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Building Sustainable, Just Food Systems in Detroit

Reflections from SEED Wayne, a Campus–Community Collaborative

By Kameshwari Pothukuchi

Abstract

This article describes a campus-community collaborative, SEED Wayne, which was developed to build sustainable food systems on Wayne State University's campus and in Detroit neighborhoods. The discussion traces the nature of SEED Wayne's partnerships and reflects on the program's past three years of existence, including experiences within the university, practical challenges associated with defining sustainability uniformly across diverse campus and community activities, gaining consistent student involvement, and the mutual benefits of the university-community partnership.

Introduction

Over the past decade, a variety of sustainable and just food movements have taken off, pushing for healthy food for all people and seeking to build local economic and political capacity in food systems. These movements relate to community food security, local food planning, healthy food in health care, farm to school, and more recently, farm to college. Inspired by these movements and informed by their experiences, SEED Wayne was established in 2008. The program's mission is to collaboratively build sustainable food systems on the campus of Wayne State University and in Detroit neighborhoods through teaching, research, community engagement, and campus operations. This article discusses the rationale for university-community collaborations in sustainable food systems and the forms of collaborations within SEED Wayne.

SEED Wayne defines sustainability as promoting the four E's: ecological regeneration,

economic viability, social equity, and democratic engagement. The program's goals are to:

1. increase access to healthy and fresh foods on WSU's campus and in Detroit neighborhoods.
2. increase knowledge and capacity of individuals and communities on key issues, such as urban agriculture, nutrition and healthy food preparation, food justice, and sustainability.
3. link producers of healthy foods in the city and the region with local eaters and thereby enhance the local food economy.
4. advance broad community goals in public health, economic development, ecological regeneration, social justice, and democratic decision-making through food system activities on and outside campus.

Rationale for University Leadership in Sustainable Community and Regional Food Systems

Why should universities become involved in building sustainable and regional food systems and offer related leadership? In discussing the rationales below, the focus is on urban universities, typically located in inner-cities that historically are not agricultural research centers and lack related extension functions. Some urban universities may have community nutrition departments or address food-related issues through social work, public health, or public policy departments that focus on anti-hunger and nutrition policy. The rationales go beyond these kinds of traditional academic involvement and underscore the need for a broader institutional commitment to sustainable food systems.

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Universities build healthy minds

Evidence is mounting that the current, industrial food economy does not deliver healthy bodies. The food environment on most campuses seems similar to that of the rest of the surrounding city, with predominantly fast food outlets serving low-priced, convenient foods that are calorie dense and nutritionally poor. As research—including university-based research—increasingly shows that food environments matter to the food choices of individuals, universities need to become more responsible actors. They cannot hide behind facile arguments that blame individuals exclusively for their dietary outcomes. As university administrators focus on building the next generation of workers, citizens, and leaders, they need to take to heart the dictum that healthy minds require healthy bodies, and ensure that healthy food choices are available on their campuses.

Universities food budgets can contribute to the local economy

Through their dining halls and food service operations, universities provide large amounts of food to students on campus. Even those urban universities that lack significant campus housing in the form of dormitories and residence halls set aside sizeable budgets for food that they serve on campus. Wayne State's annual budget for food is about \$1.7 million; currently less than 1 percent of that amount goes to the state's farmers.

Additionally, the university hosts nearly 40,000 students and employees daily in fall, and about half that number during the summer. Based on national patterns, most of the food spending by this population occurs in grocery supermarkets. Capturing even a fraction of these dollars and targeting them toward local and regional producers through a campus farmers market could make a significant difference.

Finally, Detroit faces gaps in coverage by full-service grocery stores and city residents spend about \$200 million annually on groceries in supermarkets located outside the city.¹ Detroiters who face transportation challenges depend on neighborhood stores that offer few choices and charge high prices. Providing a campus farmers market not only helps increase options for fresh and healthy foods in a city that is underserved, it also helps leverage the buying power of universi-

ty employees, who on average tend to be better paid than the city's residents and many of whom live outside the city, to provide benefits to city residents. Thus, the university is in a position to leverage its economic power to create multiple benefits for the city and the region, above and beyond those created by sourcing locally the food served on campus.



