

Multiple Benefits



Of Community Gardening

Carbon Footprint

- Food in the United States travels an average of 1300 miles from farm to fork, changes hands half a dozen times, and consumes 10 calories of fossil-fuel energy to produce a single calorie of modern supermarket food (Kloppenborg, Hendrickson and Stevenson, 1996, p. 33, 42; Pollan, 2008). Producing food locally greatly reduces the greenhouse gas emissions related to transportation of food.
- Fruits and vegetables sold in supermarkets spend as many as 7 to 14 days in transit. During this time, almost 50% of the transported food is lost to spoilage. Locally grown food reduces or eliminates this transit time, helping to greatly reduce waste (Community Food Security Coalition, 2003, p. 4).

Municipal Benefits

Community Gardens are an economic benefit to local governments:

- Community gardens have been shown to increase property values in the immediate vicinity where they are located. In Milwaukee, properties within 250 feet of gardens experienced an increase of \$24.77 with every foot and the average garden was estimated to add approximately \$9,000 a year to the city tax revenue (Bremer et al, 2003, p. 20; Chicago, 2003, p. 10; Sherer, 2006).
- Been and Voicu estimate that New York's "gross tax benefit generated by all community gardens over a 20-year period amounts to about \$563 million. Under the scenario in which the local government would have fully subsidized the garden provision [which is rarely the case], the city's total investment would have amounted to about \$83.5 million. Thus, the estimated net tax benefit would be, in the aggregate, about \$480 million or, per garden over \$750,000" (2006, p. 28).
- Developing and maintaining garden space is less expensive than parkland area, in part because gardens require little land and 80% of their cost is in labor (Saylor, 2005).
- Community gardens provide a place to retreat from the noise and commotion of urban environments, and have been shown to attract small businesses looking to relocate (Sherer, 2006).
- Community garden programs provide employment, education, and entrepreneurship opportunities for a wide variety of people, including students, recent immigrants, and homeless people (Community Food Security Coalition, 2003),
- While vacant lots can be magnets for litter and criminal activity, community gardens are observed and managed by the gardeners, resulting in a cleaner space and more active local community. All of this often comes at little or no cost to the city (Schmelzkopf, 1995).

Food Production

Community gardens allow families and individuals without land of their own the opportunity to produce food, and provide a place for gardeners to share knowledge and skills.

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Food Production (continued)

- Gardeners save significant amounts of money on produce. One project estimated that community gardeners saved between \$75 and \$380 in food costs every season (adjusted for inflation from 1994 to 2011) (Hlubik et al. 1994; Armstrong, 2000).
- Local agriculture conserves resources by shortening the commodity chain, saving on fuel-demanding transportation and packaging (Bremer et al, 2003, p.23)
- From 1978-1989, \$8.9 million worth of produce was grown in Milwaukee community gardens (Bremer et al, 2003, p.22, 56).
- In 1999, the fifteen New York gardens organized as the City Farms program of the organization “Just Food” grew close to 11,000 pounds of fresh vegetables and fruits. Nearly 50 percent was donated to nearby soup kitchens and food pantries (Just Food 1999 Summary Report, as cited by Englander, 2001, p. 14).

Health Benefits

- Community gardens provide access to fresh, traditional produce and nutritionally rich foods in low-income neighborhoods, where nutritious food is much less available than in other areas. “A study of all food stores in three low-income zip codes in Detroit found that only 19%, or fewer than one in five stores, carried a minimal 'healthy food basket' [of] products based on the food pyramid” (Pothukuchi 2003).
- Studies (like the one conducted by Lackey and Associates) have shown that community gardeners and their children eat healthier, more nutrient rich diets than do non-gardening families (Bremer et al, 2003, p.54).
- People who garden (or who live with someone who gardens) tend to eat more fruits and vegetables on a daily basis. In a survey in Flint, Michigan, while only 17.8% of respondents from non-gardening households ate fruits and vegetables at least 5 times a day, that number rose to 32.4% in households with a gardener. The same study showed that gardeners also tend to eat one more serving of fruits or vegetables per day than non-gardeners (Alaimo et al., 2008).
- Increasing the consumption of organic local produce reduces exposure to chemical fertilizers and pesticides. Local food can also “be eaten fresh, without the preservatives that are typically added to produce that is shipped long distances” (Bremer et al, 2003,p. 54).
- Multiple studies have shown that natural areas such as community gardens grant a variety of mental health benefits. Being in natural places fosters recovery from mental fatigue, improves outlook and life satisfaction, helps us to cope with and recover from stress, improves our ability to recover from illness and injury, restores concentration, and improves productivity (Maller et al., 2005).
- Simply viewing plants has been shown to reduce fear, anger, blood pressure, and muscle tension (Relf, 1992 p. 161; Ulrich, 1979; Ulrich, 1986).

Exercise

- Gardens can be areas for recreation and exercise. According to the American Journal of Preventive Medicine, the “creation of or enhanced access to places for physical activity combined with informational outreach” produced a 48.4% increase in frequency of physical activity in addition to a 5.1 percent median increase in aerobic capacity, reduced body fat, weight loss, improved flexibility and an increase in perceived energy (as referenced in Sherer, 2006).
- Gardening is considered a moderate to heavy intensity physical activity, and has been linked to significant beneficial changes in total cholesterol, HDL cholesterol, and systolic blood pressure (Armstrong, 2000).

