

# Design of Urban Farming Community: Strategies for Vacant Lands in Detroit Urban Neighbor- hoods

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## REPORT

Detroit's urban neighborhoods include vast vacant areas that have threatened the economic and social vitality of the region. Many vacant lots became dump sites or are overgrown with shoulder-high weeds. The percentage of vacant tracts in some residential blocks can be as high as 40%. City agencies, community development corporations, and developers have for many years tried to remedy the situation by developing infill housing or shops on vacant lands. Despite their efforts, the overall positive impact on the city in general is limited because often such efforts are piecemeal and incremental and not coordinated within or between neighborhoods. Furthermore, the few successful small pockets of scattered infill developments that exist are not integrated via effective connections to coherent or systematic urban spatial structure. Moreover, an inefficient public transit system and outdated zoning ordinances (include strict parking requirements) prohibit well-orchestrated mixed-use, walkable, developments in the neighborhoods in question. Consequently, the overall benefit of infill developments to the community or the city at large is limited and questionable.

In response, the Christ Community Development Corporation (CCDC) and the American Coalition of Black Farmers (ACBF), two highly active non-profit community development organizations in Detroit, have recently proposed to the City of Detroit Planning Department a farming education center with a community market in Detroit as a catalyst for change to help local communities deal effectively with vacant and underutilized areas. In particular, the farming education center is proposed as a business incubator to create locally based jobs and to provide a channel of community revitalization by teaching its residents about healthy foods. Furthermore, the center is to serve as a vehicle for supporting minority-owned farms located in Detroit's outskirts and for helping those farmers partner with local residents who are interested in selling farming-related products in Detroit's underserved neighborhoods.

My research funded by 2006 BSA Grants involved designing urban farming communities in test-case locations through master plans that pair farming education centers with community markets. Such proposed communities also feature high-yield micro farms, community gardens, greenhouses, and mixed-use development designed to occupy vacant tracts and to fit into existing neighborhoods. The placement and spatial organization of these farming-related facilities and supporting functions are thoughtfully implemented to promote a sense of community and sustainability, according to a well orchestrated urban plan. My research aimed to illustrate through master plans the urban and architectural impact of the proposal for an urban farming community, made by the CCDC and the ACBF, on a typical dilapidated neighborhood in Detroit. By doing so, we intended to demonstrate a more comprehensive and coordinated approach to the vacant land crisis and the revitalization of blighted urban neighborhoods.

### Research Method:

The methodology for this research consisted of the four components. The first component was to consult with the CCDC and the ACBF to fully comprehend their proposed development goals and to identify two separate potential sites for the proposed urban farming community master plan project in Detroit's East Warren community: one near the main commercial thoroughfare and one in the middle of a residential area. These two sites were chosen because they have more vacant lots than any other locations in East Warren. After consulting with a larger than planned number of project participants and interested parties we added two more sites in East Warren because all four sites had strong potential for urban agriculture development and had varying characteristics in terms of land use and physical features.

The second component was to generate a design for each test-case site through master planning to create an urban farming community that develops the proposed goals into urban and architectural form. To do this, I created four student design teams from my home university's community outreach studio to assist in the production of these separate design proposals. Each team began working in May 2006 and finished on December 13, 2006.

Student work consists of site inventory and analysis to investigate existing land use characteristics, zoning ordinances, physical characteristics (e.g., figure ground studies, circulation patterns, block layout patterns, land ownership, traffic volume, environmental contamination), challenges and opportunities at the test site, and precedent studies. The key assignments were a community master plan for an urban farming community, as well as a design for an urban agriculture, health, fitness, lifestyle center.

The third component was to conduct periodic reviews of the design research with our partnering agencies (CCDC, ACBF) to verify compliance with their development goals. In addition, this component involved soliciting feedback from all other stakeholders via interviews, community design workshops, and focus groups. These stakeholders included all interested parties such as area schools, the city of Detroit Planning Department, the Detroit City Council, the AIA Detroit Chapter, local design professionals, and other community anchor groups (small business associations, block groups, and churches that play an important role in community revitalization).

The fourth component was to generate exhibition boards and scale models of the design research for presentation to all project participants and interested parties. These boards and models were presented to them on December 13 at our community outreach studio. The boards and models will tour selected communities where urban farming communities are proposed, and will be presented to the public, the city of Detroit Planning Department, the Detroit City Council, and the AIA Detroit Chapter at the Museum of Contemporary Art in Detroit on December 20.

#### Key Findings:

Following is the final research results.

(1) Feedback from various project participants and interested parties suggest that urban farming is a viable strategy for vacant land to promote revitalization, sustainability, and public health. Literature sources and interviews with planning officials and community agencies who have extensive experience in community gardens in Detroit suggest that agriculture offers a range of opportunities for cleaning up the vacant land filled with trash and weeds, putting it to productive use through gardens or micro farms, thereby creating a viable income source or an aesthetic improvement for the neighborhood in question. As more funding becomes available, some of these gardens can develop into larger commercial forms of agriculture like greenhouses or industrial agriculture parks. While community gardens or micro farms can act as physical design strategies to promote a visually pleasing and pedestrian-friendly environment, some of them can be easily developed into infill housing or other neighborhood service facilities in a later phase of community revitalization.