The Grown in Detroit Cooperative has a loyal following at the Wayne State University Farmers Market

Universities have social and civic missions

Many urban universities have long adopted missions that encapsulate a commitment to improve the surrounding community.² For example, Wayne State University's urban mission states; "Wayne State University is dedicated to the renewal, prosperity and wellbeing of Detroit and Michigan. We are a powerful catalyst for the local economy, improving the quality of life in the region and across the state."³ Another example comes from University of Illinois: "The complex problems of a great city and region call upon UIC to respond with greatness. What UIC calls its Great Cities Commitment transforms the traditional university concept of public service into a vital engagement with its neighborhood and the greater metropolis, bringing the campus's wealth of research capacity and human creativity to the challenges facing Chicago and urban life worldwide."⁴

Whether or not they have adopted such missions, universities in cities, especially declining inner cities, nonetheless have a responsibility to contribute to solutions to the structural ills afflicting the community in which they are located, harness their resources for the betterment of the surrounding region, and cultivate faculty and student leadership in devising solutions to community problems. Hunger and food

insecurity, the paucity of decent grocery stores offering healthy foods, the need for supportive policies for urban agriculture, addressing growers' needs for access to vacant land and problems with soil contamination are only some examples of issues that deserve systematic attention, and therefore the contribution of university expertise and civic leadership to resolve.

Universities can offer research and education on the food system

Whether through disciplines such as anthropology, sociology, and political science; interdisciplinary or professional programs; or research projects that bring faculty members together from across campus, universities can offer research and education on food systems to the community. There exist few (if any) academic units within Wayne State, for example, that can claim zero connection to the food system for the topics they address; hence many possibilities exist for research and teaching on food system linkages.

Although the above discussion is centered on universities and the special obligations they have in society, these arguments are also applicable to other public institutions such as hospitals and school districts.

SEED Wayne Partnerships on Campus and in the Community

All SEED Wayne activities are offered in collaboration with diverse campus units and community organizations and engage campus and community members in different ways (Table 1). Cultivating student leadership is central to all SEED Wayne's activities. Beyond specific classroom and research activities that are planned as needed and completed within discrete time frames of semesters or grant requirements, SEED Wayne offers the following standing activities.

Campus vegetable and herb gardens

Students and employees grow food and learn about sustainable agricultural methods, increase their consumption of fresh and locally grown food, enhance knowledge on a variety of topics through research, and build a community of gardeners and food system advocates on campus. Gardens also have hosted research activities related to

Table 1. SEED Wayne Campus and Community Collaborations

Activity (Established)	Campus Partners	Community Partners
<p>SEED Wayne (2008)</p> <p>(The program's activities are listed below.)</p>	<ul style="list-style-type: none"> • Department of Urban Studies and Planning • AVI Foodsystems, Inc. • College of Engineering • School of Business Administration • Dept. of Nutrition and Food Science • Four student organizations (Wayne State Student Urban Planners, Student Environmental Action Leaders, Food and Nutrition Clubs) • Business Operations • Division of Research 	<ul style="list-style-type: none"> • Capuchin Soup Kitchen (and Earthworks Urban Farm) • Greening of Detroit • Eastern Market Corporation • Detroit Black Community Food Security Network • Gleaners Community Food Bank • Detroit Food Policy Council • Detroit Food and Fitness Collaborative • Food System Economic Partnership
<p>Campus Gardens</p> <ul style="list-style-type: none"> • Warrior Demonstration Garden (2008) • St. Andrews Allotment Garden (2009) • Parking Structure 5 Experimental Garden (2010) • Warrior Winter Garden (2011) 	<ul style="list-style-type: none"> • Facilities Management and Planning • Division of Research • Department of Urban Studies and Planning; J.P. Duffy Department of Art and Art History • College of Engineering • Irvin D Reid Honors College • Business Operations 	<ul style="list-style-type: none"> • Earthworks Urban Farm • Greening of Detroit
<p>WSU Farmers Market (2008)</p>	<ul style="list-style-type: none"> • Business Operations • Department of Public Safety • School of Business Administration • Facilities Management and Planning • Department of Urban Studies and Planning • Division of Research 	<ul style="list-style-type: none"> • Eastern Market Corporation • Earthworks Urban Farm • Avalon International Breads • Fair Food Network
<p>Detroit FRESH (2008)</p>	<ul style="list-style-type: none"> • Department of Urban Studies and Planning • Division of Research 	<ul style="list-style-type: none"> • Eastern Market Corporation • MOSES (regional coalition of faith-based organizations) • Earthworks Urban Farm • Peaches and Greens • Neighborhood organizations
<p>Earthworks-WSU Passive Solar Greenhouse (2010)</p>	<ul style="list-style-type: none"> • Department of Urban Studies and Planning 	<ul style="list-style-type: none"> • Earthworks Urban Farm
<p>Annual Farm Tour (2009)</p>	<ul style="list-style-type: none"> • Department of Urban Studies and Planning 	<ul style="list-style-type: none"> • Earthworks Urban Farm • Detroit Black Community Food Security Network
<p>Annual Harvest Dinner (2008)</p>	<ul style="list-style-type: none"> • AVI Foodsystems, Inc. • Department of Urban Studies and Planning 	<ul style="list-style-type: none"> • Earthworks Urban Farm • Detroit Black Community Food Security Network
<p>Quarterly Newsletter, <i>Seedling</i></p>	<ul style="list-style-type: none"> • Department of Urban Studies and Planning 	
<p>University Lectures and Seminars (2008)</p>	<ul style="list-style-type: none"> • Department of Urban Studies and Planning • Partners for university lectures vary by speaker 	<ul style="list-style-type: none"> • Earthworks Urban Farm • Detroit Black Community Food Security Network



