas are soft and fully cooked.
4. Remove from the heat, uncover and stir in the salt and herb.
5. Heat the remaining ghee or oil-butter mixture in a small saucepan over moderate to moderately high heat. When it is hot, toss in the cumin seeds and fry until they turn brown. Sprinkle in the asafetida and fry for just 1-2 more seconds, then quickly pour the fried seasonings into the split peas.
6. Cover immediately and allow the spices to soak in for 1-2 minutes. Stir and serve.

CITY FARM



Garden plots and greenhouse mural at City Farm

HISTORY:

A three-quarter acre organic farm in the heart of South Providence, City Farm has been a model of urban agriculture since the land trust began in 1981. It offers children's programs, adult workshops, field trips, and internships, which give back to the community as much as they unite people over the common need for food. In all of its endeavors, City Farm proves a small but mighty testament to the power of sustainability and collaboration.

My conversation with Rich Peterson, City Farm Manager since 2001, highlighted the different ways in which the farm builds relationships. First, volunteers are at the core of City Farm's operations. SCLT refers to their 'sweat equity' contributions because these individuals give their time in exchange for the direct experience and knowledge of how to grow food. Volunteers come from a variety of backgrounds and include many local college students, such as Providence College's Public and Community Service majors. Rich's hope is that students of any age will learn how to grow food at the farm and then take these skills to impact their communities and families.

City Farm participates in two local farmers' markets with the organization Farm Fresh R.I. The farm produces its own line of teas, salves, lip balms, and bottled herbs/peppers that are sold at local stores and these markets. It also sells its produce wholesale to local restaurants and is part of the Little City Growers Co-op. Another great sign of the collaborative nature of City Farm is its barter trade with several local businesses: for example, City Farm exchanges thirty-five dollars of flowers for thirty-five dollars of coffee at White Electric Coffee. In addition, the R.I. Food Bank receives regular donations of City Farm's organic, locally grown produce.

The greenhouse at City Farm raises funds and supporters for SCLT. Every year City Farm hosts a plant sale at the beginning of the planting season, with the plants that the greenhouse raises. Last May, the sale sold fifteen hundred fruits, vegetables, medicinal herbs, and perennials. Local musicians joined the event, and the entire Providence community was invited. This sale directly helps City Farm's neighbors grow their own food; in fact, most of the plants were sold to members of the nearby Somerset Community Garden.

Every summer City Farm hosts a children's garden camp for eight weeks. Working with other neighborhood organizations, City Farm allows these campers to learn where food comes from, how to grow food, and why seasonal eating matters. Children of all ages get a chance to explore nature in a safe environment, and witness the potential of healthy soil. The impact of this direct learning experience is evident in the children's excitement and pride; they have a sense of ownership in what they grow at the farm and are empowered by an intimate knowledge of the natural world.

While the wonders of nature surround us, sometimes the urban environment keeps them at bay; field trips to City Farm can help remind everyone of the interconnected nature of the world's ecosystems. Some common fieldtrip topics include compost and the living soil, plant life and parts, insects' role in the garden environment, urban agriculture, and local food systems.

COMMUNITY CONNECTION:

At the heart of City Farm's efforts to strengthen community, lies its ability to change people through food. I chose to focus on the farm's strong volunteer base and its farmers' market contributions as two ways in which this mission ripples throughout the city.

First, my conversation with Providence College (PC) professor Keith Morton highlighted the role of college volunteers, community assistants, and interns. Keith explained that when the college began its Public and Community Service (PSP) program in 1994, the desire for community service sites increased. The college assumed some volunteer positions established by Brown University at City Farm, and a close partnership between PC and SCLT began.

Please read the first Q&A from a current PSP volunteer working at City Farm, Jen Draeger.

- 1. How long have you been working/did you work at SCLT? Please describe some ways in which you volunteered.**

I first volunteered at City Farm when I was a freshman taking Public Service 101. That fall semester was such a wonderful experience, that now I'm back for the spring of my junior year; I just took a two year break.

This semester I am serving as a CA, or community assistant, which means I get to contribute to a meaningful service learning experience for other Providence College volunteers. I make sure that they have tasks at City Farm and feel that they are contributing in a meaningful way. Then I lead three reflections a semester where we reflect on what type of service we're doing and how it's impacting us and SCLT.

I am a CA as part of my PSP practicum class, but I also keep in touch with my volunteers' intro class and their teacher, Dr. Michael Hayes. We are a community at the farm or inside the classroom, so I am there to support them on service trips and for class presentations.

- 2. Did you or your family garden before you started working at SCLT?**

My Dad used to have a tomato garden when I was younger. He is an environmental engineer so environmentalism has always been a value in our family in terms of conserving water and recycling.

- 3. What is your favorite crop to grow? Why?**

I volunteered during the fall harvest as a freshman, but right now we are still in the snow. Even though we are not working with green plants at the moment, Rich

(Peterson) and I recently planted some Nasturtium seeds. He tells me these are edible flowers, and I am extremely excited to see them grow.

Rich also introduced me to scarlet runner beans my freshman year. They have blackish, purple shells with some black speckles. He said that if you are talking to young kids you can tell them about these magic beans, and add even more fun to their gardening experience.

4. **Describe your most favorite and least favorite task in the garden.**

I really don't think I have a least favorite task. Everything we do makes an impact in some way, and Rich is great at explaining the reasons behind what we do on the farm. My favorite activity is just about anything that involves working with green plants; I am looking forward for the snow to melt so that we can begin. In the meantime, I pruned some raspberry bushes the other week and am helping Rich prepare the greenhouse.

I really haven't had a bad job at SCLT, even when I am helping in the office. Some volunteers and I recently painted and put together bookshelves, for example. I love these chances to interact with the staff. So, I would say that any task where I'm learning something new is valuable and fun. I particularly remember my freshman year when I helped cut up some Calendula flowers, which the farm uses to make lip balm. It was fun to take part in this process; I had never done anything like this before City Farm.

5. **Has/Did your SCLT experience influence you to start a garden?**

Not yet, but I'm hoping to start a garden soon. I would love to rejuvenate the tomato garden we had at home when I was younger. Since I will be at SCLT for a total of a year thanks to practicum (spring semester junior year and fall semester senior year), I am hoping to gain even more skills. This way I will really know what I'm doing when I start a garden of my own.

6. **Has/Did your SCLT experience prompt you to alter your lifestyle choices in any way? Please explain.**

One thing that the SCLT recently introduced me to that I'd like to investigate more is the idea of organic cleaners. I have several book suggestions on environmentally friendly housekeeping, and I am hoping to read them in the near future. The idea just makes much more sense to me, and is probably a lot cheaper!

7. **What lessons has gardening taught you about people, life?**

First of all, I recognize that I am still learning and that I have a lot less experience than the other SCLT staff. One of the real joys of serving at this organization has been gardening and being outdoors. This experience is one that I would not have gotten at other service sites, and I think it makes City Farm the most unique place to volunteer for PSP majors. The fact that you are doing things with your hands and learning about nature by *being outside* is great.

Because Rich knows that I love theology and my work at City Farm, he has been encouraging me to look into the connections between the two. My long-term project will be a study of where ecology and theology converge, and how we view our responsibility to creation. I think this responsibility can call us to action and motivate us to rethink our impact on the earth. I hope to learn from the Catholic perspective on the environment, as well as from the committed Catholics/non-Catholics already involved in small-scale agriculture.

8. **What is your definition of sustainability? Does your SCLT experience contribute to this understanding and if so, in what ways?**

The word sustainability is something that I might have connected to my Dad recycling or saving water, but I really didn't use it before City Farm; Rich particularly talks a lot about us being good land stewards. It all refers to the need to keep in mind that we are not the only ones who are here and we are not the only ones who are going to be here; there will be people who will need to use these resources too. Sustainability means using the earth and its natural resources in a wise way that will not leave a completely depleted planet. We have to be always conscious of our use and how it will impact the future generations.

This Q&A stems from my conversation with Brendan Graham, a 2008 graduate of Providence College and a long-time City Farm grower. His words particularly reflect City Farm's emphasis on a nutrient rich soil as the foundation of a healthy garden and a sustainable ecosystem.

1. **How long have you been working/did you work at SCLT? Please describe some ways in which you volunteered.**

I have worked at City Farm as a PSP CA, work study student, full-time paid employee, and now as a post-grad volunteer. I started my junior year at PC and acted as a CA liaison between the college and the land trust. The summer after junior year I worked full-time as Rich's apprentice. I learned how to grow all the plants in the greenhouse, run the farmers' markets, and was his right hand man when he was not there.

2. **Did you or your family garden before you started working at SCLT?**

My mom is a flower gardener, but I am more of a food grower. I am trying to get her involved in the process of growing food as a means to healthy eating.

I currently grow my own flowers and food in one of SCLT's garden plots. I eat a ton of greens from this land and preserve whatever I pick for later use. All I have to do is boil them and freeze them, and I have organic greens whenever I want. Just the other day, I ate a meal with vegetables I had grown and preserved last season.

3. **What is your favorite crop to grow? Why?**

Kale is probably my favorite crop because of its taste and the fact that it is so easy to grow in the city. Essentially, you can grow just a few plants for a really prolific harvest.

4. **Describe your most favorite and least favorite task in the garden.**

My favorite jobs include turning the soil at the beginning of the season, and watering. There is really nothing that I dislike. Dealing with pests can be a pain if you have a good crop that gets infested by one insect. However, this experience helps you in the long run because you learn what the pests are, how to deal with them, and how to better protect against them.

5. **Has/Did your SCLT experience influence you to start a garden?**

Yes, this spring I am going to continue my small garden outside of SCLT.

6. **Has/Did your SCLT experience prompt you to alter your lifestyle choices in any way? Please explain.**

Because of my City Farm experiences, I really try to not to be wasteful. On the farm we were constantly putting items to use that would have been thrown away, and I was inspired by the extent that we reused and recycled things. Reducing your waste is just a

good life practice. For example, I keep a compost bin in my kitchen so that organic matter is not thrown away to sit in the Johnson landfill, but goes back to the soil.

7. What lessons has gardening taught you about people, life?

I think the biggest lesson I have learned is that the more love you put into something, the more it gives back to you. This is true of both gardening and human beings, and I think serves as a good working principle for life. In other words, it's a cycle or the law of return: if you put all of your heart and being into something, it will return to you in some way.

On City Farm or another urban farm, you are starting with raw materials that might not naturally support life. But, if you build up the soil and gradually introduce plants, your yields will gradually increase. I think the same is true in everyday life; if you're good to people, they're generally good to you.

8. What is your definition of sustainability? Does your SCLT experience contribute to this understanding and if so, in what ways?

We have to be careful using the term sustainable because it is a word that is used all the time. Also, I don't think there's any one working definition for all situations because it really depends on the specific piece of land. I would say that for an action to be sustainable, it can't take away from the land base. It goes back to the law of return: you can't take away something from the land that you don't give back. This is the motivation for me to save my food scraps. I plant crops that remove nutrients from the soil, and then I harvest these crops to eat. When I return the organic matter back to the soil, the same food that fed me feeds the soil that feeds the plants that will one day feed me.

Christie Moulton, Outreach Coordinator for Farm Fresh R.I., contributed to this third Q&A. Her words speak to City Farm's impact on the health and sustainability of all of Providence.

1. What produce is the most popular among consumers?

The produce preference of customers really depends on the neighborhood. At some markets leafy greens, long green beans, and little eggplants are popular because of the Latino, Asian and African immigrants who come to shop. At other markets heirloom tomatoes, tomatillos and Swiss chard may sell like crazy. I think zucchini, bell peppers, onions, and basil are big sellers across the city and nothing beats a juicy peach in August or a crisp apple in September. My personal favorites are squash blossoms, leeks, husk cherries, and chili peppers.

2. What would you describe as the biggest challenge and benefit to selling on a local market?

The biggest benefit is definitely direct contact with consumers. Being able to meet your neighbors, talk with them, and connect through food is so important. It is great to see the connections made at markets – whether it is farmers sharing pest-control advice, customers sharing recipe ideas, or young children learning about health through eating the fresh, nutritious food.

One challenge is the time commitment that farmers' must make to sell at markets. Many farmers sell at multiple markets, which means they are away from their fields and their work for several hours during the harvest season.

3. **Do you witness the farmers' market and City Farm as a vendor, contributing to the health of the larger community? In what ways?**

Yes definitely. The food we eat may be the biggest factor contributing to our health. City Farm grows really delicious food and that is the most effective way to introduce more fresh fruits and vegetables into someone's diet. When you bite into a cherry tomato from City Farm you taste a sweet, tangy, juicy tomato. It is hard to believe that someone would rather eat processed, packaged, food that has been sitting around on a shelf for months than a tomato fresh off the vine. The farms selling at farmers' markets are showing the public that healthy food is accessible, affordable, and most importantly it tastes good.