(2) An urban agriculture, health, fitness, lifestyle center (UAHF Center) is proposed as the main facility of the urban farming community to promote agriculture, sustainability, and healthy lifestyle through various educational and social services. The overwhelming majority of the project participants and interested parties emphasized that successful revitalization requires public education about the importance of taking good care of the built environment and nature, and promoting healthy food and lifestyle. In response, we proposed a UAHF Lifestyle Center building to act as the educational and social service center of the urban agriculture community in East Warren. At this center, residents will learn about community gardens, urban farming businesses, a sustainable environment, healthy food, and fitness. This center will also update people on the current research in urban agriculture and conduct study in agriculture and revitalization (See Picture 2 and Addenda).

(3) East Warren has four significant areas, each of which has unique characteristics in terms of land use and physical features. Thus each area or sector (test site) requires a different type of urban agriculture development. Four models in the urban farming community design are proposed to deal effectively with the four unique sites (see Picture 1 and Addenda).

(A) An industrial district model is applied to the industrial section of East Warren (Sector 1), which includes abundant large scale industrial buildings, many of which are underutilized or vacant. Unfortunately, some lots may have been contaminated, and this will have to be addressed. This area is situated between a major auto company facility to the east and a dilapidated residential area to the west. This model seeks to create an industrial agriculture park community with agriculture operations housed inside buildings; examples of this would be greenhouses that are elevated to avoid direct contact with contaminated soil and light industrial agriculture facilities. In addition, this model includes mixed use garages, indoor sport facilities, retail spaces, and open spaces.

(B) An open space model is proposed for East Warren's well known golf course area (Sector 2). This open space district is currently underutilized but has strong potential for urban farming. This model promotes high intensity urban farming development offering a diverse range of agriculture operations like large farms, multiple greenhouses, and a farmer's market. Additionally, this model offers water resources for the purposes of irrigation, water retention, wastewater recycling, and urban aesthetics along with meditation gardens and other farming and health-related facilities (e.g., agriculture product outlets; and health, sport, recreation facilities).

(C) A corridor model is applied to the East Warren Street corridor (Sector 3) that has few open spaces and consists predominantly of two-story and three-story retail buildings, many of which are underutilized or vacant. The road is very wide, making crossing and walking unsafe. This model seeks a balanced combination of diverse developments like agriculture research facilities near the existing hospitals or schools as well as community gardens or farms that also function as open spaces; mixed use buildings; and boulevards as traffic calming strategies along the corridor.

(D) Finally, a residential district model creates an urban farming community within a predominantly residential area in East Warren (Sector 4). This section has numerous vacant plots, making it possible to create an intensive farming-based residential community. The master plan includes two zones: An urban agriculture zone promoting various agriculture developments and a typical green zone including existing natural and man-made green spaces. Both zones are interconnected to promote a sense of community, effective circulation, and easy access. This model also offers diverse housing types (e.g., conventional urban housing and houses with micro farms). The key stakeholders in East Warren can decide which test site they will choose in which to develop a coherent urban farming community, and which proposed model they want to apply to that site for successful urban agriculture community development

#### Conclusions:

Our literature review, design research, and fieldwork suggest that urban agriculture can be a catalyst for unifying the efforts of diverse entities or groups of people in various fields in promoting revitalization, sustainability, jobs, and healthy food and lifestyle. Funding for this design research allowed us to provide a vehicle through which our design team could contribute to tackling one of the most critical economic, political, social, and architectural issues facing Detroit: vacant land. Our design and master plan research offers an alternative approach to piecemeal infill housing or commercial development, which alone cannot effectively respond to the vacant land crisis in a timely and holistic manner. The Christ Community Development Corporation and the American Coalition of Black Farmers have developed very progressive recommendations for revitalization to address the vacant land crisis; the proposed urban farming community helps turn their recommendation into reality. Our master plan research provides a clear demonstration of the proposed urban farming community's urban and architectural implications.

In closing, our key lesson is that successful urban farming community development will require (A) systematically incorporating our present master plan research efforts into the ongoing community garden developments initiated by local community agencies. They agree that our proposed master plan for the urban farming communities can help meaningfully link their individual garden developments scattered around many parts of the city integrating them throughout the larger region; and (B) producing a handbook of comprehensive design guidelines for urban farming community design and development so that private or public entities can apply the guidelines to various situations. This guideline book, distinct from, but based on our current research outcomes (i.e., community master plan drawings), will include step by step instructions and recommendations (developed through empirical research) on how to determine what type of agriculture operation is suitable for the neighborhood in question, how to integrate urban farming operations into the existing community gardens, and how to design, develop, and implement a viable urban agriculture community. The majority of our current project participants and interested parties desire to have such a guidebook so that they can apply the guidelines to various locations and create diverse revitalization opportunities in their communities or across the city. Moreover, the guideline book will also include recommendations on appropriate ordinances to ensure successful urban farming development, enabling planning administrators and other public officials to incorporate them into their development policies and regulations.

