

Case Study of Community Gardens:  
Denver Urban Gardens (DUG)

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Denver Urban Gardens (DUG) is a nonprofit organization that provides assistance to community organizations for planning, designing, constructing, and maintaining community gardens and parks that are located in Denver's low-income neighborhoods and surrounding cities. Having begun with just three gardens in northwest Denver in 1985, today DUG operates sixty-two active urban gardens, one organic farm, and nine parks and playgrounds. DUG has also completed sixteen playgrounds and gardens that no longer require its involvement, and it is planning to develop seven new gardens in the forthcoming years. Over the course of its existence, the organization has been involved in the creation of more than eighty green, open spaces that serve over 26,000 people a year in the metro-area.<sup>1</sup>

I interviewed Michael Buchenau, the executive director of DUG. Formerly an all-volunteer organization, DUG was restructured in 1994 by Michael Buchenau and David Rieseck, both of whom are landscape architects who graduated from the Harvard's School of Design. According to Buchenau, "David Rieseck and I volunteered for the board of directors, and eventually we saw the potential that existed and the needs that were not being met by an all-volunteer board. As a result, we established an organization with more substantial funding that could support a staff." In 2003, DUG had a staff of six full-time employees and 1,740 volunteers, who provided 4,700 hours of volunteer work. With an average budget of \$700,000 a year, DUG is currently being funded by city, county, state, and federal annual grants; grants awarded by foundations and corporations; and donations from businesses and individuals. These factors have made DUG the main organization in charge of creating and managing community gardens in Denver.<sup>2</sup>

To fulfill its mission, DUG organizes its work into five main programs: education and training, technical and managerial assistance, land tenure issues, design and construction of gardens, and channeling of volunteer workforce. It also runs community-supported agriculture (CSA) programs at its DeLaney organic farm, located in the city of Aurora, and it partners with food banks and hunger-related organizations to provide them with fresh and organic food.

In Denver, community gardens are usually located on vacant and rundown city lots and on school yards, which are mostly in low-income neighborhoods. Before the lots became gardens, they were often full of junk and frequently sites of illicit drug commerce and consumption. The transformation of the lots into gardens occurs when the neighborhood approaches DUG for a feasibility evaluation and assistance in creating a garden. After that initial step, DUG analyzes whether or not the project is physically sustainable by taking into account issues of land tenure, commitment of neighbors, and economic support. If the necessary conditions are met, DUG partners with the neighbors

and volunteers to go ahead with land negotiations, construction of the garden, provision of seeds, and gardeners' training.<sup>3</sup>

Other organizations in the metropolitan region also provide opportunities for urban farming in Denver. Denver Botanic Gardens, a division of the city's Parks and Recreation Department, rents plots every year on its land. Some public nonprofit housing organizations, such as Mercy Housing and Neighborhood Partners, also promote community gardens in their projects. Co-housing projects include community gardens as part of the design of communal spaces, and some schools and churches offer plots for gardening to the surrounding community. In addition, institutions such as the Colorado State University Cooperative Extension offer technical assistance, information, and training programs for gardeners to complement the programs that DUG and other organizations offer for urban farming.

The City and County of Denver has a long-term partnership with DUG to develop community gardens, and over time DUG has become the representative for community gardeners who wish to negotiate with the city over land tenure and other urban farming-related issues. Regarding case of land tenure, DUG prepares and presents the case for each community garden before the city council, which then decides whether or not to lease the land. In addition, the city has assigned to DUG the operation of community gardens-related programs such as "The Seeds and Transplants Program," which is funded by a grant from the Housing & Neighborhood Development Department. The city has also worked with DUG in other programs such as "Denver Recycles." These activities have made the relationship between DUG and the city a strong and sustainable one. As Buchenau explains, "We have always maintained a very good relationship with the major's office and city council. We have helped to make them feel like a lot of the decisions we were making were decisions that they would make, and that the gardens that we were building were projects that they would like to see happen. Therefore, we have maintained a really strong connection at all the way along, and there has been a trust built over time. When it comes to community gardens, the city defers to us and our expertise."

### **Equity and Sustainability**

In general, DUG has been working with community gardens to satisfy several needs in low-to-moderate income neighborhoods, including urban renewal, production of fresh/low-cost organic food, and strengthening of social capital. Approximately 85% of Denver's community gardens are located in low-income neighborhoods, and they constitute a sustenance-based activity for 80% of the gardeners.<sup>4</sup> Access for the low-income gardeners is facilitated by maintaining plot low plot fees—between \$15 and \$40 per year depending on the plot's size—and by offering free vegetable seeds and transplants through DUG's "The Seeds and Transplants Program." When low-income residents show interest in joining the program but do not have the money needed to rent a plot, DUG does not turn them down. As Buchenau explained, "If people show us they do not have the ability to pay, we ask our sponsors and donors to help us to supplement those needs making sure everyone has an opportunity to garden." DUG also offers the opportunity for low-income people to become shareholders of its CSA programs by purchasing produce shares with their own work.<sup>5</sup>

Most of the food that is produced in community gardens and in the DeLaney organic farm is consumed by gardeners and their families, but it is not uncommon to have

excess food. When this is the case, DUG donates the food to charitable organizations that provide it to senior centers, soup kitchens, shelters, and schools. In 2003, for instance, just one of DUG's sixty-two active gardens donated two tons of food to Project Angel Heart, a nonprofit organization that delivers more than 370 meals daily to people living with HIV/AIDS, cancer, and other life-threatening diseases.<sup>6</sup>

