Introduction
Collaborations between universities and the neighborhoods or communities they are located within are no longer novel enterprises. Over the years, institutions of higher education in the US, Canada and England, especially those located in or near cities, have been very active with their communities. This trend has also included universities outside of cities for a variety of reasons. Increasingly, colleges and universities have not been able to ignore the communities they inhabit, especially those communities that have felt economic downturns or have experienced blight, gentrification or other social issues. Projects that help to strengthen the relationship between institutions of higher education and their neighbors are beneficial to both parties (Fisher et al., 2004). The end result is that universities and communities have been involved together in research projects, the creation of field internships and service-learning opportunities, as well as curriculum development and other projects (Fisher et al., 2004, Siemens, 2012; Ostrander and Chapin-Hogue, 2011).

This chapter will examine community collaboration through a community garden developed at Monmouth University, a small, private liberal-arts university located in a suburban area of New Jersey in the US. Its growth, successes and the lessons learned along the way will also be discussed. Community gardens are developed for a variety of reasons. However, their link to food insecurity and green social work cannot be overlooked.

The context
Food insecurity is a social problem that exists in many communities around the world (Bhawra et al., 2015; Roncarolo et al., 2016). Definitions for food insecurity vary. But briefly stated, it is ‘limited or uncertain availability of nutritionally adequate and safe foods or limited or uncertain ability to acquire acceptable foods in socially acceptable ways (e.g. without resorting to emergency food supplies, scavenging, stealing or other coping strategies)’ (Taylor and Loopstra, 2016, p 3).

In the United States (US), this translates into 48.1 million Americans, including 32.8 million adults and 15.3 million children who were food insecure in 2014 (www.feedingamerica.org). In
New Jersey, this means that 11.8 percent of the state’s population is food insecure, with Monmouth County specifically having a 9.3 percent food insecurity rate (www.feedingamerica.org). Globally, this translates into 925 million people who will not have sufficient food to eat (www.globalgiving.org/sdg/no-hunger). The majority of the people who are food insecure globally are in the developing regions of the world (FAO, IFAD and WFP, 2015).

One would think that income is one of the triggers for food insecurity, and research has shown that, for children, food insecurity drops as a family’s income increases (Gundersen and Ziliak, 2014). Income, however, is only part of the puzzle with food insecurity. Several other themes emerge when examining the research that has been done on food insecurity. According to Gundersen and Ziliak (2014), these include:

- The mental and physical health of the adult caregiver – families where an adult caregiver (especially single-parented families) fare worse when depression, substance abuse and a low education level are factored in.
- Marital status of the head of household – living with a single parent, or a single parent in an extended household can lead to greater risk of food insecurity than in married couple families.
- Child care arrangements – spending time in child care that is provided by people other than one’s parents have an implication for food insecurity for children.
- Certain populations are more vulnerable to food insecurity – these would include immigrant families and households where one parent is incarcerated.

Fighting hunger and its causes was one of the Millennium Development Goals of the United Nations (UN) and it is also now goal number 2 of the Sustainable Development Goals – to end hunger, achieve food security and improved nutrition and promote sustainable agriculture (www.un.org/sustainabledevelopment/sustainable-development-goals).

In high-income countries, when public assistance cannot meet the pressing needs of clients/service users, emergency food services are often developed. Food banks, for example, have played a role in helping to diminish food insecurity especially in a short-term, crisis situation. However, as a long-term solution to food insecurity, food banks are not able to improve overall food security outcomes. In a systematic review of the research on the role of food banks in addressing hunger and food insecurity, Bazerghi and colleagues (2016) found that food banks often have several limitations when trying to address food security outcomes. These limitations are sometimes beyond the control of the food bank, depending on how it has been established and how it is able to link with other donations and resources. Generally, in this review the authors found that most food bank clients have a deficiency in their diets in the consumption of fresh vegetables and fruits, milk, meat and other meat alternatives. The food provided to food banks tends to be limited in range and also limited in cultural content for the clients/service users they serve. This research also revealed that the number of people using food banks continues to increase, but that the donations to food banks are not keeping pace with this demand. Food bank staff also described an inadequacy in resources that the food banks need beyond donated food, such as additional space for storage, additional refrigeration and not enough funds to purchase supplies that clients/service users also need, such as toiletries (Bazerghi et al., 2016).

Another small response to food insecurity in local areas is the development of community gardens. Community gardens historically have been utilised in times of economic distress. Cities in America began utilising community gardens in the 1890s to assist families who were experiencing unemployment. These subsistence gardens were also popular during the First World
War, to augment the food supply domestically, and were turned into ‘Victory Gardens’ during the Second World War (Lawson, 2005: 2). Draper and Freedman (2010) suggest that, since 2009, community gardens can be termed ‘recession gardens’, which are used to ‘help decrease individual and family food bills and provide for more self-sufficiency’ (460). Community gardens tend to be found more commonly in cities and suburban areas outside of cities rather than in rural areas where farming is a mainstay livelihood.

Currently, community gardens have included a variety of functions other than supplementing family groceries:

Community gardens often start by the want to improve food access but may become a focal point for community organizing around the promotion of neighborhood revitalization, community pride, and increasing a sense of community ownership.

