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COMMUNITY GARDENS

Description:

Community gardens are plots of land that contain edible or non-edible plant life (or a combination of the two) and that are typically cultivated or landscaped by a grassroots social network in a designated geographical area.^{1, 2} These plots can be communal, or they may be separated into smaller plots that are managed by individuals within the network.^{3, 4} In the most common variety of community garden, gardeners are allowed and encouraged to consume and/or share what they produce in the community garden. Because of their inherent social, economic, health, and community-building benefits, community gardens are a valuable element of a livable community.

Community gardens can serve many purposes, but a universal function is to garner and nurture a sense of fellowship among its members, as well as to provide collectively organized, well-maintained green spaces. For example, the Cleveland Cultural Gardens within Rockefeller Park in Cleveland, Ohio, are a collection of gardens following an ethnic theme that demonstrates just that.⁵

It is possible that community gardens have been in existence since the beginning of agriculture, but the formal concept of the community garden seems to have been established sometime during the 19th century in the United States—interest in community gardening is evident during the late 1800s.^{3, 6} History also shows that during periods of drastic change or instability (and sometimes food insecurity), people turn to gardening to ease the psychological, sociological, and financial burdens that come along with these changes;^{3, 6} for example, involvement increased during the Great Depression in the 1930s, and during World Wars I and II.^{3, 6}

Interest continues today, particularly in areas where green spaces are limited. According to the American Community Garden Association (ACGA),⁷ there are at least 18,000 gardens in the United States and Canada, with at least one community garden in all 50 U.S. states and most of the Canadian provinces; and ACGA has been holding annual conferences in the United States and Canada since 1978.

Members of community gardens are as diverse as the communities in which they live. Membership often includes children and adolescents, adults of all ages including elderly persons, people in wheelchairs, immigrants, celebrities, and people with a variety of special needs. Additionally, community gardens attract members across income levels and with a wide range of gardening experiences.

Categorizing community gardens—

There are several ways to categorize community gardens—by characteristics of flora grown in the garden, the garden's overall function, the location of the garden, and the media used for cultivation:

Flora: Community gardens contain plant life, or flora, which can be edible or non-edible. Edible gardens are more utilitarian in that they are developed for consumption, and produce often includes fruits, vegetables, and herbs. Although soil testing is recommended for all gardens, this is a mandatory requirement for gardens producing edibles. Non-edible gardens are primarily produced for aesthetics, and flora includes flowers, small shrubs, and trees. Often, community gardens are of a blended type, consisting of both edible and non-edible flora.

Many community gardens in the United States and Canada are primarily of the edible or blended type,⁷ while gardens in some places—such as Germany, specifically Berlin—tend to be for aesthetic purposes only.⁸ In Ireland and throughout other areas of Europe, edible gardens are often identified as allotment gardens, and non-edible gardens are considered community gardens.⁹ Therefore, it is important to understand that what is considered a garden consisting of edibles in one area of the world may be referred to as something totally different elsewhere.

Function: There are typically six functions of a community garden: donations, market, neighborhood, therapy, education and training, and multi-functional.

- Donation gardens allow all products of the garden to be donated to individuals and organizations.¹⁰
- Market gardens require all products of the garden to be sold for a profit.¹⁰
- Neighborhood gardens are probably what most people think of when they hear the term community garden. In this type, garden plots are individually or communally tended, and gardeners are allowed to keep what is produced.¹⁰
- Therapy gardens are found in places such as hospitals, elder care and other special-care homes, and occupational health clinics. The therapy garden is intended for mental, spiritual, and physical rehabilitation.^{10, 11}
- Education and training gardens, located in schools and other locations, are used to teach others about the environment and how to garden successfully.^{10, 12}
- A multi-functional garden can serve any combination of the previously mentioned functions.

Location: Community gardens can be further classified by location. Generally, gardens can be found in urban, rural, or suburban areas. Gardens in all of these areas can be placed wherever soil or other growing media are found—including empty lots, backyards, rooftops, planters, work places, places of worship, schools, and others.

Medium: Additionally, community gardens are identified by the medium in which they are cultivated. Most gardens are soil-based, but there are gardens grown in mediums other than soil, due to the type of flora the gardener has chosen to

produce, climate conditions, lack of available land for cultivation, or for personal convenience. These are called hydroponic gardens, and they have been in use for many years.^{13, 14, 15} Examples of these alternative media for plant growth include moss, peat, woodchips, gravel, and even liquids fortified with nutrients vital for plant growth.^{13, 15} Such alternative media can be vital in areas where soil, space/land, and even water are issues.¹⁶ The essence of a hydroponic garden is evidence of the special attention and knowledge required to maintain this type of garden. While not required for hydroponic gardens, soil-based gardens must have the soil tested, as previous land uses may have resulted in retention of contaminants in the soil.