4. **What is your definition of sustainability? Does your experience working with the farmers' markets/local vendors contribute to this understanding?**

It is so utterly clear that our current global food system is not sustainable. We are exploiting land, water, energy, and human resources to create food that is not good for us. The local food movement shows that it can be done differently. The local food movement is striving to create a food cycle that is sustainable – where resources are recycled, soil fertility is replenished, and the food we eat is good for us and our community. By getting to know the farmers' who grow my food I can see for myself what their growing practices are and if I want to support them with my money.

RECIPES:

Professor Keith Morton submitted the first recipe after our conversation about City Farm. Keith is a long time supporter of SCLT, a defender of local agriculture, and an avid gardener, so please use the freshest possible ingredients when preparing this dish.

The second recipe comes from Christie Moulton of Farm Fresh R.I. She encourages the chef to use whatever vegetables are in season. The main ingredient also promotes local eating because, thanks to New England's fishing industry, clams are available all year round!

Vegetarian Chili

Ingredients:

- ½ cup olive oil, for sautéing eggplant and peppers
- 3 large cloves garlic
- 1-2 sweet onions, cubed
- 2 smaller eggplants, skinned and cubed
- 2 small yellow squash, cubed
- 1-2 small zucchini, cubed
- 2 sweet red peppers, chopped
- 2 sweet yellow peppers, chopped
- 1 green pepper, chopped
- Broccoli, broken/cut into small florets
- 4 cups (or two 16oz cans) black beans
- 4 cups (or two 16oz cans) red or pinto beans
- 1-4 cups water, as needed
- Favorite spices, to taste
 - o 2-3 Tbsp chili powder: chipotle or ancho powder, or a combo
 - o 1 tsp cumin
 - o 1-2 pinches of cayenne powder

Steps:

1. Peel and crush the garlic cloves; let them sit for at least five minutes.
2. In a large soup pot, heat ¼ cup of olive oil over medium-high heat. Toss in the cubed eggplant and stir often. The eggplant will absorb a lot of olive oil. Keep adding olive oil, just enough to keep the eggplant from sticking to bottom of pot.
3. As the eggplant absorbs the olive oil, sprinkle it with chili powder; the goal is enough chili to mix with the olive oil and lightly coat the eggplant. It will start to stick to the pan at this point. Add a touch more olive oil if you'd like. As the eggplant simmers/fries, add the garlic.
4. Add the onion, stirring as you go. Add a bit more olive oil if needed. Add the peppers, and let it all begin to cook together. The onions will start to come apart and get translucent, and the peppers will begin to soften at the edges.
5. Stir in the broccoli. When it feels ready, add the tomatoes and beans. The pot will probably be pretty full by this point. If you are using canned beans and/or tomatoes, then add the liquid from the cans as well; canned or fresh, add enough water to allow the mixture to simmer – just enough liquid to cover the tops of the vegetables.

6. Give the mixture a good stir, and let it start to reach a hard simmer. Then turn down the heat so it is just simmering. You can simmer it for as little as 45 minutes, or as long as a 2 ½ hours.

Notes:

- The chili can be served with rice, or cornbread for a really rich meal. Brown rice works well and can be prepared while the chili is simmering. When the rice is done, put a healthy scoop of it in a bowl, smother it with chili, add a dollop of sour cream, and sprinkle it with a shredded cheese of your choice- or just eat plain.
- Preparation: When chopping the vegetables, aim for 1 inch cubes or pieces.
- Tomatoes: For extra flavor, roast the 6 tomatoes over a flame before dicing. As an alternative, use two 16oz cans of roasted, diced tomatoes, such as Muir Glen sells.
- Spices: I prefer to grind whole cumin seed in a hand mortar. If you really want to have a great taste, roast the seeds in a pan for a minute and then grind. Cayenne really adds heat, so use it sparingly. You can always add more, and the flavor tends to get stronger the longer the chili simmers.
- The chili only gets better as you reheat it, so it can be made ahead of time, refrigerated and warmed for serving. If you like it a little soupier, add some extra water and partially cover it to speed up the cooking time. Soup or stew (simmer longer, uncovered), the goal is to have the flavors blend, but the vegetables retain some of their substance when you bite into them.

Serves: 8

Farmers' Market Clam Chowder

Ingredients:

- 5 lbs. littleneck clams, steamed and chopped
- 1 tsp. olive oil
- 3 medium baking potatoes and 1 sweet potato, cubed
- 1 large onion, chopped
- 1 large red or green bell pepper, chopped
- 1 carrot, chopped
- 4 cloves garlic, minced
- 1 cup water retained from steaming clams
- ½ cup dry white cooking wine
- A few sprigs of fresh thyme
- ½ tsp. black pepper
- 1 cup milk
- 1 cup heavy cream or half and half

Steps:

1. Place clams in just enough water to cover, and steam until they open, about 15 minutes.
2. Save 1 cup of the steaming water. Remove clams, allow clams to cool, remove from shells and chop.
3. In a large frying pan drizzle olive oil, add potatoes to pan and cook over medium heat for 5 minutes. Add onion, bell pepper, carrot and garlic and cook for another few minutes.
4. Transfer contents of frying pan to a large soup pot. Add chopped clams, clam water, clam juice and white wine and cook over medium heat until potatoes are tender.

5. Stir in thyme and pepper.
6. Reduce heat to low and add milk, then heavy cream, stirring.
7. Ladle into bowls, and serve with a slice of fresh bread!

EDUCATION: AFTER-SCHOOL



Leo Pollock captures a potato harvest celebration

HISTORY:

At the end of a busy school day, SCLT's Youth Garden Clubs provide students with a chance for physical exercise, outdoor adventure, and access to fresh food. They expand upon the organization's mission for sustainable growth and strong communities by creating a space for students to learn directly about nutrition and nature's mysteries. The learning garden obliterates the limits of classroom walls; students practice their math, science, literacy, and cooperation skills in the daily tasks of measuring, weeding, recipe recording, and transplanting.

SCLT began two after-school gardening programs in the fall of 2004, one at William D'Abate Elementary and one at Bailey Elementary School. These programs meet several times a week and also host community events that allow students to share their new knowledge with parents and neighbors. In addition, SCLT has provided resources for other local schools to start similar clubs.

Please read the Q&As below for more information on the programs at William D'Abate Elementary School and Bailey Elementary School. The text is adapted from my conversations with Tara Cinnamon, Youth Garden Club Leader for SCLT, and SCLT's Education Director Leo Pollock.

COMMUNITY CONNECTION:

Tara Cinnamon: SCLT Youth Garden Club Leader

1. **How long have you been gardening? How long have you been involved with the Youth Garden Club and how did you first hear about it?**

My great grandmother, Jennie Cimini, had an amazing kitchen garden in her front yard on Louiquissett Pike in Lincoln, Rhode Island. My earliest memories are of helping her harvest tomatoes for canning and picking blueberries for pies.

I started working at D'Abate in 2006. I have volunteered at SCLT on and off since 2000 and knew a lot of the staff members. I bumped into Kiera Mulvey, the former Education Director, at the grocery store (in the produce section of course) and she told me about the Garden Club Leader position. I jumped at the opportunity!

2. How many hours a day/week is the program and are the gardens ever incorporated in the school day classes?

We run two programs, one at William D'Abate Elementary School in Olneyville and the other at Bailey Elementary School on the Southside. Both schools have two days of Garden Club, one day for younger students (K-2) and one for the older students (3-5). Each class runs for an hour and a half (from 3:30 until 5pm).

We try to involve the classrooms and introduce planting seeds and composting to as many students as possible. We've had several classrooms host our Worm Box for the school year and start peas in their classrooms, and then plant the pea seedlings in the garden in the spring.

3. What is the most popular crop to in the learning garden?

The children love to grow potatoes! They all can relate to a seedling potato and have a great time building the mounds for planting and then digging them up come fall. It also might have a little something to do with that magical snack, homemade French fries.

4. What is your favorite crop to grow and why?

I love growing peas! Peas are the best vegetable for teaching the children all of the parts of the plant because it's so recognizable even for very young children. It's the first seed we can plant outside in the spring and you can eat the greens, the seeds and the flowers! Peas are great for urban gardens, for small spaces along a fence or wall or to grow in containers on trellises, they're both beautiful and delicious!

5. Have you noticed any changes in the children (attitude, health, attention, etc.) since they began participating in the program?

Teachers and parents have expressed various benefits they've noticed since their students/children have participated in Garden Club including more participation and confidence in class discussions, trying/eating different vegetables, helping in the kitchen preparing meals and cleaning, and starting gardens in their yards.

6. What is your definition of sustainability and does the Garden Club factor into this definition?

Sustainability addresses the fundamental needs of people, including access to food, shelter, water, health and happiness. In order to fulfill these needs, we must learn to maintain, conserve and preserve resources for ourselves and future generations of plants, animals, insects and people. In Garden Club we seek to instill compassion and understanding for all living things and empower young people with the skills needed to create healthy, viable communities. We focus on soil health and how to grow organic food in an urban environment. Teaching these important, basic concepts early on

develops the curiosity and creativity our students need in order to grasp more complex sustainability issues as adults.

Leo Pollock: SCLT Education Director

1. What distinguishes a partnering school from SCLT's two after-school sites?

We run after-school programs at William D'Abate Elementary School in Olneyville, and Robert Bailey Elementary School in South Providence. We've helped a number of schools start their own gardens with our Youth Garden Club manual, but we don't have formal classes at these locations.

2. What is the average size of a class and what is the typical age range of the students?

Most Garden Club classes are 10-15 students. The ages range from kindergarten to 5th grade, or roughly 6-12 years old.

3. What is the most popular crop that the students' grow?

Probably potatoes. Not only do kids love making homemade French fries or mashing potatoes with a hand masher, but they love digging up piles of dirt and uncovering multi-colored gems! We usually grow one to two raised beds of potatoes, with a range of varieties and colors: pink, purple, yellow, blue, red.

4. What is the favorite and least favorite gardening task among the students?

I would say the least favorite task is weeding. As with most people, the students get bored with weeding after a short period. Their favorite activities include watering, transplanting, seeding, and harvesting. Little kids especially seem to love watering.

5. How do the challenges, surprises, and joys of the garden contribute to the children's overall health and classroom education?

The Youth Garden Clubs are not really integrated into the students' classroom education, and while some teachers work in the after-school program, I don't know that I can speak to the garden's academic impact. But, my hope is that the Garden Clubs have a big influence on the students' food and eating choices. I hope that the students gain a new awareness about where their food comes from and what foods are in season.

We (garden leaders) include as much cooking as possible so that students make the connection between growing organically and eating a healthful meal. We consciously incorporate recipes even with the students just learning to read, and give each student a printed copy for his or her Garden Journal. The hope is that when the students take these journals and cooking memories home, the family will want to make the dish together. We always emphasize simple preparation and basic, fresh ingredients.

6. Do you notice a transformation in the children's attitudes or sense of community after working the garden? If so, in what ways?

One thing that is pretty powerful is the sense of ownership that the garden creates. Current and past students feel that this green space is part of their school, and it symbolizes a shared experience. And because SCLT has been at our schools for about five years, Garden Club students who might not

have had me as their teacher feel comfortable coming up to me and talking. The garden is a connector between peoples.

7. What is your definition of sustainability and, if so, how do the Garden Clubs factor into this understanding?

I feel that what we teach at Garden Club is consistent with Rich's foundation at City Farm; the emphasis is on maintaining the health and fertility of the soil. This reflects the mission of all of our programs because, as a SCLT friend explained, healthy soil allows you to grow healthy plants that feed healthy people.

So, in order to grow food and continue to get productive results, we always make sure that our soil stays healthy. At the school gardens and the other SCLT sites, we rotate crops, plant crop covers, compost and mulch, and test the soil's nutrient levels regularly. Our goal is to increase the level of organic matter as much as possible.

RECIPES:

The following recipes are tasty components of the Youth Garden Clubs. The first recipe highlights the flavors of fall, and the second recipe features the children's favorite vegetable: the potato. Leo Pollock, SCLT's Education Director, explains that the students collect printed copies in Garden Journals, so that by the end of the year they all have a recipe and picture-filled record of their experiences.

Butternut Squash and Apple Soup!

Ingredients:

- 2 Tbsp. butter
- 1 large onion
- 2 pounds butternut squash
- 2 cups water (or chicken broth)
- 1 large apple (peeled)
- Salt and pepper
- Optional: ½ tsp. nutmeg

Steps:

1. Roast squash in oven until soft.
2. Chop onion and cook in butter until it turns golden brown.
3. Cut squash and apple into pieces.
4. Add squash, apple, and water (or broth) to pot with onions and cook until apple and squash are soft (about 20 min).
5. Put soup in food processor, return to pot and add salt, pepper, and nutmeg!

Potato Leek Soup!

Ingredients:

- 3 Tbsp. butter or olive oil
- 2 leeks, chopped (white and green parts!)
- 2 garlic cloves, chopped
- 5 medium potatoes, cut into small pieces
- 5 cups vegetable (or chicken) stock, or water
- Salt and pepper

Steps:

1. Cook leeks in butter or olive oil for 5 min.
2. Add garlic & cook 1 min.
3. Add potatoes and stock or water.
4. When soup boils, turn heat to low & cook 15-20 min.
5. Add some salt and pepper, and eat!

