

Vacant lots are a commonplace in urban environments. Along with them exist low-income communities and urban blight. Much of Philadelphia was built after the turn of the century, with the population finally peaking in 1950 at about two million. Since then it has dropped back to just over one and a half million, not much more than in 1900. This loss of people and housing leaves a lot of open space for urban agricultural development. The hundreds of garbage strewn vacant lots (sometimes constituting 50 percent of a city block's area) have stimulated citizens to create what has been called "the largest comprehensive urban greening program in North America."<sup>i</sup> Through its Philadelphia Green program, the Pennsylvania Horticultural Society (PHS) has helped thousands of Philadelphia residents turn neglected vacant lots into thriving community gardens in every corner of the city.<sup>ii</sup> Community gardens are often catalysts for change. They not only help revitalize urban areas and help provide valuable fresh produce to the community, but they are also the common ground that brings people together. Community gardens turn strangers into friends and neighborhoods into communities.<sup>iii</sup>

Of urban farming projects in action throughout Philadelphia, PHS' City Harvest is one of the few providing the vital network that distributes fresh, healthy food as well as the seedlings, compost, and other gardening materials essential to producing food.<sup>iv</sup> As a unique, collaborative partnership between PHS; the Philadelphia Prison System; SHARE (Self Help and Resource Exchange, a food distribution network); Weavers Way Co-op and Farm; and the Health Promotion Council of Southeastern Pennsylvania, City Harvest performs two valuable functions



in the Philadelphia urban farming system. First, by way of their partnerships, they help make fresh produce more readily available to urban neighborhoods. Through City Harvest, inmates are invited to become part of a horticultural project growing greenhouse seedlings for 45 community gardens. These seedlings are distributed among the gardens four times during the growing season. Gardens grow the seedlings to harvest. At least once a week, the gardens donate part of their harvest to a specific food pantry. Over the last four years, the gardeners have donated more than 55,000 lbs of fresh produce to local food cupboards.<sup>v</sup> It's

quickly becoming a model for urban agriculture and a standout of the local-food movement within the region. “City Harvest empowers gardeners to share the fruits of their labor with families in need, while offering inmates an opportunity to participate in a job training program and give back to their communities,” says Joan Reilly, senior director of Philadelphia Green.<sup>vi</sup> Secondly, they help support the growth of the Community Growers Alliance through agribusiness education, garden supply acquisition, and urban agriculture market development. The Community Growers Alliance is a new initiative to encourage local entrepreneurial growers to grow produce that supplements their income and benefits local food cupboards.<sup>vii</sup> The Community Growers Alliance supports one of the goals of the City of Philadelphia’s recently adopted sustainability plan, *Greenworks Philadelphia*. The plan calls for bringing local food to within 10 minutes of 75 percent of city residents, as well as creating an additional 86 fresh food outlets by 2015.<sup>viii</sup> Since its conception in 2006, PHS’ City Harvest program has significantly expanded and strengthened the roles of community gardens in fresh food distribution. City Harvest has integrated gardeners into a diversified network of urban food distribution and education programs. City Harvest producers extend well beyond community gardens. Partners and participants in the program include Weavers Way, Teen4Good, Mill Creek Farm, Urban Nutrition Initiative, Greensgrow, and other farms and community food projects. In today’s diverse landscape of community gardens and farms in the city, nearly all commercial producers and certainly City Harvest staff recognize partnerships and networks as vital to building sustainable food security.<sup>ix</sup>

Programs like City Harvest are key variables in Philadelphia’s urban farming scene. As a member of the Philadelphia community and an avid farm volunteer, the sustainability of these types of programs are of particular interest to me. Are they resilient enough to sustain themselves through the upcoming decades? If the question of resilience is the question of a system’s ability to absorb disturbance and still retain its basic function and structure, then what can be done to enhance resiliency in programs like City Harvest? To begin answering these questions, it is first beneficial to have an understanding of the history of Philadelphia’s urban farming system.

Programs such as PHS’ City Harvest are not the first efforts for urban farming in Philadelphia. In fact, Philadelphia has a long history of urban farming extending throughout the last century. Programs like the Philadelphia Vacant Lot Cultivation Association (PVLCA) were

spearheading urban farming back in 1897. Being another time period in the grip of depression, the PVLCA worked to help provide relief to the unemployed and poverty-stricken workers and families. They did this by asking owners of vacant lots to lend their land to be converted into farms. The PVLCA then oversaw the cultivation of these lands. The PVLCA flourished for several decades, but as with all social-ecological systems, changes in one domain of the system inevitably have impacts on the other domain. In PVLCA's case, industry grew making fewer plots were available to farm and more people were able to find employment. The PVLCA was disbanded in 1928.<sup>x</sup>