Starting a garden: Community gardens typically begin as grassroots efforts, and the American Community Gardening Association identifies six steps in starting a community garden:⁷

- Development of a planning committee;
- Selection of a site for the garden;
- Preparing and developing the site;
- Organizing/designing the garden;
- Liability insurance for the garden; and
- Setting up a new gardening organization.

Once a planning committee is formed, identification of usable land is a very important step. Land tenure (the right to hold land/property) is a major issue;¹⁷ thus, prior to breaking ground for establishing a community garden, the planners must determine whether a garden is to be cultivated on public, private, or semi-private land. Once a usable plot of land is identified and access is obtained, other resources—such as funding for tools, irrigation, media, seeds, and seedlings, as well as any skilled people required to run/maintain the garden and organize members—are needed to prepare and develop the site. Liability insurance is also recommended in order to start a community garden responsibly.⁷

To add to the livability of a community, the process of developing and maintaining a community garden should reflect the community's membership. For example, gardens can be planned and designed to accommodate people in wheelchairs, those with other special needs, and people of various ages; and the garden should also be named in a way that best suits the garden and the community. The most valuable required resource is the members of the community that are mobilized to sustain and maintain the garden on an on-going basis. Whether the garden is initiated by a well-established neighborhood organization or a group of motivated citizens, other members of the community must be identified and encouraged to participate.

Throughout the six steps for establishing a community garden, coalitions can be formed with local businesses, government agencies, and other organizations. Such collaborations foster community-building support for the establishment and maintenance of the community garden and are valuable resources for in-kind contributions of equipment, volunteers, and other essentials. In addition, support

from local officials and leaders can promote the success of a garden by helping to establish community gardening as a norm.¹⁸

What community gardens are not—

Occasionally there is confusion among community gardens and urban farms, food cooperatives (food co-ops), community supported agriculture (CSA), and farmers' markets.

- *Urban farms:* Urban farms are full scale farms operating in a metropolitan area. They can be plant- or animal-focused and are dependent on a sole farmer or a group of farmers working together. Compared to community gardens, cultivation and harvest are much more structured in urban farming; typically, what is produced is sold for profit; and operations run via paid labor.
- *Food co-ops:* Food co-ops exist when a collective, for the purpose of lower food costs, pools its resources to obtain food for the members of the collective. Usually set up like a grocery store, food co-ops require membership dues to maintain operations, and they pay the people who run the co-op for the members. The co-op may also allow non-members, who are required to pay slightly higher prices for purchasing goods. Money made by the co-op is invested back into the co-op.
- *Community supported agriculture (CSA):* CSA involves a contract between consumers and a local farmer, which allows a consumer to receive a package of produce—and sometimes animal products such as meat and dairy and other goods—on a regular basis. Selection is limited to what the farmer successfully produces, so participating consumers assume this collective risk. Packages of produce and other goods can be delivered to the consumer or picked up from a set location, such as the local farmer's operation, at defined intervals over the production season. The consumer pays a flat fee to the farmer for this service. The fee is typically expected up front, but some farmers allow participation in payment plans.
- *Farmers' markets:* Farmers' markets are typically designated sites where a single farmer or a group of farmers gather on a specified day and time to sell their wares to members of the public.

References—Description Section:

¹ T. Glover (2004), "Social Capital in the Lived Experiences of Community Gardeners," *Leisure Sciences*, Vol. 26, pp. 143-162.

² T. Glover, D. Parry, and K. Shinew (2005), "Building Relationships, Accessing Resources: Mobilizing Social Capital in Community Garden Contexts," *Journal of Leisure Research*, Vol. 37, No. 4, pp. 450-474.