URBAN EDGE FARM



Christina Dedora snaps a shot of farm beauty in bloom

HISTORY:

Urban Edge Farm includes 50 acres of land preserved by the city (Rhode Island's Open Space Preservation Act) and managed by SCLT. Just eight miles from Providence, its periurban location in Western Cranston allows farmers to grow food abundantly and deliver it at the peak of freshness. Urban Edge's produce contributes to local restaurants, farmers' markets, soup kitchens, and food pantries.

The farm also fosters SCLT's missions for building community and environmental education. Aspiring or immigrant farmers can apply to the Farm Business Incubator Program and receive a piece of land to farm in exchange for SCLT's resources. Farmers who join this program enter into a network of growers who possess different levels of experience, but who all contribute to the farm's daily operations.

Six of the Urban Edge farmers formed a CSA in 2006 called Four Friends. CSA, or Community Supported Agriculture, allows consumers to purchase shares in the seasonal harvest. Consumers form a relationship with the farmer and share in the risks of the business- the potential for a failed or surplus crop. In exchange, the predominantly city consumers benefit from fresh surprises each week, meet and support their local farmer, and know that their food was produced in a sustainable fashion.

COMMUNITY CONNECTION:

Please read the following Q&A, transcribed from my conversation with Four Friends' farmer and SCLT's Director of Operations Christina Dedora.

1. How long have you been working at Four Friends?

I am preparing to start my third full growing season/year with Four Friends.

2. How long have the same six growers been working together?

Every year the growers change a bit, so we have only all worked together for one season. This season one farmer has decided not to participate in the CSA. Another farmer, who began at Urban Edge through the Farm Business Incubator Program, is only participating in the CSA; there's flexibility. I have been involved with Four Friends since it began and this is my fourth year farming at Urban Edge.

3. How many farmers would you estimate participate in the Incubator process at Urban Edge Farm?

There are currently seven farmers- it always ranges. Sometimes there are as few as three, but participants are definitely growing. The goal of the land trust (SCLT) is to have the farmers work as collaboratively as possible to manage the farm. Katherine (Brown, of SCLT) facilitates the meetings between the farmers to help us address our needs and concerns.

When I first heard about Urban Edge Farm, I applied and was accepted into the Farm Business Incubator Program. I began taking SCLT's classes and helped start the CSA the next year. Some farmers at Urban Edge participate strictly in this Incubator Program and not the CSA, and others do the opposite.

Each farmer comes to Urban Edge with a different level of agricultural knowledge and experience. I have been farming off and on for ten years, but Chang, another farmer who emigrated from Laos, has been farming since she was a kid.

4. What is the most popular crop that you grow?

Definitely mixed greens: lettuce mixes, kale, and collards. Tomatoes and seasonal squash are also popular. I grow mostly flowers because I also work part-time, and vegetables are much more labor intensive.

5. How large is the radius within which you sell your produce?

Most farmers come into Providence, so I would say a twenty mile radius, which is great because the farmer does not have to travel far.

6. Have you noticed an increase in CSA shareholders since you began?

Definitely! The first year we had twenty-four customers, the second year we had one hundred and three; we had to stop taking orders because the demand got so great. This year our goal is two hundred shareholders. I think the fact that our business quadrupled in a year just proves that the demand is there.

7. Does the community-centered nature of a CSA (other farmers, consumers, etc.) contribute to your production levels and/or outlook?

Yes, absolutely. At the most basic level, more costumers means more production for the farmer. The fact that our costumers come to pick up their share also makes it easier on the farmers; we do not have to truck our produce to various locations and pay the costs of gas, time, etc. Last year we had a few delivery points throughout the area, one at Providence College, one at Fidelity in Smithfield, and one at a law firm downtown; but, we are not sure if we will continue delivering this season. Even though it is more environmental for one farmer to drive a greater distance, there are logistical issues. The ideal situation would be to have contact persons at each delivery point and to hire one person just for deliveries.

8. What would you describe as the biggest challenge and benefit to selling on a local market?

The biggest challenge is definitely to make sure that every week the customer has a good variety of vegetables. For example, last year we did not have any broccoli because of bad luck and the vegetable's fickle growing seasons. We had a ton of peppers and customers got them each week- to the point that people grew tired of peppers. But, the customers are signing on to this risk when they join a CSA; they share in the reality of the farmer, so if there is no broccoli, there is no broccoli. The farmer still just wants to give the customer as much variety as possible.

The greatest benefit is the freshness of the produce and the proximity between producer and consumer. R.I. particularly benefits because of its small size. For instance, a farmer can be at a farmers' market and set up in less than an hour. This proximity allows the customers to get the freshest, healthiest food possible- and it tastes so much better!

9. What is your definition of sustainability and, if so, how does your work at Four Friends factor into this understanding?

My definition of sustainability, as it relates to being a farmer, is the ability to sustain a living (make a livable yearly wage and/or profit) utilizing 2 acres or less of land. The small scale farmer should be able to grow food organically and practice good land stewardship.

My work at Four Friends factors into sustainability because it allows me an opportunity to sell more of my flowers, herbs, etc. via a collaborative model.

RECIPE:

The following recipe was recommended by Four Friends. It was adapted from recipessource.com, and highlights one of the CSA's best selling crops: kale.

Crockpot Lentil and Kale Soup

Ingredients:

- 1 cup lentils
- 7 cups water
- 4 cups (about 1 lb) kale, chopped and torn into 1/2" strips
- 1 large onion, chopped
- 1 celery stalk, chopped
- 3 tomatoes, chopped
- 1 medium carrot, chopped
- 3 Tbsp. parsley, chopped
- 1 bay leaf
- 1/4 t ground thyme
- 1-2 Tbsp. soy miso
- Pinch of pepper

Steps:

1. Place the ingredients in a Crockpot, and let them slow cook on a low temperature setting.

Notes:

- Spinach or Swiss chard can be used in place of kale.
- Remove the bay leaf before eating.
- Soy and/or Worcestershire sauce can act as substitutes for the miso.
- This recipe creates a thick soup that becomes more stew like as it cooks.

Serves: 4-6

SOMERSET COMMUNITY GARDEN



View of family garden plots

HISTORY:

SCLT's inner-city Somerset Community Garden provides plots for over two hundred families to grow their own food. Gardening knowledge and a sense of community are shared with these neighbors, many of whom are immigrants from agricultural backgrounds. The ability to grow fresh produce in the city's backyard saves the average household \$250 per summer; it preserves the earth, creates a beautiful green space, and celebrates the traditions of these families' cultures.

COMMUNITY CONNECTION:

Because of the various languages and close-knit nature of many immigrant communities, this section will not follow the Q&A format. Instead, I have chosen traditional soup recipes to represent the Somerset Community Garden's five main cultures. One R.I. friendly vegetable was selected from each recipe and described in terms of its history, nutrition, and connection to a cultural community. I followed with regionally specific gardening tips and a traditional soup, as a way to invite all of Providence to celebrate the richness of its diverse inhabitants through food.

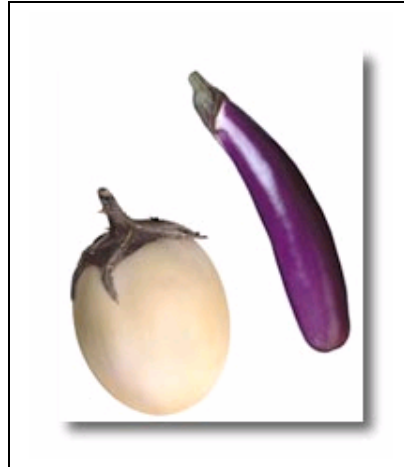
Eggplant *Solanum Melongena*

Did you know?

Eggplants were called the “mad apple” for centuries because they were thought to cause insanity. In Europe, eggplants are called aubergines. They are related to tomatoes, peppers, and potatoes.

Nutrition Facts: 1 cup cooked

Calories 27.7
 Protein .82 gram
 Carbohydrates 6.57 grams
 Dietary Fiber 2.48 grams
 Phosphorus 21.78 mg
 Potassium 245.52 mg
 Folate 14.26 mcg



Native to the regions of modern day India, eggplant was one of the first vegetables to be cultivated; it has been part of the human diet for over 4000 years. The eggplant spread to China around 500 B.C., and then to the Middle East and northern Africa. The Spanish prized the vegetable as an aphrodisiac, and brought it to Europe and the Americas. Thomas Jefferson made it popular in America, where it was grown more for its flowers.

Eggplants are a good source of vitamin B-1, which promotes a healthy digestion and combats stress. Vitamin B-1 improves hair, skin, and nails, and prevents memory loss associated with Alzheimer's disease. The vegetable is low in calories, but high in folate and potassium, which protect the heart and regulate the blood pressure.

Cultural Connection: Liberia

The country of Liberia was founded in the 1800s by a group of American slaves who had been freed and wanted to return to Africa. The cuisine is thus a mix of American flavors and local produce. Eggplants- along with hot peppers, pumpkins, peanuts, sweet potatoes, mangoes, coconuts, plantains, okra, and greens- are one of the vital vegetables because of their adaptability to the tropical climate and fragile soil. Starchy cassava roots are another stable crop and are often boiled, chopped with other vegetables, or used to thicken soups.

Every meal is served with rice, and traditional vegetables are sold seasonally in outdoor markets. However, as rice and other processed foods are being shipped from the U.S., the problem of food access is on the rise. Food imports and donations are increasing because of economic and civil struggles between the descendents of freed slave and the indigenous peoples.

Gardening Tips:

RI season- Plant eggplant plants from May 15- June 10

Conditions- Eggplants are sensitive to the cold and must not be planted until after the last frost.

Planting- Eggplants grow best as transplants that are covered with a heavy layer of mulch to retain heat and moisture. Note that crops are threatened by a range of pests, such as flea beetles, Colorado potato beetles, aphids, spider mites. Lady bugs will help control the beetle and aphid populations. A disease called Verticillium wilt turns the plant's leaves yellow until they wilt, and is best prevented organically through crop rotation.

Recipe: Eggplant Stew

Ingredients:

- 2 pounds eggplant
- 1 onion, finely chopped
- 3 tomatoes balls
- 3 tsp. tomato paste
- 4 to 6 Tbsp. oil
- chicken/meat/fish as desired
- salt and pepper to taste

Steps:

1. Peel and slice eggplant in chunks. Sauté eggplant in oil until light brown. Add onions, tomato balls, meat, and stir. Add water, salt and pepper and bring to a boil, then add tomato paste.
2. Cover the pan and turn the heat to low, simmering for 20 to 30 minutes and stir often until the eggplant is tender and the flavors have blended.

Potato *Solanum Tuberosum*

Did you know?

One of the most popular vegetables, the potato is also the main crop of R.I.

The only other food that Americans consume more of is milk.

The potato grows from a tuber, or piece of stem.

Nutrition Facts 1 baked

Calories 145
 Protein 3.06 grams
 Carbohydrates 33.63
 grams
 Dietary Fiber 2.34 grams
 Calcium 7.80 mg
 Iron .55 mg
 Magnesium 39.00 mg
 Potassium 609.96 mg
 Phosphorus 78.00 mg
 Vitamin C 19.97 mg
 Niacin 2.17 mg
 Folate 14.20 mcg



Potatoes are root vegetables full carbohydrates and vitamins C and B, which help the body absorb nutrients. These vitamins along with phosphorous, magnesium, and potassium improve the look of the skin. Magnesium prevents kidney stones and vitamin B-6 promotes a healthy brain.

Potatoes' high levels of soluble fiber make the vegetable ideal for weight gain or for individuals suffering from sensitive stomachs. Its fiber and carotenoids also help lower cholesterol and protect the heart. Potatoes are high in iron and calcium; they reduce inflammation, and heal ulcers.

Cultural Connection: Ireland

Before the introduction of the potato, Irish diet mainly consisted of milk, cheese, fowl, shellfish, grains, and vegetables, cooked in a cauldron over an open fire. Hospitality was emphasized, so meals were eating from a common bowl, shared a drink and a story.

In the 1500s Irish farmland was rewarded to English and Scottish soldiers. Irish farmers lost their lands to friends of the monarchy, and the smelting industry claimed their forests for fuel. At the same time, the Spanish introduced a new crop from America: the potato. The Irish quickly adopted this vegetable because of its cheap, quick harvest (after 60 days) and nutritional value. By 1770 it was known as the Irish Potato, the food staple that allowed communities survive the population increase, bad weather, and crop failures of the next few decades.

Despite series of famines, the potato survived as the backbone of Irish cuisine. Traditionally, the Irish combined their main livestock, sheep, with this crop to produce a thickened stew called *ballymaloe* or *stobhach gaelach* in Gaelic (see recipe below).