Gardens and gardening has waxed and waned over the years in correspondance to larger economic and neighborhood trends. Some lots have been gardened, developed, de-developed, gardened and, finally, redeveloped all in one century.<sup>xi</sup> Since the mid-1990s, funding and support systems for urban farming has declined, and thus, so has community gardening in Philadelphia. A study conducted in 2008 by the University of Pennsylvania's Planning and Urban Studies found that between 1996 and 2008 the number of food-producing community gardens in the city declined from 501 to 226.<sup>xii</sup> Today Philadelphia has the highest per capita vacancy rate in the country. Philadelphia has more than 40,000 vacant properties on more than 900 acres.<sup>xiii</sup> In recent years, formal youth programs have developed, holding promise for a new generation of gardening. These formal programs include a growing number of school gardens and farms, such as those of the Urban Nutrition Initiative (UNI), Weavers Way's CSA at Saul Agricultural High School, and the kindergarden project of The Food Trust. Youth also participate in educational and employment programs with Mill Creek Farm, with Weavers Way at its Awbury Arboretum farm and at Stenton Family Monor homeless shelter, and with Teens4Good, which grows on dispersed sites in various neighborhoods. The state of urban farming in Philadelphia has been constantly changing and adapting to a shifting world over the



last century. Of the changes noted throughout the years, there are three trends or slow moving variables that stand out: the aging of gardeners, the decline of support programs, and land tenure.

Values such as diversity, ecological variability, modularity, acknowledging slow variables, tight feedbacks, social capital, innovation, overlap in governance, and ecosystem services all play an important role in shaping the resilience within an organization. PHS' City Harvest has evidence of all of them within its organization. The following outlines current efforts, possible future actions, and the variance of action across scales:

*Diversity and Modularity* – City Harvest is an intensively collaborative effort comprising a public/private circle of citizens, volunteers, nonprofits, a government agency (the Philadelphia Prison System) and growers. The program does well to diversify, with respect to both functional and response diversity, and include modularity within their social system. However these efforts may not be as apparent in their ecological system. Community gardens and farms range in size, but there is discussion within the community about how the farms diversify their crops. Possible suggestions include education about Cuban farming methods, where instead of growing the same crops at each farm, crops are rotated at different intervals. This effort could help in providing more locally available variety to the communities and restaurants throughout the year. On a regional scale, this effort could assist in decreasing the region's dependency on imported food.

*Ecological Variability* – A lot of City Harvest community gardens are grown organically, meaning they take variability as it comes - without chemical fertilizers, pesticides or herbicides. Aside from the south, Pennsylvania has one of the highest elderly populations in the country. It also is one of the lowest supermarket per capita areas in the United States. Lack of healthy food access contributes to a number of health issues including hunger, obesity, diabetes and heart disease. Recent medical studies are also now linking pesticides exposure to ADHD in children.<sup>xiv</sup> Growing organically provides healthy and safe food to communities. Regional Ecological benefits of community gardens include increasing pervious surfaces and allowing for groundwater recharge and decrease city storm water run-off, improving air quality through the addition of plants to the landscape. They also use large quantities of organic waste for fertilizer, thus helping to minimize a community's overall waste output.

*Tight Feedbacks* – Being an organization of public service, City Harvest is in constant communication with PHS, their partners and growers. However, having talked with individuals within City Harvest, I question how well this communication happens between City Harvest

members. Some people within the City Harvest team communicate openly, while others withhold information creating misunderstandings and gaps within the organization's feedback loops. Open communication needs to be stressed on all scales to ensure tight feedback loops.

*Social Capital* – Citywide work would not be possible without a variety of strategic partnerships forged with key governmental agencies, community-based organizations, and non-profits. Working together toward a common purpose, each partner brings something unique and critical to the table. Through these alliances, Philadelphia Green and its partners increase their capacity to tackle complex problems in creative ways, accomplishing far more than any one organization could achieve alone.<sup>xv</sup> On the neighborhood scale, community gardens break down barriers between people, increase socialization, provide exercise, improve nutrition and create safer spaces. City and Regional planners should become involved in creating, protecting and promoting community gardens, because of the multiple benefits that they offer. History has shown that in order adapt with changes in economic and social trends, you need to remain constantly vigilant with creating and connecting networks to continually build and shape social capital on all scales.

*Innovation* – Enabling innovation is an important way of creating space.<sup>xvi</sup> Each community garden City Harvest works with is different. Each finds its unique way to contribute to the



Figure 1 - Illustration by Robin Tatlow-Lord

community. Some community gardens have farmstands; others operate through donations only. Some farms grow okra; others grow rare herbs. Philadelphia urban farms are also known for their heirloom and culture produce. PHS Community Growers Alliance is an example of a larger scale innovation to encourage local entrepreneurial growers on to grow produce that supplements their income and benefits local food cupboards. Across all scales, people are finding new ways to work together to find better uses for vacant lots that benefit both the

community and the environment. One way City Harvest can do this is by building scenarios. Through these scenarios, they could initiate a dialogue within their network to explore possible vulnerabilities, resilience and sources of innovation.