- ³ H. Okvat and A. Zautra (2011), "Community Gardening: A Parsimonious Path to Individual, Community, and Environmental Resilience," *American Journal of Community Psychology*, Vol. 47, No. 3-4, pp. 374-387.
- ⁴ S. Wakefield, F. Yeudall, C. Taron, J. Reynolds, and A. Skinner (2007), "Growing Urban Health: Community Gardening in South-East Toronto," *Health Promotion International*, Vol. 22, No. 2, pp. 92-101.
- ⁵ M. Tebeau (2010), "Sculpted Landscapes: Art & Place in Cleveland's Cultural Gardens, 1916-2006," *Journal of Social History*, Vol. 44, No. 2, pp. 327-350.
- ⁶ D. Armstrong (2000), "A Survey of Community Gardens in Upstate New York: Implications for Health Promotion and Community Development," *Health & Place*, Vol. 6, pp. 319-327.
- ⁷ *Growing Community Across the U.S. and Canada*, web site providing information and resources, American Community Garden Association, Columbus, OH:
<http://www.communitygarden.org/>.
- ⁸ M. Rosol (2010), "Public Participation in Post-Fordist Urban Green Space Governance: the Case of Community Gardens in Berlin," *International Journal of Urban and Regional Research*, Vol. 34, No. 3, pp. 548-563.
- ⁹ A. Murtagh (2010), "A Quiet Revolution? Beneath the Surface of Ireland's Alternative Food Initiatives," *Irish Geography: Bulletin of the Geographical Society of Ireland*, Vol. 43, No. 2, pp. 149-159.
- ¹⁰ *Urban Harvest—Growing Gardens, Enriching Lives*, web site providing extensive educational information and resources, Urban Harvest, Houston, TX:
<http://www.urbanharvest.org>.
- ¹¹ E. Ozer (2007), "The Effects of School Gardens on Students and Schools: Conceptualization and Considerations for Maximizing Healthy Development," *Health Education & Behavior*, Vol. 34, No. 6, pp. 846-63.
- ¹² M. Mcbey (1985), "The Therapeutic Aspects of Gardens and Gardening: An Aspect of Total Patient Care," *Journal of Advanced Nursing*, Vol. 10, pp. 591-595.
- ¹³ L. Albright (2010), "Frequently Asked Questions," *Controlled Environment Agriculture*, web site providing extensive information and resources, Cornell University Biological and Environmental Engineering:
http://www.cornellcea.com/frequently_asked_questions.html#q2.
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http://www.usu.edu/cpl/research_hydroponics.htm.

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Benefits:

- *For Residents:*
 - **Food Security:** Edible community gardens can improve the food security of community members, particularly in low-income areas or areas considered a "food desert." Food deserts are found in both urban and rural areas.^{6, 7, 8}
 - **Physical Health:**
 - Gardening is considered moderate-to-heavy physical activity, which contributes to overall health and fitness.
 - Gardeners are more likely to have increased consumption of the food they produce, which is predominantly fruits and vegetables; in addition, easy access to locally grown fruits and vegetables increases the potential for introducing diversity into the diet.⁷
 - **Mental Health:**
 - Community gardens can increase feelings of empowerment and a sense of community ownership among community members.^{1, 2, 3} This is particularly important in communities where people do not own property or residents' lives may involve circumstances they cannot control, which can lead people to feel alienated and powerless.
 - Much empirical evidence shows that activities such as gardening help sustain mental capacity and improve mental well-being.^{1, 2, 3, 9, 10}
- *For the Community:*
 - **Improved Communities:**
 - **Property values:** Evidence shows that property values in areas where a garden is located increased in value, as did property values of surrounding areas.⁵
 - **Residents' perception of community quality:** Community gardens provide green spaces in communities where green space is lacking,^{1, 2, 3} making neighborhoods more aesthetically pleasing and improving residents' attitudes about the quality of their communities.
 - **Environment:** Added flora to an area can improve air quality, provide shade, and mediate the temperature of the area.^{1, 2, 3}

- Strengthened Communities:
 - Sense of community: Community gardens can serve as “public squares” for the community,^{3, 4} providing natural meeting spaces for greater socialization opportunities among residents.
 - Social capital: Community gardens have the ability to increase community engagement and cohesiveness, providing participating residents, who may otherwise not interact, with greater opportunities to get to know their neighbors.^{1, 2, 3, 11, 12} This increase in social capital allows community members to feel more comfortable in their own communities and to better address other issues in the community.¹³

References—Benefits Section:

¹ H. Okvat and A. Zautra (2011), "Community Gardening: A Parsimonious Path to Individual, Community, and Environmental Resilience," *American Journal of Community Psychology*, Vol. 47, No. 3-4, pp. 374-387.

² S. Wakefield, F. Yeudall, C. Taron, J. Reynolds, and A. Skinner (2007), "Growing Urban Health: Community Gardening in South-East Toronto," *Health Promotion International*, Vol. 22, No. 2, pp. 92-101.

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¹² D. Armstrong (2000), "A Survey of Community Gardens in Upstate New York: Implications for Health Promotion and Community Development," *Health & Place*, Vol. 6, pp. 319-327.