A campus chef and a student harvest salad greens from the Warrior Winter Garden for Earth Week tastings at campus dining halls

motivations and interests of participants, soil and atmospheric pathways of lead and other heavy metals in gardens, and the possibility of growing food on the roof of a parking structure. They have served as points on citywide tours organized by the Detroit Agricultural Network as well as sites for potlucks and other social gatherings bringing campus and community gardeners together.

Farmers market

The WSU Farmers Market is held weekly from June to October. Vendors sell Detroit- and Michigan-grown fruits, vegetables, herbs, flowers, honey, baked goods, ciders, and prepared foods. The market hosts seven Detroit-based growers and prepared food vendors and another nine from outside the city. One vendor is a cooperative of city gardeners selling under the Grown in Detroit banner. Of the 16 vendors in 2011, five are minority farmers or business-owners including three African-Americans, and one each of Mexican and Hmong ancestry. The market accepts food stamps (SNAP, Supplemental Nutrition Assistance Program) and Project FRESH and Senior Project FRESH coupons (the state's Farmers Market Nutrition Programs). The market also matches food stamp purchases up to \$20 per card per day through the Double Up Food Bucks Program offered by the Fair Food Network.

In 2010, the WSU Farmers Markets placed nearly \$300,000 in the hands of local producers, including nearly \$10,000 in food

stamps and \$6,000 in Double Up Food Bucks. The markets help keep more money in the local economy than if it were spent at grocery stores.

Farm to cafeteria

SEED Wayne collaborates with AVI Food-systems, Inc., WSU's food service provider, to increase Michigan-grown foods in campus dining halls. We help build connections to local farmers, source from local farmers for SEED Wayne's events, and use dining halls to educate students about sustainable food systems. In 2011, this took the form of tastings offered during Earth Week in two WSU dining halls of salad greens grown in low-tunnels at SEED Wayne's Warrior Garden. SEED Wayne also composts part of the kitchen wastes in two composters located near the Warrior Garden.

Detroit FRESH

In addition to the campus-based activities above, Detroit FRESH (SEED Wayne's healthy corner stores project) helps neighborhood-based stores—mostly liquor stores and gas stations—carry fresh fruits and vegetables so that shoppers can incorporate them into meals or snacks. The aim is to increase access to fresh foods within neighborhoods rather than necessarily to supply ingredients on an ongoing basis for entire meals given higher prices at neighborhood stores.

Detroit FRESH recruits stores following an assessment of their offerings; provides par-

ticipants with basic resources and technical assistance for stocking, merchandising, and selling produce; connects them to produce distributors, including a mobile market that partners with SEED Wayne to offer near-wholesale prices to stores; and conducts outreach in neighborhoods to inform residents of produce availability in corner stores. We have documented increased produce sales at several stores following neighborhood outreach. Many neighborhoods, however, continue to experience losses in population and wealth, which create additional stressors for stores that participate in Detroit FRESH.

Passive solar greenhouse at Capuchin Soup Kitchen

In 2010, SEED Wayne sponsored the construction of a nearly 4,000-square-foot passive solar greenhouse at Earthworks Urban Farm, a key community partner. Earthworks Urban Farm, a program of the Capuchin Soup Kitchen, grows vegetables and herbs for the soup kitchen on two acres distributed over multiple lots. It also supplies transplants to city gardeners who participate in the Garden Resource Program and hosts a variety of educational and entrepreneurial activities for youth and adults, including season extension techniques.