*Acknowledging Slow Variables* – A 2008 Harvest Report by Domenic Vitiello and Michael Nairn, two urban studies professors at the University of Pennsylvania, pointed out three trends or slow moving variables: the aging of gardeners, the decline of support programs, and land tenure. City Harvest is actively partnered with youth groups like the Urban Nutrition Initiative (UNI), Weavers Way's CSA at Saul Agricultural High School, Philly Rooted and Teens4Good, to help raise gardening interest and employment opportunities in younger generations. "In recognizing the complexity of gaining access to City-owned land, the Mayor's Office of Sustainability is coordinating with the Redevelopment Authority (RDA), the Department of Public Property, and the City Planning Commission to inventory land holdings and analyze which parcels are appropriate for growing food. The Mayor's Office of Sustainability is designing a page on their website to disseminate information about how to access available technical assistance and City-owned land for growing food."<sup>xvii</sup> While these are great initiatives, City Harvest needs to remain aware of these trends over the years to ensure their success.

*Overlap in Governance* – PHS has created a lot of programs that assist urban farming in various forms such as the Neighborhood Garden Association which works to ensure the continuity and long-term preservation of community-managed gardens and open space, primarily located in low to moderate income neighborhoods. There are also other agencies throughout Philadelphia, government and private, which help with the preservation of community gardens. In addition to City Harvest, similar function organizations such as the Urban Tree Connection are becoming more involved in Philadelphia urban farming system. Some organizations are nested, like PHS, City Harvest and the Neighborhood Garden Association. Others are redundant in service, but provide that service to different areas of the city.

*Ecosystem Services* – The 2008 Harvest Report by Domenic Vitiello and Michael Nairn, two urban studies professors at the University of Pennsylvania, not only pointed out the potential income streams from Philadelphia urban farms, but it also noted, "Community gardens grow more food – and distribute that food more directly to hungry people – than any other form of urban agriculture in the United States today."<sup>xviii</sup> This was also the first study of its kind to investigate food production on urban community and squatter gardens. It provides new, valuable data for organizational decision making concerning food security in the Philadelphia area.

The Delaware Valley Regional Planning Commission recently published a year-long study revealing that, "while the 100-Mile foodshed has a diversity of [diversified] farmers, its food

supply cannot meet Greater Philadelphia's total demand for food. This supply and demand problem is exacerbated by the steady loss of viable farmland to a sprawling and inefficient land use pattern. Additionally, many Americans are eating highly processed convenience foods, which has led to a prevalence of diet-related diseases, hunger and "food insecurity" - not knowing when you will have your next meal."<sup>xix</sup> As cities face the environmental, economic, and social challenges of the 21st century, including hunger, diabetes, and dependence on global industrial food systems based on fossil fuels, local food production will be more and more important for building food security. Urban farming initiatives such as City Harvest provide a much needed function of making fresh produce more readily available to urban neighborhoods and helping to build the sustainability of the urban farming network throughout Philadelphia. Through the efforts of organizations such as City Harvest, PHS and many others, communities can have a voice in their food security. It is an example of a local food system with potential to become sustainable through a strategy favoring cooperation over competition. While already making strides to strengthen their resiliency, there is always more that can be done. "Resilience thinking is a way of looking at the world. It is about seeing systems, linkages, thresholds and cycles in the things that drive them. It is about understanding and embracing change, as opposed to striving for constancy."<sup>xx</sup> Like brushing your teeth, you can't brush them for a week or even a month or a year and expect them to stay healthy forever.

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- <sup>vi</sup> PHS|Pennsylvania Horticultural Society. (2010). *City Harvest*. [www.pennsylvaniahorticulturalsociety.org/phlgreen/cityharvest2010.pdf](http://www.pennsylvaniahorticulturalsociety.org/phlgreen/cityharvest2010.pdf).
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<sup>xvii</sup> City of Philadelphia. (2010). *Greenworks Philadelphia: 2010 Progress Report*. [http://www.phila.gov/green/greenworks/PDFs/MOS\\_AnnlRprt2010.pdf](http://www.phila.gov/green/greenworks/PDFs/MOS_AnnlRprt2010.pdf).

<sup>xviii</sup> Vitiello, D., and M. Nairn. (2009, November). *Community Gardening in Philadelphia: 2008 Harvest Report*. <http://sites.google.com/site/harvestreportsite/philadelphia-report>.

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