¹³ E. Ozer (2007), "The Effects of School Gardens on Students and Schools: Conceptualization and Considerations for Maximizing Healthy Development," *Health Education & Behavior*, Vol. 34, No. 6, pp. 846-63.

Impediments or barriers to development or implementation:

- Community gardens can be seen as temporary solutions to otherwise worthless land. Once property values improve and if the land is not owned by the community garden organization, the owner of the land may find other uses for the area.^{1, 2, 3}
- As the value of the property where the garden is located and the property surrounding the garden increases, gentrification of the area can occur, affecting the affordability of housing for current residents. This is often seen in certain urban areas.²
- Soil contamination from previous land use can make starting a community garden in a specific area difficult or impossible.²
- Members of the community are often afraid the garden will attract vandalism or worsen current safety and security issues in the neighborhood.²
- Lack of support from community leadership and lack of funding for the garden can prevent a community garden from thriving.²
- Although a major purpose of community gardens is to encourage fellowship, some residents of the neighborhood may feel that the garden leads to exclusivity, as evidenced by fencing or rules limiting access to the garden.⁴
- In communities with low social capital, feelings of fear or mistrust within the community can keep people from participating in the community garden.⁵
- Lack of participation and maintenance of the garden by members can yield an eyesore instead of an aesthetically pleasing space.

- Most community gardens require some sort of skilled participation and management. Lack of either can prevent a garden from achieving its maximal potential.

References—Impediments or Barriers Section:

¹ H. Okvat and A. Zautra (2011), "Community Gardening: A Parsimonious Path To Individual, Community, and Environmental Resilience," *American Journal of Community Psychology*, Vol. 47, No. 3-4, pp. 374-387.

² S. Wakefield, F. Yeudall, C. Taron, J. Reynolds, and A. Skinner (2007), "Growing Urban Health: Community Gardening in South-East Toronto," *Health Promotion International*, Vol. 22, No. 2, pp. 92-101.

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⁵ C. Smith and L. W. Morton (2009), "Rural Food Deserts: Low-Income Perspectives On Food Access In Minnesota and Iowa," *Journal of Nutrition Education & Behavior*, Vol. 41, No. 3, pp. 176-187.

Resource—examples:

- Cleveland Cultural Gardens, Rockefeller Park, Cleveland, OH: A cluster of gardens following an ethnic theme and highlighting some of the history of the United States. <http://culturalgardens.org/education-faq.aspx>.
- Capital Area Community Gardens, New York State: A network of community gardens based in the Capital District area of Albany, New York. <http://www.cdcg.org/>.
- P-Patch Trust, Washington State: A community garden network based in Seattle. <http://www.ppatchtrust.org/>.
- Greenest City, Canada: A network of community gardens based in Toronto. <http://www.greenestcity.ca/about-us>.
- American Community Gardening Association: Lists many of the community gardens within the United States and Canada and allows community gardens to connect with other community garden organizations. <http://communitygarden.org/>.

Resource—tool kits:

- University of Missouri Cooperative Extension *Community Gardening Toolkit*: A how-to guide for community garden startup and management.
<http://extension.missouri.edu/publications/DisplayPub.aspx?P=MP906>.
- Atlanta Regional Commission *Community Garden Manual*: A manual developed by the Atlanta Urban Gardening Program and the University of Georgia, providing information on how to start and maintain a community garden.
<http://documents.atlantaregional.com/aging/ascommunitygardensummitmanual2.pdf>.
- Wisconsin Department of Health Services *Got Dirt Gardening Initiative*: State of Wisconsin initiative to increase number of community gardens throughout the state; includes a tool-kit.
<http://www.dhs.wisconsin.gov/health/physicalactivity/gotdirt.htm>.

Resource—written and web:

- *Community Gardens*—a brief fact sheet about community gardens, Centers for Disease Control and Prevention, Atlanta, GA. Provides information, resources, and case studies.
<http://www.cdc.gov/healthyplaces/healthtopics/healthyfood/community.htm>.
- RUA Foundation and Resource Centres on Urban Agriculture and Food Security, The Netherlands—an international network of seven regional resource centres and one global resource centre on Urban Agriculture and Food Security. Provides extensive information and resources; serves as a site for the documentation and exchange of research data and practical experiences on urban agriculture. <http://www.ruaf.org/>; <http://www.ruaf.org/node/512>.
- Growing Power, Inc., Milwaukee, WI—a non-profit organization focusing on providing “healthy, high-quality, safe, and affordable” food to communities.
<http://growingpower.org/> .