Other functions

In addition to the above activities, SEED Wayne also offers a host of classroom-based educational, research, and service learning opportunities on a variety of topics related to sustainable food systems. A quarterly newsletter, *Seedling*, keeps more than 4,000 subscribers informed about SEED Wayne activities and accomplishments. We also offer an annual farm tour, which, in 2010, toured four farms in Detroit and neighboring Macomb County that participate in the WSU Farmers Market. In early November, the annual harvest dinner helps campus and community partners celebrate the season's harvests, relationships, capacities developed, and other accomplishments.

Cities and Food, a course offered by the author each winter, allows students already involved in SEED Wayne, or those interested in the topic, to explore local food issues systematically. It features local food experts in a weekly seminar that is open to the public, and contributes to local knowledge through student projects that are designed in collaboration with community partners.

For example, one team in 2011 surveyed a sample of 22 stores out of a list of 80 Detroit grocery stores designated as full-service by a study sponsored by the Detroit Economic Growth Corporation. They compared prices of a basket of basic foods and found several stores with reasonable prices, positive environments, and good service. They also found stores with rotting produce, dusty shelves, and poor service that partially confirm Detroit's reputation for poor food choices. Three of the 22 stores did not offer foods in all the categories to merit the label of full-service store, suggesting the original list benefited from the ground-truthing that the students provided through the project. The study was published in the *Michigan Citizen*, a community newspaper.

Reflections

As SEED Wayne enters its fourth year, we have reflected on its many features, in particular the university role, student involvement, and community partnerships. These reflections, shared below, are based on the program's experiences at the university and in the community and may be generalizable only in limited ways to other university-community collaborations related to sustainable food systems or other topics at Wayne State.

Sustainability initiatives spanning core university functions continue to be unfamiliar

While more and more sustainability centers focus on academics and research and sporadically on campus operations or, alternatively, community service, few sustainability programs at universities combine all functions. At Wayne State, administrators find it difficult to view our activities as an integrated whole; they tend to place activities into pre-existing categories based on their best understanding of each activity. Thus each sees the SEED Wayne "elephant" with a limited perspective, based on their experience of its tail or leg. For example, the farmers market elicits responses from administrators that are generally positive, yet many see it as just another business operation. The many ways in which the farmers market diverges from typical university business seem invisible—for example, in its social enterprise orientation; explicit commitment to small, minority, and local vendors; incorporation of government nutrition programs to serve low-income clients; sustained integration

of classroom, research, and service learning projects; and community partnerships that are crucial to the market's operation.

While academic units at Wayne State associated with education, social work, urban planning, public health, community medicine, and even law have experience integrating classroom, research, and community service functions, university operations have rarely, if ever, been added to the mix in the past. Similarly, although business school or operations engineering student projects have contributed to streamlining business and other university operations, these are conceived as discrete projects and do not integrate community engagement or outreach activities under one thematic rubric. Finally, paper recycling has taken off as an activity that combines student activism, community engagement, and campus operations, but there is no systematic effort to bring related concepts/experiences into the classroom or faculty research collaborations.

After three years of successful implementation of garden projects and market, all the while steadily increasing the scope of activities and documenting benefits delivered to the campus and surrounding community, administrators have begun to understand the integration of multiple goals and the complementarity of the campus and community activities.

The spectrum of sustainability goals in activities can be confusing

Although SEED Wayne's activities on campus and in the community are integral to our definition of sustainable food systems, and are organized collectively to deliver the goals outlined in the first part of this article, the specific goals for each activity lie on a spectrum of sustainability based on needs sought to be met by the activity and the resources it can harness. For example, in Detroit FRESH, increasing neighborhood-based access to fresh and healthy foods is the highest goal; other goals, such as local sourcing of produce or connecting eaters and growers, are secondary. However, in campus gardens, we are able to insist on meeting all core SEED Wayne sustainability goals or values. Gardeners grow their own food using sustainable practices, increase access to fresh and organically grown foods, enhance capacities along multiple dimensions including agriculture and nutrition, and become involved in movements related to community food

justice, right to food, and sustainable agriculture.