Gardening Tips:

RI season- Plant potatoes between April 1-May 1

Conditions- Potatoes require drained, heavy and sandy soil that has been tilled at least one week before planting. To prevent potato scab, a disease which can form on the surface of the tubers, fertilizer should be placed a couple of inches to each side of the seed. Also, beware of the Colorado potato beetle which can defoliate a maturing potato plant or stem the matured plant. Stink bugs and lady bugs are among this beetle's natural enemies.

Planting- Plant the potato tubers immediately after cutting them; each tuber piece should include one eye or bud. Place tubers 9 to 12 inches apart in shallow trenches.

Recipe: Irish Lamb and Potato Stew

Ingredients:

- 2 pounds of lamb or mutton, cut into chunks
- 2 pounds of potatoes, peeled and cut into ½ inch rounds
- 2 onions, chopped
- 3-4 cups of water
- ½ bunch of parsley, chopped
- salt and pepper to season

Steps:

3. Lay one half of the potatoes in the bottom of a casserole dish or Dutch oven. Cover with half the onions. Add all of the lamb, and then layer in the rest of the onions. Top the onions with the remaining potatoes. Sprinkle with the parsley and season with salt and pepper. Pour in enough water to come about 3/4 of the way up the ingredients.
4. Set the pot over medium flame and bring to a boil. Then reduce heat to a low, cover and simmer for 1 1/2 to 2 hours, or until the meat is tender and the potatoes have broken down and thickened the stew. Add water as needed to keep stew from becoming too thick. Adjust seasoning and serve.

Notes:

- Chopped carrots, celery, turnips or parsnips are often added, as well as thyme and rosemary. Pearl barley will make the dish even more filling.
- Guinness stout may be used instead of the water.
- Cut half of the potatoes into rounds to thicken stew, and leave the rest in larger chunks.
- The stew can be brought to a boil on the stovetop, and then covered in a 350°F oven.

Serves: 4-6

Celery *Apium Graveolens*

Did you know?

Celery comes from the same family as carrots, parsley, fennel, and dill.

The stalks range in color, but the white variety (grown with little sun) is most popular in Europe.

Celery's leaves, roots, and seeds are also edible, and traditionally used as natural remedies.

Nutrition Facts	
Serving Size: 1 Large Stalk (11) - 2 stalks is about 1 cup	
Amount per Serving	
Calories 10	Calories from Fat 0
% Daily Value *	
Total Fat 0g	0%
Saturated Fat 0g	0%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 50mg	2%
Potassium 161mg	5%
Total Carbohydrate 2g	1%
Dietary Fiber 1g	4%
Sugars 2g	
Protein 0g	0%



Celery originated around the Mediterranean Sea and the Himalayas. Mostly leaves and seeds in its wild form, celery treated high blood pressure, acted as a diuretic, and was a mark of distinction for Greek athletes. The Europeans first began eating this vegetable raw in the 1700s.

Celery mostly consists of water and its leaves can be quickly turned into juice or soups. It is very low in calories, but packed with vitamin C to fight against the common cold, protect the heart, and reduce inflammation. Its chemical compounds may help prevent cancer because of their ability to stimulate white blood cells and strengthen the immune system. Celery is also a good source of potassium, folate, magnesium, iron, and B-complex vitamins.

Cultural Connection: Dominican Republic

Dominican cuisine evolved from the traditions of the native Taino Indians, the Spanish explorers, and the Spanish's African slaves; it shares many Cuban and Puerto Rican flavors because of this Spanish influence. Dietary staples include pasta, salted fish, and sofrito- a seasoning made from thyme, salt, garlic, parsley, onion, green pepper, cilantro, tomato, tomato paste, and vinegar. The principal meal, lunch, consists of rice, beans, meat/fish, and vegetables.

Traditionally, all dishes are served simultaneously, made with simple ingredients, and followed by desert and coffee. Soups are especially common in the elevated regions of the country where the winter breezes can be very cool. Cream of celery soup is a Caribbean classic.

Gardening Tips:

RI season- Plant celery/celeriac seeds from April 15- May 1

Conditions- Celery is sensitive to extreme heat and requires frequent watering. It grows best in warm, well-drained, moist soil.

Planting- Celery takes about five months to mature. Seeds should be started inside, planted several inches apart and half a cm into the soil; they will take two weeks to germinate. Once temperature rises about 55 degrees F, stalks that are about 5-6 weeks old may be planted 15-20 cm apart in garden rows. To harvest, chop the stalks above the soil line and store in the fridge.

Recipe: Creole Celery Root Cream Soup

Ingredients:

- Olive oil
- 1 medium onion, chopped
- 2-3 celery stalks, chopped
- 2 small carrots, peeled and sliced
- 4 medium potatoes, peeled and cubed
- 1 celery root, peeled and sliced
- 1 tsp. cumin powder
- 1 bay leaf
- Salt and pepper
- 2 cups vegetable stock
- Fennel leaves for garnish

Steps:

1. Heat the oil in a pan on medium/low heat. When hot, add the chopped onion. Fry till soft, add the cumin powder and the bay leaf. Add the celery, followed a couple of minutes later by the carrots, celery root and potatoes (keep on a very low heat).
2. Cover the pan and sweat for several minutes, stirring occasionally to prevent sticking or burning. Add the remaining vegetable stock, and simmer until the vegetables are cooked. Leave to cool. Once cool, blend the soup, add salt and pepper to your liking, and adjust water if necessary. Reheat and serve with fennel leaves as garnish.

Serves: 6

Winter Squash, *Cucurbita Maxima*

Did you know?

Squash was eaten first for its seeds, over 10,000 years ago.

Native Americans traditionally planted squash on a hill with corn and beans, the Three Sisters, because each plant contributed to the growth of the others.

Squash ranges in color depending on its variety, from grey to green to red to orange.

Winter squash are related to melons and cucumbers; pumpkins are one type of winter squash.

Nutrition Facts 1 cup cooked

Calories 79.95
 Protein 1.82 grams
 Carbohydrate 17.94 grams
 Dietary Fiber 5.74 grams
 Calcium 28.7 mg
 Iron 0.67 mg
 Potassium 895.85 mg
 Folate 57.40 mcg
 Vitamin A 7,291.85



Winter squash matures in the late autumn, after the summers squash season. Common varieties include butternut, acorn, hubbard, and turban squash, as well as pumpkins. It originated in Mexico and Central America, and was brought to Europe by Christopher Columbus. Today, the majority are grown in Asia, Europe, and Argentina.

Winter squash is packed with vitamin A, specifically beta-carotene, which promotes healthy lungs. It also contains high levels of vitamin C, manganese, B-complex vitamins, and omega-3 fatty acids. Its folate and fiber promote colon health, its potassium lowers blood pressure, and its phytonutrients slow the development of cancer cells.

Cultural Connection: Laos

The Hmong people are native to China, but have been living predominantly in Laos since the 1800s. They are a mobile, mountain peoples who base their culture on oral storytelling and rural agriculture. In fact, it was not until the 1950s that the Hmong language was written as text.

The foundation of a Hmong meal, especially breakfast, is a bowl of white rice and vegetable soup. This soup is never salted and acts as the main beverage. Meat may be added or served as its own dish. Spices- salt, red pepper, fish sauce- are separated and eaten in between bites of vegetable. There is no dessert and meals are shared within the close-knit clan or tribe.

Hmong consume a range of grains and fruits, creating a diet high in starch and vitamin C; common fruits include bananas, mangos, pineapples, coconuts, lichees, and citrus. Food is mostly boiled, steamed, or stir-fried. The little meat and lack of dairy- many Hmong are consequently lactose intolerant- create a diet low in fat and reliant on fresh produce.

Gardening Tips:

RI season- Plant squash seeds from May 15 – June 15, allowing 80 to 100 days to mature

Conditions- Squash seeds are sensitive to cold and frost, and they will not germinate below 68 degrees F. Plants require full sun and well drained, moist soil. Frequent irrigation is necessary.

Planting- Seeds should be planted in mounds, 4 to 6 seeds apart. The size of the mound and spacing will depend on whether the squash is a vine or bush variety; vine squash will require extra space or they will overcrowd surrounding plants. Potential threats include the squash bug, squash vine borer, and powdery mildew. A mixture of baking soda, horticultural oil, and water will fight the latter. For the insect pests, remove (do not compost) damaged or infected leaves.

Recipe: Baby Winter Squash and “Ends-of-Vine” Soup

Ingredients:

- 3 cups bite-size pieces of small immature winter squash (skin is soft and easily punctured with a fingernail)
- 2 cups chicken broth
- 1 cup water
- 2 cups bite-size pieces of tender stem and immature leaves from the last 7 inches of the winter squash vine (the pruned vine quickly grows a new end)

Steps:

5. Remove any tough fiber or threads from the outer surface of the main stem.
6. Boil all ingredients together for 8 minutes until squash (flesh, stem, leaves, or unopened buds) is tender.

Notes:

- This dish can be served as a soup or spooned over cooked rice.

Culinary Herbs

Basil, *Ocimum basilicum* and Garlic, *Allium sativum*

Did you know?

Culinary herbs use the leaves of a plant, but spices use the seeds, roots, fruits, flowers, and bark. Basil is an annual herb, while garlic is a perennial- it reoccurs for several years after planted. Basil is related to the peppermint plant. Garlic belongs to the onion family.



Basil originated in India, Asia, and Africa, and is still a vital herb in Asian cuisine. Basil means royal in Greek, symbolizes hospitality in India, and represents love in Italy.

Basil is nature's ibuprofen or aspirin; its compounds provide a natural way to alleviate the pain of arthritis or upset bowels. It is also a good source of iron and calcium, and vitamin A and C to support the heart and immune system.

Garlic dates back 5,000 years to the regions of central Asia. It later spread to Greek and Roman societies, where it was honored and eaten by soldiers before a battle. Societies around the world still grow this herb for its medicinal properties and distinct flavor.

Garlic has anti-inflammatory, anti-bacterial, and antiviral properties; it helps repair torn and sore tissue and fights against the common cold. However, it is best known as a heart-healthy herb. Its high levels of vitamin C and B6, selenium, manganese, and sulfur compounds reduce bad cholesterol levels and increase blood flow.

Cultural Connection: Cambodia

In Cambodian households, meals consist of several small dishes all served at once and shared. The two principal elements are rice and fish sauce. In fact, rice is such a staple that it is culturally sacred; fish sauce blends the flavors of lime, garlic, salt, sugar, water, and chilies. Common vegetables are bitter melon, cabbage, bamboo shoots, and bok choy; fruits, often the meal's desert or sweet beverage, include mangoes, watermelon, and bananas. Meats like beef, shellfish, duck, and turtle, are served stir-fried, stewed, grilled, or boiled.

The variety of Cambodian or Khmer cuisine reflects the influence of Laos, Thailand, China, and India. For example, many dishes utilize crushed peanuts (Thailand), curry with coconut milk (India), and rice noodles in soups (China). Each flavor and dish is kept separate so that the spiciness is determined by the individual. Soups are the base of every meal, beginning with breakfast. Their consistency varies between clear broths with herbs and vegetables, and thicker stews with coconut milk bases. Soups might incorporate noodles or small amounts of meat or fish, but they are always flavored by herbs, chilies, and garlic.

Gardening Tips:

BASIL

RI season- Plant seeds in late spring, ideally after the middle of March

Conditions- To grow basil, there must be fertile, well-drained soil and regular sun exposure.

Planting in a raised bed or small container is a good way to ensure moist soil that drains easily.

Planting- Plant basil seeds twelve inches apart in moist rows. Basil plants can be started with seeds or transplants, but planting must wait until after the last frost has passed.

GARLIC

RI season- Plant garlic cloves from March 15- April 15

Conditions- There is a specific, earlier window of time to plant garlic in the Northeast. It must be planted in the early spring when outside temperatures are warm. Soil must be crumbly and moist to ensure that the bulbs grow evenly.

Planting- Separate garlic cloves just before they are to be planted in the soil. Plant cloves a half inch deep and space them three to five inches apart. Take care to plant bulbs straight to facilitate growth. Once bulbs are mature- around August- dig them out carefully and allow the tops to dry completely. In cool temperatures, cloves will keep for about six months.

Recipe: Spicy Chicken Soup

Ingredients:

- 8 cups water
- 1½ pounds chicken parts (preferably 1 whole breast and 1 whole leg)
- 1 stalk lemongrass, bulb split 2 garlic cloves, smashed
- 2 tablespoons fish sauce, plus more for serving
- 4 teaspoons salt
- 2 teaspoons sugar
- ¼ cup fresh lime juice (1-2 limes)
- 2 scallions, cut diagonally into 1-inch pieces
- Handful of fresh basil leaves, coarsely chopped
- Thinly sliced bird's eye chilies to taste

Steps:

7. Bring the water to a boil in a small stockpot and add the chicken, lemongrass and garlic. Return to a boil and skim the surface thoroughly. Reduce the heat and simmer, partly covered, until the chicken is tender, 25 to 30 minutes. Add the fish sauce, salt and sugar.
8. Remove the chicken from the simmering broth and set aside on a plate. Cool just enough so you can shred the meat from the bones with your fingers. Return the shredded meat to the pot to heat through.
9. Remove the lemongrass from the broth and discard. Stir in the lime juice, scallions and basil. Transfer the soup to a tureen or four individual bowls and serve immediately with rice, with sliced chilies and more fish sauce on the side.