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Exercise (Continued)

- Besides being a great way to exercise, gardening motivates people to stay active longer than other activities. In one study, participants spent significantly more time gardening (225 minutes/week) than doing other leading forms of exercise, such as walking (160 minutes/week) and biking (170 minutes/week) (Caspersen et al., 1991).

Crime Prevention

Community gardens offer a focal point for community organizing, and can lead to community-based efforts to deal with other social concerns.

- Community gardens give youth a safe place to interact with peers and can involve them in beneficial activities (Sherer, 2006).
- Community gardens increase neighborhood surveillance or “eyes on the street”, often deterring crime (Kuo & Sullivan, 2001b).
- In a study of violent and property crimes around public housing buildings in Chicago, buildings with a high level of vegetation that doesn't obscure view (such as most garden plants) had 52% fewer crimes than those with no landscaping. Buildings with medium levels of this type of vegetation had 42% fewer crimes (Kuo & Sullivan, 2001).
- Scientific studies show that crime decreases in neighborhoods as the amount of green space increases, and that vegetation has been seen to alleviate mental fatigue, one of the precursors to violent behavior (Kuo and Sullivan, 2001).
- Community gardening is recognized by many police departments as an effective community crime prevention strategy. In Philadelphia, burglaries and thefts in one precinct dropped by 90 percent after police helped residents clean up vacant lots and plant gardens. (“Healing America’s cities” p. 5-6, as cited in Englander, 2001).

The Urban Ecosystem

Gardens help to improve the health of the city ecosystem in several ways:

- Community gardens add beauty to the community and heighten people’s awareness and appreciation for living things. In a Chicago survey, this was the #1 reason given for the importance of community gardens, mentioned by 14.3% of respondents, while 83% of respondents felt that the garden has enhanced the beauty of the community (Chicago, 2003, p. 34).
- A 1995 Regional Plan Association poll of individuals nationwide found that the major components of a satisfactory quality of life are safe streets and access to greenery and open spaces. In another survey, owners of small companies ranked recreation, parks, and open space as their highest priority in choosing a new location for a business (Sherer, 2006, p.5).
- Urban green spaces are unevenly distributed and access is extremely limited near low-income neighborhoods populated by minorities, including recent immigrants. For example, in “Los Angeles, white neighborhoods enjoy 31.8 acres of park space for every 1,000 people, compared with 1.7 acres in African-America neighborhoods and 0.6 in Latino neighborhoods” (Sherer, 2006, p.6).
- Filter rainwater and help to keep lakes, rivers, and groundwater clean (“Plants and the micro-organisms with which they symbiotically coexist help to clean and filter water as it percolates through the soil”) (Bremer et al, 2003, p. 50).

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Urban Ecosystem (continued)

- Reduce soil erosion and runoff, which lessens flooding and saves the city money (Bremer et al, 2003, p. 50, 56; Sherer, 2006; tpl, 2004).
- Restore oxygen to the air and help reduce air pollution through the gas exchange systems of leaves and soils (Chicago, 2003 p. 14; Sherer, 2006).

Youth Education

Community gardens can serve as an outdoor classroom where youth can learn valuable skills, like those involving practical math, communication, responsibility and cooperation. They also provide the opportunity to learn about the importance of community, stewardship and environmental responsibility.

- When combined with science education, gardening can be a form of experiential learning that is more effective than traditional classroom learning. In a study of Hispanic and African American middle school students in Los Angeles, students who participated in a science class with a school garden project showed dramatically improved science-processing skills when compared to those in a traditional science class (Blair, 2009 p. 19).
- In California, the San Francisco League of Urban Gardeners has a program in Alemany, a community with an unemployment rate of 84%, which employs 20-25 local youth during the school year and about 60 during the summer. They are trained in gardening, landscaping, habitat restoration, work skills and leadership development (Feenstra et al, 1999 p.40).

Cultural Opportunities

- Community gardens offer unique opportunities to establish relationships within and across physical and social barriers. (Bremer et al, 2003; Tranel & Handlin, 2004). In places like the Twin Cities, where there are large communities of first and second generation immigrants, community gardens have provided a space for: Inter-generational exposure to cultural traditions; Cultural exchange with other gardeners; Access to non-English speaking communities
- In gardens across New York that are supported by the city's community garden association, GreenThumb, there are gardeners from 45 different countries and many regions of the U.S.
- A recent study found that, compared to residents living near barren areas, those closer to green common spaces are more likely to use them and more likely to interact with neighbors as a result (Kuo et al, 1998, p.26).
- Community gardens are great places to host social and cultural events, helping to strengthen local communities (Krasny & Saldivar-Tanaka, 2004).

Horticultural Therapy

- Exposure to green space reduces stress and increases a sense of wellness and belonging (Bremer et al, 2003, p. 55).
- "A ten percent increase in nearby greenspace was found to decrease a person's health complaints in an amount equivalent to a five year reduction in that person's age" (Sherer, 2006, p. 16).
- In Brentwood California, the Vets Garden employs 35 patients, many of whom have not been able to hold down a job since the Vietnam War. Since the garden program started, inpatient stays have been significantly reduced and the gardeners have been making progress at faster rates and are better able to "participate more fully in the world and move on to jobs outside the hospital". Employment opportunities such as gardening and landscaping throughout the city have become available to Vet gardeners and several program participants have even gone back to school. (Feenstra et al, 1999, p. 52).

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