While this diversity of goals allows us to meet the needs of SEED Wayne's participants and constituents where they are with the resources at hand, it makes communicating the sustainability message that much more complex. It requires an explanation of the tensions inherent in addressing the immediate needs of the various communities we serve, consistent with a basic focus on equity and the longer-term vision related to sustainability, while responding to the very real economic and social realities specific to our time and place.



Fresh fruits and vegetables on offer at a corner store that participates in Detroit FRESH

Student participation faces several challenges

Our gardens typically engage a core of a few dozen students on a weekly basis, and our market and Detroit FRESH activities require another dozen each. Five SEED Wayne alumni have found full-time or part-time employment in community food-related organizations, with groups such as the Greening of Detroit, Eastern Market Corporation, and Fair Food Network. The challenges of recruiting student participants, especially volunteers, are now easing as alumni and current participants help engage other students based on their positive experiences with the program.

However, most of Wayne State's students and employees commute from across the southeastern Michigan region. WSU has two major semesters, fall and winter. Spring and summer terms see fewer course offerings and enrollments and have a more condensed calendar. Student participants who live nearby and those carrying a



Students lead a campus workshop on building rain barrels

lighter load during spring/summer are able to take advantage of the slower pace and lease garden beds and volunteer at the WSU Farmers Market. However, students who commute to school or take summer jobs outside the city tend not to participate or may drop out early. Furthermore, active students may have challenging schedules at the start of the fall semester, when harvests are coming in fast and thick, the farmers market is buzzing with products, and new and returning students and employees descend on campus en masse.

Our gardens were hit hard by this dynamic during our first two seasons. To accommodate student drop-off in garden activities, we insist that students lease garden beds in



Rooftop experimental garden beds capture rainwater and drip-irrigate crops.

teams; we also plan in advance to ensure that the drop off is as small as possible by shifting weekly garden group hours when school starts in fall. Market activities are planned in advance to accommodate changes in student schedules and to incorporate volunteers from among interested new students who come to the farmers market. Nonetheless, our biggest problem involving students lies in the fact that most students commute to campus and a significant proportion combine their university education with employment, family responsibilities, and/or volunteer commitments elsewhere.

Community food organizations welcome university partnerships and capacities

In all, SEED Wayne has formal partnerships with eight community-based organizations in varying constellations and informally collaborates with at least as many others in ad hoc arrangements or through community coalitions. SEED Wayne benefits from these partnerships by gaining greater access to grassroots networks and community residents for program input and information dissemination, resources, and experience related to gardening and farmers markets, and legitimacy in community circles.

Partnerships with the university also benefit community organizations in many ways. For example, organizations have gained from assistance in proposal and program development including the use of research and evaluation activities of faculty and students; seminars and lectures that bring professionals, community experts, and neighborhood residents together; funds from joint proposals; and participation in university food system operations (as suppliers to university kitchens, vendors in farmers markets, and trainers in topics).

Community partnerships are not without challenges, however. Differences in the ability to act and respond quickly and effectively in autonomous ways, approaches to solutions, strategic and operational skills, financial flexibility, and connection to constituents are just some categories that need to be addressed and negotiated continually. Our experience shows that successful collaborations require effective, ongoing communications between all parties, a willingness to try new things, and a basic level of trust.

Since 2008, our achievements and steady growth have increased confidence among university administrators and community leaders in our ability to deliver on our commitments. We anticipate that some earlier challenges will dissipate and new ones will emerge in the form of greater competition for scarce resources, coordination of more complex programs, continual need to build relationships with university and community leaders as they turn over, and possible declining participation by students and other constituents as the economy tightens further. SEED Wayne's activities, along with similar others at urban universities nationwide, however, point to both the urgent need for universities to seize a leadership opportunity in building sustainable food systems and the ability to deliver real benefits to communities and their surrounding regions.

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References

1. Pothukuchi K. The Detroit Food System report, 2010-11. Detroit Food Policy Council, Detroit, 2011.
2. The Wingspread Declaration on Renewing the Civic Mission of the American Research University, 1999. Last accessed June 20, 2011: http://www.compact.org/wp-content/uploads/2009/04/wingspread_declaration.pdf
3. Wayne State University. A strategic action plan for 2006–2011. Last accessed June 20, 2011: http://bog.wayne.edu/meetings/2006/10-18/board10_18_06_itemii.pdf
4. UIC—Great Cities Commitment. Last accessed June 20, 2011: <http://www.uic.edu/index.html/welcome.shtml>

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