Serves: 4

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MEET THE STAFF

HISTORY:

The organization Deborah Schimberg began by rallying her neighbors, has evolved into a fully functioning team of passionate individuals. This staff upholds SCLT's mission through open communication, mutual respect, and sustainable lifestyle choices. Each member brings his or her unique knowledge and expertise to the community table, which only enhances SCLT's diverse programs and personal approach to service.

COMMUNITY CONNECTION:

Please join me in reading about several SCLT members in the Q&As that follow.

Rich Peterson- City Farm Manager

2. How long have you been working at SCLT? Did you garden before SCLT?

I've been working at SCLT since 2001. I was working on a farm before I began working at Southside.

3. What is your favorite crop to grow? Why?

I like to grow kale. It is a beautiful crop to grow. It's super healthy to eat. It's also very prolific and the length of the season in which you can harvest it is long, even after the frost.

4. Do you plant any crops that reflect or are important to your cultural heritage? For example?

I also grow kale because it reminds me of when I was in the Peace Corps, living in the Republic of Kiribati in the Central Pacific. When you harvest kale from the bottom up the remaining tops remind me of palm trees.

For my cracker roots...sunflowers remind me of a grandmother who grew them on her family's farm; edible hollyhocks remind me of my other grandmother. Composting eggshells and coffee grounds is also a practice of this grandmother.

5. How do you cook or prepare these crops? Please give an example of a favorite dish.

Sunflower seeds are eaten raw and are grown for market, and hollyhocks are nice to put on salads.

6. If you didn't garden, do you think your health would change?

Imagining a life without growing food is impossible, so my life would be worse and my health would be poorer.

7. What lessons has gardening taught you about people, life?

This is a novel. How do I share all that I have learned? It would be impossible. But to at least answer it on a surface level, it is that food is the common ground because we all eat; growing food is an easy beginning for strangers to become acquainted and perhaps become friends.

Leo Pollock- Education Director

1. **How long have you been working at SCLT? Did you garden before SCLT?**

I started at SCLT in July, 2007. I've never had my own garden, but I have been involved with other organizations working in agriculture. In college, I was involved with a student-run organic farm, and then lived in the farmhouse my senior year. I also worked on urban and suburban farms in Boston. But I'm excited about owning a house someday and having a beautiful vegetable and herb garden with fruit and nut trees.

2. **What is your favorite crop to grow? Why?**

I love all of the different color varieties of potatoes that are available: purple, blue, pink, red, and yellow. Potato plants aren't the most beautiful plants, since you harvest potatoes after the plants look dead, but I think there is something magical about digging deep into the soil and finding these multi-colored gems! And it's a great excuse to get dirt everywhere.

3. **Do you plant any crops that reflect or are important to your cultural heritage? For example?**

I absolutely love beets, and my grandparents were Jews that emigrated from Eastern Europe, so I like to think that I'm eating some of the same foods that they ate over a hundred years ago.

4. **How do you cook or prepare these crops? Please give an example of a favorite dish.**

I don't make it often, but borscht is a truly Eastern European Jewish dish. I like it cold with sour cream and dill. With the sour cream, it turns an incredible bright pink! This recipe is pretty close to the kind of borscht I like:

http://www.brama.com/yonkersukrainianfest/recipe_borshch.html

5. **If you didn't garden, do you think your health would change?**

I like to garden because I like to eat. To me, there is nothing better than growing your own food: you get to be outside, you get to watch your plants grow and bear fruit, and you get to eat vegetables when they are the freshest and most delicious.

6. **What lessons has gardening taught you about people, life?**

I would love to see more people growing their own food, or knowing the farmers who are growing food for them! I think we would live in a healthier and happier world if people were more in touch with what they were eating.

Christina Dedora- Director of Operations

1. How long have you been working at SCLT? Did you garden before SCLT?

I have been at SCLT for almost two years. I have worked for myself running a small farming business in the past and present, and in partnership farming an acre of land. I have worked on two other farms as well.

2. What is your favorite crop to grow? Why?

I love to grow everything! Flowers are my absolute favorite, but I also love herbs, veggies, and strawberries; I just planted five blueberry bushes and cannot wait to see them grow. My very favorite plant is the eggplant because the flowers are a beautiful purple color and the leaves are so fuzzy and strong. I love zinnias and gladioli and squash too...I guess I do not have a favorite crop.

3. Do you plant any crops that reflect or are important to your cultural heritage? For example?

No.

4. How do you cook or prepare these crops? Please give an example of a favorite dish.

My most favorite dish is fresh tomato, onion, and basil casserole. The first farm that I worked on in France, the farmer made this dish and it was so good!

5. If you didn't garden, do you think your health would change?

Yes for sure. In the spring and summer I feel stronger and healthier. All the physical activity of farming helps to lose weight, plus I am in the field until seven or eight as opposed to being so sedentary on winter evenings. Farming is my gym and workout. When you work so close to the earth, you gain energy from the earth!

6. What lessons has gardening taught you about people, life?

Patience and take nothing for granted.

Allison Abramson- Development Director

1. How long have you been working at SCLT? Did you garden before SCLT?

As the Development Director for the past year, I have definitely noticed SCLT's dedication to community-building reflected in its approach to fundraising. Throughout the summer, we invite the public to join us for "Seeds of Hope Tours" at City Farm and the Somerset Community Garden. Our guests get to see firsthand the impact our organization has had on the South Providence neighborhood. Most of the time, community gardeners are busy at work in the evenings- watering, harvesting, etc.- but they always stop to chat with our supporters and share a story about their garden plots.

I did garden before working here. When I was growing up, my parents maintained three huge vegetable gardens, and my mom pickled and preserved large portions of our harvest. So, I learned at a young age how to care for plants. Over the years I've always had something growing, even if it's only herbs in a windowsill. Now, I have my own home and the chance to build a garden for my daughter to enjoy.

2. What is your favorite crop to grow? Why?

Sungold Cherry Tomatoes are my favorite! I tasted my first one several years ago when I got a pint in my CSA share. Who needs candy? They're amazing. I've grown them ever since. When I didn't have a yard, I grew them in pots on a deck. They're easy and yield a lot of fruit.

3. Do you plant any crops that reflect or are important to your cultural heritage? For example?

My maternal grandmother is Italian. Her parents came here from Italy, and she grew up in a neighborhood surrounded by her cousins and other large Italian families. Everyone ate off the land. My gram even remembers older women in the neighborhood picking dandelions to make wine. She's always had a garden- and some of her staple crops are tomatoes, green bell peppers, oregano, and basil. These four ingredients set the stage for so many Italian meals. Not surprisingly, these were among the many plants my parents' grew when I was a child. And they always find their way into my gardens, too.

4. How do you cook or prepare these crops? Please give an example of a favorite dish.

Homemade tomato sauce is so easy. Roast a dozen tomatoes for about 45 min. While that's baking, chop 1 green bell pepper, 1 onion and 2 cloves of garlic and sauté in a little olive oil. Add the roasted tomatoes and simmer for a few hours with some basil, oregano, red pepper flakes and salt. You can thicken it up with a can of tomato paste.

5. If you didn't garden, do you think your health would change?

I'm by no means an avid gardener, so I don't think I'm reaping all of the health benefits that I could be. But I do think that my appreciation for how and where my food is grown has had a huge impact on my family's health. We care about keeping plenty of locally grown foods in our kitchen—a few we grow, and the rest we get through a CSA or buy at the farmers' market. It's wonderful to see how much my daughter already loves vegetables. I feel good about knowing the farmers who grow the things I prepare for her.

6. What lessons has gardening taught you about people, life?

I knew that my own gardening experience had a way of connecting me to my past, but I didn't realize just how common that was for other people as well. In the community gardens, people from all different ethnic backgrounds are able to connect to their own histories and carry out traditions they learned from childhood. In a space like a community garden, you can see the similarities play out in garden plots, side-by-side. Though the foods may be different (but sometimes the same!) the reasons for selecting certain plants, the knowledge of how to care for them, the recipes for preparing them, and the memories of their taste are the same for most of us. The amazing thing about gardening and food in general, is that through the simple acts of growing and preparing food we can easily create moments that celebrate our families and traditions—old and new.

Katherine Brown- Executive Director

1. How long have you been working at SCLT? Did you garden before SCLT?

I have been at SCLT since October 2003, when I joined the staff as the Program Director. In December 2004 I became Executive Director.

2. What is your favorite crop to grow? Why?

Snap peas. They are early starters, harbingers for the season. I love the tenderness and perseverance of their twining stems and leaves. I love how you can eat the whole pod. I love their sweetness.

3. Do you plant any crops that reflect or are important to your cultural heritage? For example?

Not particularly.

4. How do you cook or prepare these crops? Please give an example of a favorite dish.

Fresh pea soup (see the following recipe).

5. If you didn't garden, do you think your health would change?

These years I have been so busy with SCLT's organizational development that my gardening is pretty puny actually. And I think this has not helped my health. This year I'm vowing to be in my gardens more!

6. What lessons has gardening taught you about people, life?

In 1995 it was my backyard garden that led me to start City Sprouts, a nonprofit similar to SCLT. I was gardening one day while thinking about how to help our neighborhood respond to several fatal drive-by shootings in Omaha NE. I realized that if I could spread the feeling of peacefulness and positive action that I experience when gardening into the neighborhood that it would make a real difference. Neighbors took hold of the idea and we cleared a large vacant lot where one of the murders had happened. Within 6 months the whole feel of the neighborhood changed—we knew one another, we'd witnessed the transformation of the lot as the result of our collective action, and the good feelings were spreading to cause other improvements as well—like clearing away or fixing up buildings that had been in horrible disrepair, gathering to stop a corner convenience store from getting a liquor license, etc.

RECIPE:

Every day for lunch the Southside Community Land Trust staff shares a simple lunch of freshly prepared soup. Below is a favorite recipe of Katherine Brown, SCLT's Executive Director.

Fresh pea Soup

(Adapted by Katherine Brown from Deborah Madison's The Greens Cook Book)

Ingredients:

Stock: combine, bring to a boil, simmer for half hour

- Chopped pea pods (left from shelled peas)
- Lettuce leaves
- 1 peeled and chopped carrot
- 1 celery stalk
- Bunch of green onions
- 1 bay leaf
- 7 cups water
- Salt

Soup:

- 3 tbsp butter
- Stock
- 4 sliced shallots
- 3 pounds shelled peas
- Salt and pepper to taste
- 1/3 cup heavy cream
- Finely chopped mint leaves

Steps:

1. Melt butter in soup pot with 1/2 cup stock, add shallots until they are soft.
2. Add peas and boil, then simmer until they are soft.
3. Add the rest of the stock and puree everything.
4. Return to the pot, add salt and pepper. Add the cream and mint and serve.

Notes:

- Deborah advises a more elegant version where you whip the cream, sprinkle in the mint, and add the mixture with some unblended but cooked peas, as dollops to each serving of the soup.

CREDITS:

All photos were taken by me unless otherwise noted in the caption or Works Cited. Please see the Somerset Community Garden chapter for more detailed sources.

The recipes and Q&As have been edited for clarity, with every attempt made to uphold their integrity and individuality.

This cookbook was bound by the Providence College Copy Center, March 2009.

ACKNOWLEDGEMENTS:

I would like to start by expressing my appreciation to each and every member of the SCLT staff for their conversations, contacts, and suggestions. A very sincere, community thank you to Katherine, Rich, Leo, Allison, Liza, and Jessica! Thank you also to Deborah Schimberg for taking the initiative and founding this wonderful organization. I thoroughly enjoyed hearing your inspiring story.

Christie Moulton and Heidi Hetzler of Farm Fresh R.I. provided me with a sharper perspective of City Farm's impact in and around Providence. Tara Cinnamon shared her stories from SCLT's after-school programs and relayed the sense of adventure felt by her group of young gardeners. Thank you to all three.

Members of the Providence College community proved invaluable supporters of this project and deserve my deepest gratitude. Thank you to Jen Draeger and Brendan Graham for speaking from the heart about their service at City Farm. Thank you to Keith Morton for helping me delve into SCLT's history and connection to the PSP program, for hearing the range of project ideas, and for first introducing me to the organization. Thank you to Nick Longo who offered valuable advice, listened to the endless brainstorming, and supported this project from the very start. Thank you to Jim Tull and Tom King for emphasizing out of the box thinking and for answering my e-mails. And to my fellow Global Studies Capstone seniors, who are perhaps the only ones who truly understand the makings of such a project, and who by doing so, provided encouragement.

In the words of SCLT founder Deborah Schimberg, sometimes you really do not know where a project or plant will grow, but must wait patiently for it to unfurl. Step by step, this project has been a collaborative effort in true SCLT fashion. I have been blessed by every person who contributed to this final product and have gained immensely from your stories. I hope that the network of knowledge and support that SCLT has created continues to flourish for twenty-eight more years.