DUG discourages the use of chemical fertilizers and pesticides in favor of organic methods by requesting that gardeners sign an agreement to accept several responsibilities, one of which is to farm organically. This orientation is also evident in DUG's DeLaney Community Farm, which is one of the only organic farms in the metropolitan Denver area.<sup>7</sup> However, sometimes gardeners do not follow the organic principles. As Buchenau explained, "When these issues do come up, we try to deal with them through education. We have an education coordinator who teaches gardeners how to grow more effectively organically by using compost, watering effectively, and using organic methods to control pests. It definitely takes a lot of education to take someone who would otherwise utilize chemicals and fertilizers and help them develop into an organic gardener, but in the end it is a more effective way to approach gardening. It is especially true here in Denver, where we have a very extreme climate. The methods that we teach will strengthen the ability of plants to withstand the climate better than if we were to use chemicals and fertilizers."

Community gardens are popular with immigrants who have come to Denver from countries where they used to be farmers. When they first arrive, some of the immigrants face language barriers that constrain their incorporation into Denver's economy. The gardens offer them the opportunity to engage in productive activities in a space where they feel comfortable and are able to socialize with the rest of the neighborhood.<sup>8</sup>

### **Policy Issues**

One of the relatively unique advantages of community gardening in Denver is that the 2002 Master Plan for Parks and Recreation included community gardens as alternative green, open spaces. Also known as "The Game Plan," the department's master plan was approved in 2003 by the City Council after a process that involved an extensive survey of citizens' perceptions of the parks and recreation system and a participative process of diagnosis and design for an updated Master Plan. The Game Plan provides a fifty-year vision as well as strategies for "transforming Denver into a City in a Park." One of the most interesting elements of this policy, in terms of urban planning and community gardens, is framing community gardens as "public open spaces." Chapter 3 of the Game Plan states that one of its goals is to increase the number of "breathing spaces" in Denver. The plan characterizes breathing spaces as ranging from "natural open space to neighborhood parks or rooftop gardens, to more urban squares and plazas." The document also states that the diverse public open spaces can "support gathering, recreation, and relaxation for families, friends and neighbors," and that there should be "at least one-half acre of public open space within one-half mile of every resident's home that can be reached without crossing a major barrier." They goal could be fulfilled not only by creating parks, but also by creating or adopting community gardens, plazas, and schoolyards, all of which are cheaper to build and maintain than parks.<sup>9</sup>

As Buchenau explained, "It was the first time a city planning department recognized community gardens, based on the desires of the residents, as one of the components of a healthy city and included them as part of the city plan when considering

new park developments. Just the fact that the Parks and Recreation Department recognized gardens as a component of a healthy park was a victory for the cause of community gardens in Denver. Today, when young planners are working on a neighborhood project or a park plan, they have community gardens as part of their palette.”

The city has also supported community gardens by maintaining a close relationship with DUG. In addition to programs described above, the city has helped DUG to relocate gardens that are lost to development. Over the last two decades about six community gardens were lost to housing development. As Buchenau explains, “We have limited low-income housing and affordable housing. In our inner city core there is still a need for land to be used for infill housing, and about a half dozen of our gardens have had to move. In those cases, the city has helped us to find another piece of ground and buy it to accommodate the new garden, and it has also helped us to pay for garden improvements so that all the efforts that went into the previous garden were not lost.”

DUG also reduces potential land tenure conflicts by attaining ten-year leases from land owners and by seeking out institutionalized properties to place gardens. As Buchenau explained, “We are not very interested in establishing gardens on private property, and we are looking primarily for institutionalized properties. Even when we have a garden on a city-owned property, we are still concerned about the city feeling pressure to put housing on that site, so what we would ideally like to do is to have our gardens be associated with institutionalized uses such as parks or school grounds. We also look for grounds that are not suitable for construction. For example, the size may be too small for any sort of development, or the shape of the site may mean that it is not allowed to be developed.”

Although the support from City Hall and City Council is strong, it needs to be renewed every time Denver’s political leadership and administrators change. Buchenau added, “If administrators and politicians do not already know about the benefits of community gardens, we end up having to reeducate them and helping them to understand what our program does. Once they see a garden actively being utilized and talk to the gardeners, they are convinced, but often they are not even aware of the benefits. They need to learn that gardens are much more than recreation. Gardens help to stabilize neighborhoods and improve people’s lives, and they can even help neighborhoods come back together and reduce crime.”

Another challenge that DUG is facing and will continue to face is dealing with a growing Latino community of gardeners. “A lot of them do not speak English as a second language, and we sometimes have communication barriers at our gardens. They may not even be aware that they can even garden in one of our plots.” Communication is needed to ensure community gardens are meeting DUG’s growing goals and that gardens are fully utilized despite people’s transience. Buchenau added, “In a lot of inner city neighborhoods in Denver, garden participants one year may be completely different than the people who come in the next year. People move and change jobs, and they leave the neighborhood. We have to remain in contact with the neighborhood leaders and make sure that our gardens in some of our neighborhoods are feasible. We also have to make the availability of gardens known in every neighborhood. When we have a full garden with a waiting list, it will flourish, but when it is not quite full, it will struggle.”

Based on an interview by Richard Arias of Michael Buchenau, May 31, 2005.

Web site: <http://www.dug.org>

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