A final note of thanks to everyone who submitted a soup recipe... Readers, please select your favorite dish, sit back, and share the meal with friends.

FINDINGS

This cookbook anthology attempted to put a voice to each of SCLT's programs, as a way of introducing them to the larger community. It allowed me to work with a small, passionate group of people and actively test my UA research conclusions in the process. The project that resulted speaks to the challenges and benefits of growing locally, as well as to the challenges and benefits of non-profits and community building.

For the sake of clarity, I separated the SCLT programs into chapters. The introduction highlights the history of the organization and tells the story of its founder Deborah Schimberg. Deborah was a name recommended to me by another interviewee and she proved to be not only approachable, but a crucial component to this anthology. One challenge that arose from this chapter was the inaccessibility of information. For example, Deborah spoke to me of a Brown University student who had compiled a box of resources at SCLT, regarding its origins. When I tried to recover this box, the SCLT staff did not know of its whereabouts and assumed that it was with the Executive Director, who was out of the office for most of the semester. I would have also liked to expand on Deborah's story through the accounts of those friends and neighbors who rallied for her early fundraisers. The obstacles of acquiring these contacts in time, when many of them had moved, and of introducing myself to them through Deborah, prevented me from pursuing this step.

In both challenges, I see the potential for future cookbook addendums. While more stories would have added to the anthology, their existence simply highlighted the range of leaders and community members who have contributed to SCLT over the years. The organization's adaptability lends to its staying power and growth, and thus these limitations

contributed to the project indirectly. I benefited immensely from my conversation with Deborah and from the video documentaries that Rich Peterson provided. In learning about the organization's past and its values I felt better prepared to enter into relationship with its staff and volunteers.

My main challenge with the City Farm chapter became an obstacle for the other chapters as well: the clash between the academic calendar and the agricultural schedule. Interviews were rescheduled because of snow, and farmers were not available to talk or were not yet planting. But, despite the low levels of greenery at City Farm, I was able to witness the preparation for the plant sale in the greenhouse. I witnessed the immediate impact weather places on farmers, and how even city farmers adapt to these seasonal patterns. Winter weather also allowed me to spend more time in conversation with Rich Peterson, City Farm Manager, before his busy season started. The limitation of the growing season required that I change my project from an on-site focus on farming farmers, and explore ways in which the larger community contributes to City Farm. My interviews with members of the Providence College community and Farm Fresh R.I. provided a more well-rounded scope of City Farm's community impact. I hope that these heartfelt reflections inspire other volunteers to start a garden or visit the land trust.

The Education chapter presented the obstacles of scheduling and transportation restraints. I would have liked to build a relationship with an after-school class and conduct my interviews from the garden. If I had been able to build the students trust, I might have even interviewed a class of young gardeners. However Leo Pollock, Education Director of SCLT, and Tara Cinnamon, Youth Garden Club Leader for SCLT, proved invaluable resources. I was able to have a series of conversations with each of them, and gather pictures and recipes. I feel that this

chapter accurately portrays the after-school program even with its limitations. Perhaps in the future, children's voices could be heard and recorded through a trusted adult such as Leo or Tara.

Urban Edge Farm's challenge stemmed from its multi-farmer identity. Because many of the farmers were not in the fields for winter and contact information was sparse, these farmers proved very difficult to reach by phone. Deborah Schimberg and Keith Morton provided some suggestions, but the contacts were either unreachable or had moved to a different farm. Another conversation informed me that Christina Dedora, Director of Operations at SCLT, was a farmer at Urban Edge; she had not only participated in the Farm Business Incubator Program, but she was a founding member of the CSA Four Friends. Thus, this chapter taught me the value of finding connections through connections, and reminded me of the value of establishing relationships. Christina knew me from my weekly visits to the office, and my conversations with her provided wonderful insights into this SCLT program.

The chapter on Somerset Community Garden ultimately changed the entire direction of this project. My original intent was to create a story book and accompanying slide show of these gardeners and their experiences. This project would have examined the cultural diversity and sense of community UA creates between gardeners, and questions would have delved into the role of female community gardeners, in particular: how the rising food insecurity impacts them, how their agricultural involvement contributes to society's health, and how their participation in gardening is viewed by other (especially male) gardeners. However, after my initial conversations with Allison Abramson and Liza Sutton of SCLT, I realized that the language barriers and close-knit nature of these communities would prevent such a project. The staff explained that after two years, their relationships with these communities were still in the beginning stages. Since I would approach the gardeners as a stranger, translators would be hard

to obtain and accurate answers even harder. The winter weather also meant that community work days would not be scheduled until the end of April, so there was little hope of even meeting a community gardener.

This next stage in the project really taught me patience and adaptability. I proposed several new project ideas, listened to SCLT feedback, and then retailored my proposals. I was talking with Allison in person, by phone, and through e-mail. She was relaying my messages to Katherine Brown and to some former volunteers who had also created SCLT projects.

After many conversations, the idea of a cookbook that would highlight the individual voices of SCLT and offer gardening tips for the region, was selected. This new idea incorporated my original intent for personal conversations through Q&As. It explained SCLT's programs and left room for future additions; specifically, a later edition might include the personal accounts of community gardeners, gathered and translated by a trusted source. The project also appealed to SCLT's upcoming website expansion. Parts of the finished product could become online resources for Providence gardeners and serve as an introduction to the organization. Local agriculture and seasonal eating were emphasized through regional gardening tips and soup recipes. Another motivation was the knowledge that a former volunteer had proposed a cookbook project, which Katherine Brown thought could act as a SCLT fundraiser. I hoped that my homespun version might serve as a model for this future venture. But, most importantly, I hoped that this new idea of a cookbook anthology would emphasize the diversity of SCLT's programs and its impact within the community.

The Meet the Staff chapter shared in this theme of collaboration; it showed me the individual talents of the SCLT team, and how their expertise interconnected for the good of the community. Ironically, this section's Q&As relied heavily on e-mail and phone correspondence

even though I was in the office weekly; it took several meetings to establish relationships with the staff members before the Q&A sessions began.

The fact that I started with this chapter helped me understand the organization, but it also meant that I was still working out what the project would be with Allison and Katherine. This reality sometimes made it difficult to explain the exact outcome of my questions to the interviewees. A couple staff members also resisted participating in the questions and recipe submissions. After several polite requests from me and Leo, I accepted their decisions with disappointment and respect. I would have liked for each staff member to be represented in the book, but I also knew that the spirit of this SCLT anthology had to be rooted in voluntarism. I decided to be thankful for the voices I was able to hear and, as with the other chapters, hoped that this section might be expanded in the future.

The staff's small size allowed me to get to know each person individually, but also presented the challenge of working with mutually busy schedules. I quickly perceived that I needed to conduct my conversations through a variety of mediums: e-mail, phone, and face to face. For example, Christina preferred to be sent the questions ahead of time and respond orally over the phone. Leo, on the other hand, preferred to jot down his notes in an e-mail, for me to edit and compile.

Throughout this agriculturally centered project, academic deadlines presented a constant hurdle. I particularly struggled to find a balance between pressuring and passively asking individuals for the needed information. One strategy that I developed was to determine 'deadlines' on an individual basis. These dates worked within my time frame, but also gave my interviewees specific times for which to prepare their responses, suggestions, or recipes. Another strategy was to pursue as many contacts as possible. While I hoped that all of the

contacts would respond and contribute to a more diverse look at SCLT, I expected that I would not speak to everyone and still be able to present an accurate picture of the organization. And, the more I conversed with people, the more contacts I gathered.

Technology was another major benefit to this project. At first it seemed ironic that e-mail and phone played such a strong role in my study of small-scale growers, but I think the emphasis on appropriate technologies really fits into the UA goal. The idea that these inventions allowed me to burn less fossil fuel, expand my community connections, and cut down on my paper usage, all coincide with SCLT mission for sustainability. The internet especially provided me with a valuable resource for local gardening tips. I was able to access the University of Rhode Island's Cooperative Extension site, which helped me select Rhode Island appropriate vegetables and detail their planting seasons. I was then able to delve into the histories, nutrition, and cultural signification between these crops and the Somerset gardening communities.

While I entered this project to study UA's impact on a society, the dynamic nature of its creation allowed the community, not my hypotheses, to determine my findings. In this way, my project followed certain elements of the Participatory Action Research (PAR) approach. The chapters' histories situate the reader, the community connections introduce the reader to specific SCLT staff and volunteers, and the recipes allow the reader to share in this community from his or her own kitchen. These elements also all interconnect to support the true heart of this project, the individual reflections. The nature of these personal accounts gave the project its direction and afforded me the ability to act as the listening investigator. Each reflection created a link to the next contact, and each story literally added to the developing portrait of SCLT. My opinions about UA were shared by the values of my participants because of their SCLT connection and gardening experience; however, I made a conscious effort to keep the questions as unbiased as

possible and not project my research's conclusions onto the participants. I honored the freedom of their responses and edited only for clarity.

While each chapter reflects a distinct SCLT program, I refrained from labeling these sections 'chapters' in a formal table of contents, because of their inherent overlap; together they present various ways in which SCLT's mission is concretely applied in the community and how SCLT, in turn, creates community through its programs. A broad, systems perspective is crucial to understanding this organization's programs and mission statement: we help people grow food in and around the city! First, individual reflections allowed me to showcase SCLT from a variety of diverse lenses; interviewees spoke from business, education, and farming backgrounds. Second, the wide range of these perspectives allowed for common themes to emerge. The SCLT staff and volunteers detailed their contributions to the organization and spoke from the heart about the gifts of their SCLT experiences. Frequently, they linked their consideration for healthy soil, plants, and food, to their concern for healthy communities and future generations. Even the recipes evoked family traditions, referred to favorite adapted dishes, or connected gardening patience with meals shared among friends. I feel that the real gift of SCLT lies in its ability to stress this interdependence of life. For example, a SCLT program might teach an individual how to grow kale, but in this process it instills a new sense of connection to humanity and the earth. The moral of the cookbook anthology is community building.

Thus, this project started, evolved, and ended in conversation. The more I spoke with the community, the more I developed relationships with this community, and the more my project took on a community building focus of its own. I refer to the end product as a cookbook *anthology* because of these vital ingredients of collaboration and story telling. Ultimately, my

project goal was to create something of value that, as requested, SCLT could use in print or digital form. I hope that it provides a welcoming introduction to the organization, and that it tells the impacts of UA through the varied voices of one community.

CONCLUSION

Both my literature review and community engagement at SCLT speak to the need for regionally specific and adaptable UA programs; climatic conditions, cultural traditions, financial priorities, and government policies vary dramatically from place to place. However, all cases suggest that the benefits of UA outweigh the challenges faced by the community. The common need for food, the rising food insecurity, and the continued migration of citizens into urban environments, call for a change in the current food system. UA provides one tangible avenue for this change, as it creates a forum for diverse city inhabitants to communicate, share knowledge, and rally for their rights.

My hope is that the research and cookbook anthology would be expanded in the future, to bring light to more urban examples and highlight more community voices. I would be interested in analyzing the role of female community gardeners, especially since my research spoke of this social group as a front-runner in UA. I hypothesize that these female gardeners, and mothers in particular, could dramatically impact the food security of other marginalized communities, and that their civic initiatives would do much to spread UA programs world-wide. In partnership with this increased research, I would hope that the immigrant communities of Somerset Community Garden could be interviewed. I feel that their reflections would provide a vital window into SCLT's mission, and that they might also shed light on the role gender plays in the

UA movement. I hope that the SCLT staff interviews would continue, that children gardeners could contribute their stories or pictures, and that more thematic recipes could be added to an ever expanding anthology.

In conclusion, by working through the global pressures that prompt UA programs and the specific obstacles of their implementation, local communities cultivate more than food. The opportunities to restore human-nature bonds and person to person relationships empower individuals to lead healthier lives as self-sufficient community units. Ultimately, at the heart of UA lies the need for adaptability: bringing agriculture to the crowded, urban center. I undeniably learned this lesson of at every stage of this project, from reading the literature cases to working with SCLT, and I feel that through this central theme, UA heralds a hopeful message for the ever-changing future.

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Alaimo, Katherine, Elizabeth Packnett, Richard A. Miles, and Daniel J. Kruger. "Fruit and Vegetable Intake Among Urban Community Gardeners." Journal of Nutritional Education and Behavior. 40.2 (2008).

This article relays a very statistically accurate study comparing the health of gardeners to non-gardeners in Flint, Michigan. It used urban agriculture (UA) as one "innovative" strategy to increase the fruit and vegetable intake among Americans, especially those restricted by urban geographies. The article determined that the primary factor that impact diet was access to better produce. Community gardening alleviated the problem of access, and also improved the intake, personal tastes, physical activity levels, and problems of neighborhood violence. The study also discussed the average urban gardener in terms of race, gender, and age.

Balzli, Beat, and Frank Hornig. "Deadly Greed: The Role of Speculators in the Global Food Crisis." Spiegel Online. 23 Apr. 2008. 13 Nov. 2008. <<http://www.spiegel.de/international/world>>.

This article suggests that private investors have artificially manipulated the price of food to protect their own investments. It gives suspicious examples of investors' dramatic profit increase and sudden efforts to escape media attention. Ultimately, the article argues that this increase in personal wealth comes at the cost of higher levels of global hunger and poverty.

Barboza, David. "Suburban Genetics: Scientists Searching for a Perfect Lawn." The New York Times. 9 Jul. 2000. 23 Nov. 2008. <<http://www.nytimes.com>>.

Barboza reports on the scientific research dedicated to preserving a 'perfect lawn' free of weeds and vibrantly green. He discusses the range of inventions such as Scotts' fertilizer, golf range ready grass varieties, and longer blooming flowers. The article is most helpful because of its discussion about Monsanto's creation of sterile Terminator seeds.

Bello, Walden. "How to Manufacture a Global Food Crisis: Lessons from the World Bank, IMF, and WTO." Focus on the Global South. 13 Nov. 2008. <<http://fobusweb.org>>.

This article highlights the negative effects of the World Bank, IMF, and WTO intervention in developing nations. It focuses particularly on demands for international debt reparation at the cost of all other social, governmental programs. Bello studies the cases of Mexico, the Philippines, Africa, and Malawi and traces the loss of food sovereignty within each location as directly resulting from these organizations' involvement. He particularly addresses the double standard of food subsidies that exist between developed and developing nations, and links this dichotomy to the rise in global, food imports.

Bellows, Anne C., Katherine Brown, and Jac Smit. "Health Benefits of Urban Agriculture: Public Health and Food Security." Community Food Security Coalition. 2 Jul. 2008. 16 Sept. 2008. <<http://www.foodsecurity.org>>.

This article analyzes the benefits of UA within the categories of nutrition, exercise, mental health, food security, green environments, and overall health. It provides an inclusive, yet compact summary of UA's many benefits to a community, and emphasizes its ability to build relationships and encourage self-sufficiency. The article ends with suggestions on how to support or begin an UA project.

Bradsher, Keith. "A Drought in Australia, A Global Shortage of Rice." *The Food Chain*. The New York Times. 17 April 2008. 14 Oct. 2008. <<http://www.nytimes.com>>.

This article addresses the six years of drought faced by Australian rice farmers, and how their 98 percent crop reduction impacts global hunger. It links the drought to climate change and shows its repercussions on every agricultural industry upon which Australia's economy depends, such as shepherding and grape cultivation. It also how similar climate change events threaten political structures, citing the global riots and protests against doubling rice prices. One concluding remark argues for immediate research into hardier rice varieties.

--, and Andrew Martin. "Shortages Threaten Farmers' Key Tool: Fertilizer." *The Food Chain*. The New York Times. 30 April 2008. 14 Oct. 2008. <<http://www.nytimes.com>>.

This article discusses the rising price of fertilizer in terms of its social, economic, political, and environmental ramifications. Specifically, it addresses: rising food prices and the resulting protests, the increase in global consumption and the farmers' struggle to meet demand, the growth in livestock farming and its pressure on the grain supply, and the effects of fertilizers' nitrogen run-off and Middle Eastern production mines. The authors cite the scientists' link between fertilizer, increased food production, and exponential population growth- and question what less fertilizer means as human numbers continue to climb.

Brown, Katherine H., and Anne Carter. "Urban Agriculture and Community Food Security in the United States: Farming from the City Center to the Urban Fringe." Eds. Anne Carter, Peter Mann, and Jac Smit. Urban Agriculture Committee. Community Food Security Coalition. Venice: Community Food Security Coalition, 2003.

This "primer" specifically defines urban agriculture and distinguishes between its varieties, which differ primarily in their location and size. It also offers global statistics up to its publication date and examples of active projects that should serve as U.S. models. The break down of sections makes the information very accessible and covers details the types of agriculture, gardener demographics, financial challenges, and need for policy reform. The central message is urban agriculture's effectiveness in improving food security, poverty, hunger, and public health. It argues the need for a new social perspective to realize the food crisis as an urgent national security issue.

Brown, Lester R. "Farming in the City." *Book Bytes*. Earth Policy Institute. 16 Mar. 2007. 15 Oct. 2008. <<http://www.earth-policy.org>>.

This article synthesizes a section of Lester R. Brown's book *Plan B 2.0: Rescuing a Planet Under Stress and a Civilization in Trouble*. Through a series of brief case studies, Brown discusses UA's ability to improve the self-esteem, civic participation, nutrition, physical health, and sense of belonging within communities. He ends his studies with an example from Philadelphia and cites the "huge unrealized potential" for UA in the U.S.

Canada. Urban Agriculture Notes. City Farmer. Office of Urban Agriculture. Rev. of Urban Agriculture: Food, Jobs and Sustainable Cities. 12 Feb. 2008. 16 Sept. 2008. <<http://www.cityfarmer.org/smitbook90.html>>.

The original UN publication of this text is currently out of print, but will soon appear in a second edition. As a result, this book review provides a solid summary of the book's message to

rally global networks in support of urban agriculture. Specifically, it argues for more research and dissemination of research, and studies various cities within the 18 developing countries visited by the authors (as part of the Urban Agriculture Network). It compares the challenges of developing nations and those of wealthier nations, hoping that others might learn from their successes and mistakes. Ultimately, this review cites the book's efforts to "persuade leaders" of urban agriculture's potential to increase sustainability and create healthy, active citizens.

Drescher, A.W. "The German Allotment Gardens- A Model for Poverty Alleviation and Food Security in Southern African Cities?" Sub-Regional Expert Meeting on Urban Horticulture. Food and Agriculture Organization. United Nations. 15-19 Jan 2001. 15 Oct. 2008 <<http://cityfarmer.org/germanAllot.html>>.

This article studies the history and implementation of allotment plots in German cities, comparing their times of great popularity and the numbers of still operating sites. The highest peak appeared during the two world wars as an interest in UA directly relates to food insecurity. These gardens produced social communities, recreation, education, and improved health, as well as sense of solidarity. The article includes a useful graph which provides a systems view of how a garden impacts various community institutions, such as health and employment. The conclusion argues that the German model, if tailored to the female-headed South African households, could directly improve food security in the region.

Engwicht, David. Street Reclaiming: Creating Livable Streets and Vibrant Communities. Gabriola Island BC: New Society Publishers, 1999.

This book speaks to the power of re-localization, focusing on tangible ways to reduce traffic and reutilize the street as the most basic, community meeting space. Its chapters highlight the link between public space and society's mental and physical health, and creativity. The text argues that city planning benefits the community economically, socially, and politically because it restores the community center and reintegrate excluded groups. This reintroduction of a shared, physical space fosters citizenship and a sense of belonging.

"Examples of Urban Agriculture in Asia." United Nations University Press. 15 Oct. 2008. <<http://www.unu.edu/unupress/food>>.

This chapter from the UN's study on nutrition and urban agriculture focuses on the Asian tradition of urban agriculture and some of the modern problems the cities face. It specifically emphasizes the rapid growth of crowded cities and the loss of rural farmland as reasons for more UA efforts. It addresses the policy roadblocks, such as inaccessible land, and inaccurate stigmas against UA, such as the idea that food produced in the city is unhealthy. This article includes a particularly strong comparison between the benefits of urban and rural agriculture, and emphasizes the unique impacts of UA on Asian communities in the context of traditional diets and political systems.

Finn, Robin. "The Island: Romancing the Honeybees." The New York Times. 30 Sept. 2007. 23 Nov. 2008. <<http://www.nytimes.com>>.

This article follows a beekeeper on Long Island, and is particularly useful for its discussion of a decline in bee populations. Termed colony collapse disorder (CCD), this phenomenon has been linked to cell-phone signals and most convincingly, pesticide use.

Freyfogle, Eric T., ed. The New Agrarianism: Land, Culture, and the Community of Life. Washington: Island Press, 2001.

In a collection of essays, this book focuses on the changes in American culture that have changed how people come to view and rely on agriculture. Topics range from land ownership to establishing local food sources. Orr's chapter called "The Urban-Agrarian Mind" particularly discussed how history's economic changes have impacted society and farming in America. Wendell Berry's chapter "The Whole Horse" calls for a return to a locally based economy in light of the world's industrial global system. The book's main message is the need to reassert agrarianism into the modern world as a central aspect of our culture and shared identity.

"Gender and Food Security." Gender in Agriculture. Food and Agriculture Organization.

United Nations. 16 Sept. 2008. <<http://fao.org/gender>>.

While many of the articles discuss the role of rural agriculture in women's empowerment, their themes still apply to UA. And as increasing numbers of women migrate from these rural regions, a rural-urban comparison proves important. This publication claims that the "feminization of agriculture," which results from war or disease, has left many women the sole producers of food for their families. This reality is worsened by the traditional gender roles and women's inability to own land in many regions. The articles link a community's health and sustainability to female empowerment, for example through family gardens.

Girardet, Herbert. Cities People Planet: Livable Cities for a Sustainable World. John Wiley & Sons Inc.: Hoboken, 2004.

This reference delves into the role of cities as an "urban ecosystem" and the need to improve upon the system through efficient city planning, new technologies, and returning to community based networks that even ancient societies used. It discusses the broad benefits of urban agriculture for the environment and society, but also addresses the challenges industrial and developing nations face. The section on the history of city planning and city greening was particularly useful as it provided a contrast to how and why modern society operates.

Hanna, Autumn K., and Pikai Oh. "Rethinking Urban Poverty: A Look at Community Gardens" Bulletin of Science, Technology, & Society. National Association for Science, Technology, & Society. 20 (2000): 207-216.

The result of two students' research, this article addresses the need for a new perspective when arguing the benefits of UA. It discusses the experiences of Hanna and Oh, who researched community gardening as a unique solution to urban poverty, while living at several sites in a low-income, inner-city section of Philadelphia. They concluded that the issue of poverty could be addressed through non-traditional, social strategies (UA) rather than pure, economic analysis.

"Helping Women Respond to the Global Food Crisis: What We Know and What We Still Need to Know." International Food Policy Research Institute. 17 June 2008. 16 Sept. 2008. <<http://www.ifpri.org>>.

This article argues that the global food crisis affects men and women differently, and highlights the role of female protesters speaking out against higher prices in urban communities. The main problem it cites is an unequal access to resources that leads women to suffer more than men. It argues that because of regional differences and different gender roles among cultures, specific solutions must be adapted to each community. However, general research shows that

food aid directed towards women has a larger benefit to the whole community. Policy reform should focus on improving women's resources and representation to improve the food crisis.

Henriques, Diana B. "Price Volatility Adds to Worry on U.S. Farms" *The Food Chain*. The New York Times. 22 April 2008. 14 Oct. 2008. <<http://www.nytimes.com>>.

A combination of the weakened dollar and the rising global food prices creates a "volatile" economic environment for U.S. farmers. Some specifics that this article address are the rising insurance premiums for harvests, and company reluctance to invest in certain crops because of their lower predictability. These situations of distrust create anxiety among modern farmers and require that they dedicate more of the attention that their harvest demands, to following trading and investments. The article cites the size of the global food system a main factor, since large investors find more price stability and produce guarantee in the average farmers' large-scale competition.

Hynes, Patricia H. A Patch of Eden: America's Inner-City Gardeners. White River Junction: Chelsea Green Publishing Co., 1996.

This source was recommended to me as a great case study on urban agriculture in America. It presents detailed chapters on community garden projects in Harlem, San Francisco, Philadelphia, and Chicago. These studies include color photographs of the various garden types, as well as the steps and challenges of their beginnings. The concluding chapter focuses on women's role in urban agriculture. It traces this tradition through history and across nations, and gives examples of female led social movements. This section emphasizes the power of female farmers in the city and their current, often unrecognized contributions to the food system.

Leathers, Howard D., and Phillips Foster. The World Food Problem: Tackling the Causes of Undernutrition in the Third World. Lynne Rienner Publishers, Inc.: Boulder, 2004.

This book is a particularly good resource on the economic causes and implications of the global food crisis. It discusses the problems caused by government subsidies, the current reliance on imports and exports, and the contrast between rural and urban cultivation. A particular strength is the texts' ability to link other global problems, such as the water shortage and climate change, with the food crisis. The statistics on how women and children and developing regions also provided a systems view of how human diseases, education, access to resources, and gender roles directly relate to food sustainability. The final section addresses the need for future reform through efficiency not just more agricultural yield.

Lordahl, Gerard. "For the Greater Good" Organic Gardening 54.4 (2007): 40.

This interview questions the director of New York City's Council of the Environment's Greening Program. Gerard Lordahl speaks of his specific experience working with community gardens in New York, but he also has traveled around the world to address the issue of hunger through gardens. He mentions that governments often fail to understand the benefits of community gardens when faced with housing shortages and financial constraints. However, he explains that among the community benefits, such as "conflict resolution" and education, gardens maintained by the citizens "save tax dollars."

McKibben, Bill. "The Cuba Diet" Harper's Magazine. 310.1859 (2005): 61-69.

This article chronicles Cuba's shift in diet and agriculture as a result of the disintegration of the Soviet Union and its financial support. It emphasizes the necessity and immediacy of this shift, but also how well the people adapted and improved their overall health as a result of the near crisis. He highlights Cuba's geography as an island and its less than democratic political system in context of this change, and champions their sustainable, localized agricultural system. He esteems Cuba's ability to change in time to relearn traditional farming techniques in the absence of fossil fuels. Dubbed the anti-Green Revolution, McKibben argues that Cuba's example should motivate the U.S. to act and reeducate themselves on more sustainable farming and food systems.

Mougeot, Luc. Growing Better Cities: Urban Agriculture for Sustainable Development. In Focus Ser. Ottawa: International Development Research Centre, 2006.

This book provides a wonderful print complement to IRDC's expansive internet network of global research. The author is particularly knowledgeable, having founded IRDC's Cities Feeding People program and written on the social, environmental, and political impacts of Urban Agriculture. The text itself is clearly divided between key sections, such as The Issue, The Approach, and Learning from Experience. It studies UA through the global issues of food security and the UN's Millennium goals, as well as through specific, data rich case studies from around the world. Plus, the book is accompanied with a CD that offers information in three languages about IRDC's projects, mission, and, contact information, and past publications.

--. "Urban Food Self-Reliance: Significance and Prospects" Urban Environment Management Program. IDRC Reports. Ottawa: International Development Research Centre, 1997. 4 Dec. 1997. 16 Sept. 2008. <<http://archive.idrc.ca>>.

This article briefly traces urban agriculture (UA) to its roots in ancient societies and from the 1970s. It cites global cities, such as Singapore and Hong Kong, with flourishing UA systems, and argues for its feasibility and needed expansion. It discusses inner-city, small scale farming specifically, addressing challenges such as sewage systems, equity among farmers, and land rights. The conclusion argues that more research is still needed and praises certain NGOS for taking the initiative. Ultimately, it analyzes food security through a systems perspective.

Musiimenta, Peace T. "Urban Agriculture and Women's Socio-Economic Empowerment: A Case Study of Kiswa and Luwafa Areas in Kampala City." Urban Agriculture Notes. City Farmer. Office of Urban Agriculture. 16 Sept. 2008. <<http://www.cityfarmer.org/kampalaWomen.html>>.

This paper attempts to find whether women's socio-economic status improves more with the presence of UA, than the position of other community members. It studies how gender roles and the need to provide for their children naturally lead women to UA efforts. It concludes that UA is a matter of survival for many women in developing nations subject to drought, government instability, or war; consequently, small-scale agricultural projects and training should be expanded in urban locations.

Obosu-Mensah, Kwaku. "Changes in Official Attitudes Towards Urban Agriculture in Accra" Africa Studies Quarterly: The Online Journal for African Studies. 15 Oct. 2008. <<http://web.africa.ufl.edu/asq>>.

This article specifies Africa's unique situation and need for UA as it faces urban growth with little economic development. A major reason that UA has proved a possibility in Accra are the number of migrants from rural areas who already possess agricultural skills. This article's strength is the detailed explanation of official attitudes and concerns against UA. These reasons range from concerns about the water supply to the low status of farmers in society. Ultimately, the article supports UA but argues that its implementation requires a change in social mentality before it can be incorporated into regional policy in the region.

Parr, Hester. "Mental health, Nature Work, and Social Inclusion" Environment and Planning, Society & Space. 25.3 (2007): 537-561.

This article studies the use of gardens as a therapy for people with mental illnesses. It compares the early use of a garden rather than an indoor asylum, and explains how 'ordered nature' was thought to address the "'unnatural' madness" of the patients. The section on urban gardens as a treatment for addiction patients particularly addresses the importance of a nature-human reconnection. The patients were given a chance to interact in society and directly contribute to community gardening projects, as their self-confidence and life skills improved. They grew healthier because of building social relationships to their immediate community and viewed the tangible results of their progress in the garden and beautification projects. The conclusion claims that in modern societies, UA projects hold the most potential for healing.

Parsons, Kermit C., and David Schuyler, ed. From Garden City to Green City: The Legacy of Ebenezer Howard. Johns Hopkins UP: Baltimore, 2002.

This book discusses the century-old ideas of Ebenezer Howard, who envisioned a network of pedestrian-driven, garden-filled communities as a replacement for England's Victorian towns. It also discusses other leading city planners that argued for self-sustaining small-scale communities based on the village model of past societies. Readers learn how these ideas adapted and strengthened with WWI, the Great Depression, and especially struggled after WWII and the rise of the automobile. It concludes with a discussion of Howard's influence on urban planners, who refer to his message as "industrial ecology." Ultimately, he argued for society to learn from past mistakes so as to create a healthy balance between city and country.

Pollan, Michael. "Farmer in Chief." The Food Issue. The New York Times. 12 Oct. 2008. 14 Oct. 2008. <<http://www.nytimes.com>>.

Pollan writes to the next American president that food is at the crux of the nation's health, energy, and climate change concerns. He cites the amount of greenhouse gases produced in food transportation, the over-consumption in "cheap calories," and the lack of diversity in the American farmland as major national-security concerns. He highlights the impracticality of shipping food across the globe and the food subsidy programs, which weaken local growers and create crop "monocultures." He pushes agricultural reform and early education programs as ways to return to healthy soils, societies, and local economies connected to the food they eat.

Rieff, David. "A Green Revolution for Africa?" Encounter. The New York Times. 12 Oct. 2008. 14 Oct. 2008. <<http://www.nytimes.com>>.

This article discusses the large-scale funding, research, and time commitment of the Bill and Melinda Gates Foundation in Nairobi, Kenya. It discusses how the Green Revolution ignored Africa because of low population and industry levels, and how the continent faces an

urgent need for more food as population levels swell and climate change weakens crops. The Gates Foundation works especially through a Program for Africa's Seed Systems and with the World Food Program on the Purchase for Progress project. These projects' seek to increase self-sufficiency through developing seeds, improving the soil, and creating networks for farmers to move and market their goods. The article also includes critiques of the Gates Foundation's efforts, arguing that their heavily funded projects create a reliance on foreign aid that will damage Africa's sustainability.

Rosenthal, Elisabeth. "Environmental Cost of Shipping Groceries Around the World." The Food Chain. The New York Times. 26 April 2008. 14 Oct. 2008. <<http://www.nytimes.com>>.

This piece offers specific examples of the long-distance travel that governs the world's food supply. It addresses the pollution, specifically carbon dioxide, low labor costs, and impractical consumer expectations that have resulted from this system. A solid study of the economic motivations, it especially compares European cities, and proposes the idea of a shipping tax.

--. "World Food Supply is Shrinking, U.N. Agency Warns." The Food Chain. The New York Times. 18 Dec. 2007. 14 Oct. 2008. <<http://www.nytimes.com>>.

This article addresses the immediate results of rising food prices: the vulnerable poor will become more vulnerable and world hunger will increase. It cites the rise in oil prices, which have "doubled shipping costs" for food. It also mentions that the price of food sent to "the neediest countries rose 25 percent" in 2006. Besides oil, climate change is mentioned as a contributor to smaller harvests and rising prices. Food shortages directly weaken nutrition and spread diseases, such as HIV/AIDS. The conclusion advocates local agricultural initiatives and seed/fertilizer voucher systems over food aid.

Sengupta, Somini. "In Fertile India, Growth Oustrips Agriculture." The Food Chain. The New York Times. 22 June 2008. 14 Oct. 2008. <<http://www.nytimes.com>>.

This article highlights the technology and policy mistakes that have kept India from self-sufficiency and well below its food producing potential. Specifically, it cites the impact of the Green Revolution to combat famine and the challenges of a still expanding population. Sengupta links the depleting water supply and climate change to the food shortages, and critically studies the government's fertilizer and grain subsidies. He describes a society of desperate farmers with few successors and with a focus on profit to survive.

Smit, Jac. "The Urban Agriculture Network's Mission and Values." Urban Agriculture Notes. City Farmer. Office of Urban Agriculture. 1 Jan 2005. 16 Sept. 2008. <<http://www.cityfarmer.org/smitbook90.html>>.

The Urban Agriculture Network works directly with the UN and advocacy organizations to conduct research on urban agriculture and its impacts around the world. Through its online library, published articles, and training sites, it hopes to create empower cities through urban agriculture, specifically women and youth. Their president Jac Smit is an expert in urban agriculture, with degrees from SUNY and Harvard, and countless research trips to Asia, Africa, and Latin America.

Stiffler, Lisa. "Bio-debatable: Food vs. fuel" Seattle Post-Intelligencer. 3 May 2008. 13 Nov. 2008. <<http://seattlepi.nwsourc.com>>.

This article clearly distinguishes between biodiesel and ethanol, and lists the organic matter used in either production. It presents a good debate on the environmental impacts of both biodiesel and ethanol, arguing that ethanol is barely a significant reducer of greenhouse gases and often diverts arable land away from food production. Biodiesel, however, presents much more potential, especially through systems that recycle soybean oil or are researching the use of algae and woody debris. But ultimately, neither option can assume all of the world's gasoline consumption- without dedicating at least 20 percent more land to alternative fuel crops.

Streitfeld, David, and Keith Bradsher. "Worries Mount as Farmers Push for Big Harvest." The Food Chain. The New York Times. 10 June 2008. 14 Oct. 2008. <<http://www.nytimes.com>>.

This article addresses the paradox of flooding for American corn/soybean farmers and drought for Australian wheat farmers, to highlight the insecurity facing the global food system. It notes that even with rising food prices, the rising costs of fertilizer and diesel and climate problems are lowering farmers' profits. Some farmers are choosing not to produce, others are planting more and harvesting less, and in either case the global food supply suffers.

United States. Office of Housing-Multifamily. Neighborhood Networks. Dept. of Housing and Urban Development. Growing a Garden and a Community. Fairfax: HUD, 1999.

This source delineates between the motivations for community garden projects in the U.S.: beautification, youth engagement, public safety, and community building and empowerment. It also includes specific examples of successful garden communities in Seattle, Greeley, and Portland. The pamphlet concludes with steps on how to create a community garden and provides a range of resources, such as their national website (Neighborhood Networks). The different sections highlight a project's reliance on group planning and communication, and its ability to foster relationships.

"Urban Agriculture in St. Petersburg, Russian Federation." Urban Gardening Club. World Health Organization. Ser. On Urban Food Security: Case Study 1. Copenhagen (2000).

This case study discusses the implementation of gardens in St. Petersburg prisons and schools. It highlights gardening's ability to act as a non-violent means to achieve conflict resolution, create a safer atmosphere, and improve self-worth. The positive effects of physical activity and time in nature are compared to the traditional types of confinement in prisons, and the gardens' produce even helped pay for the facility's costs. This article particularly mentions the importance of an initial gardening success in order to convince prison and school officials of the program's potential. The conclusion addresses the media's reactions, obstacles, and future plans for UA in the city.

Van Veenhuizen, René, ed. Cities Farming for the Future: Urban Agriculture for Green and Productive Cities. Ottawa: International Development Research Centre, 2006. 15 Oct. 2008. <<http://www.idrc.ca>>.

Chapters five and six of this book proved particularly good studies of the community focus of UA. Chapter five, entitled "Gendering the Urban Agriculture Agenda" emphasizes women's pivotal role in UA in light of the restrictive policies and social roles they face. Several

case studies exemplify this paradox and discuss the roles of NGOs, government agencies, and micro-credit loans as means to address gender inequalities. Chapter six, entitled “Building Community Capital and Social Inclusion through Urban Agriculture” identifies seven dimensions of community capital: human, social, political, cultural, economic, built, and natural. It shows how community garden projects benefit more than individual participants; they create the cohesion necessary to affect policy improvements for marginalized groups. Global examples of UA projects are also discussed.

Williams, Dilafuz. “Listening to Nature: Cultivating Ecological Literacy through Learning Gardens.” Oregon English Journal. 30.1 (2008): 12-15.

This article speaks to the flaws in traditional education, namely its segmented subjects and disconnection with real world experiences. Williams argues for a systems approach to learning that fosters a connection to the natural world and the local environment. A professor at Portland State University, she cites the Learning Gardens program as a successful way of fostering ecological literacy. She specifically explains how the program involves the entire community and encourages understand and respect for various cultures, ages, school subjects, and living creatures. Such experiential learning in the garden engages the students so that they motivate themselves to learn and feel compelled to protect the communities they have come to respect.

Woodsworth, Alexandra. “Urban Agriculture and Sustainable Cities.” Urban Agriculture Notes. City Farmer. Office of Urban Agriculture. 5 Mar. 2001. 13 Nov. 2008. <<http://www.cityfarmer.org/smitbook90.html>>.

This article addresses the social prejudices and obstacles urban agriculture projects have to overcome. However, it challenges these claims that UA is idealistic and impractical by citing successful projects that have flourished in tight, city spaces. Woodsworth particularly explains that the ability for city residents to grow their own food alleviates the growing apathy and profit-mindedness controlling modern societies.