(Lanier et al., 2015: 493)

Some community gardens today often have multiple agendas, which can include education, social needs, as well as economic concerns (Lawson, 2005; Lanier et al., 2015). Roncarolo et al. (2016) see community gardens as an alternative intervention which often focus on empowerment, the development of skills and the support for better nutrition to assist in the reduction of food insecurity. These gardens are developed in a number of ways, under various auspices, with multiple sources of funding and with varied ways of functioning. Whatever the focus, community gardens as an intervention usually do not ‘pursue the objective of impacting the economic factors at the root of food insecurity, nor the broader systemic factors that shape food production and distribution’ (Roncarolo et al., 2016: 3).

### The community garden at Monmouth University

During the spring semester of 2009, a group of academics, staff and administrators, who were members of the then-Center for Human and Community Wellness, were meeting to discuss possible projects for the Center to engage in. At some point in the conversation, the group discussed community gardening. One of the local neighborhoods, Long Branch, had previously established a community garden, which was sponsored by the municipality. However, it had recently closed and it seemed at the time that there was a need to establish another community garden based on what members of the group were hearing about the increase in soup kitchens and food pantries in the area.

While the university is partially surrounded by a fairly wealthy community one mile from the Atlantic Ocean, the other surrounding towns that encompass the campus community are not as well off. Census data from 2010 illustrates the disparities in income and poverty rates, based on the US poverty guidelines (US Poverty Guidelines, 2015) as follows:

**Table 15.1 US Poverty Data**

<table>
<thead>
<tr>
<th>Town</th>
<th>Population (2010)</th>
<th>% &lt; 18</th>
<th>% &gt; 65</th>
<th>White</th>
<th>Black</th>
<th>Hispanic</th>
<th>% below poverty</th>
<th>Median household income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asbury Park</td>
<td>16,116</td>
<td>23.8</td>
<td>10.3</td>
<td>36.5</td>
<td>51.3</td>
<td>25.5</td>
<td>29.4</td>
<td>$33,527</td>
</tr>
<tr>
<td>Eatontown</td>
<td>12,709</td>
<td>20.7</td>
<td>14.0</td>
<td>71.3</td>
<td>12.4</td>
<td>12.4</td>
<td>9.1</td>
<td>$60,188</td>
</tr>
</tbody>
</table>

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It was suggested by Robin Sakina Mama, the Dean of the School of Social Work, that the group look to establish a community garden somewhere on the Monmouth University campus. She also felt that social work might be able to provide an MSW intern to get this venture started (with office space and supervision). As the School has a concentration in International and Community Development, this would be an excellent community development opportunity for the right student. The School of Social Work has a focus on human rights and social justice, and this project was congruent with the School's overall values.

The Center's Steering Committee agreed with this idea in the early spring of 2009, and work began with the Office of Field and Professional Education in social work to identify an incoming MSW student who might take this venture on as an internship experience. Fortunately, a student was identified. He was a young man who had completed his undergraduate degree in physics, but who had been deeply involved in environmental organizing during his college years. He eagerly accepted the challenge, since it would be his responsibility to build this garden ‘from the ground up’. Work to build this garden began in the fall (autumn) of 2009.

Community gardens vary – by definition, scope and purpose. One definition, by Ferris, Norman and Sempik (2001: 560) distinguishes between a private garden and community garden in ‘terms of ownership, access, and degree of democratic control’. The American Community Gardening Association considers community gardens as ‘any piece of land gardened by a group of people’ (cited in Aftandilian and Dart, 2013: 56). In the UK, community gardening denotes a garden owned publicly that includes public access and follows democratic rules, whereas ‘allotment’ gardens are those which are tended by members who each have a plot of land. Some of the larger gardens allow for community participation in an open space but also provide facilities for education and training (Firth, et al., 2011). Some community gardens focus only on individual garden plot cultivation while others have a more collective purpose to the community they are located in. Some gardens are small, located on abandoned plots of land (if in an urban center), while others can be quite large, taking on multiple purposes and serving larger groups of people (Firth, et al., 2011).

The locus of control for community gardens varies as well. Generally speaking, there are usually three ways in which community gardens are sponsored: by municipalities, non-profit organisations or universities. Depending on how the garden is established (and by whom), its general purpose will also vary. In an extensive review of the literature on community gardening, Draper and Freedman (2010) discovered that the overall purposes of community gardens in the US tended to cluster into several areas:

- Health benefits – promoting both individual and community health;
- Food security – promoting food security in a community;

<table>
<thead>
<tr>
<th>Town</th>
<th>Population (2010)</th>
<th>% &lt; 18</th>
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<th>White</th>
<th>Black</th>
<th>Hispanic</th>
<th>% below poverty</th>
<th>Median household income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long Branch</td>
<td>30,719</td>
<td>21.7</td>
<td>11.3</td>
<td>65.3</td>
<td>14.2</td>
<td>28.1</td>
<td>14.5</td>
<td>$52,792</td>
</tr>
<tr>
<td>West Long Branch</td>
<td>8,097</td>
<td>19.6</td>
<td>13.6</td>
<td>94.5</td>
<td>2.2</td>
<td>5.0</td>
<td>8.2</td>
<td>$96,369</td>
</tr>
<tr>
<td>Tinton Falls</td>
<td>17,892</td>
<td>19.0</td>
<td>25.6</td>
<td>82.5</td>
<td>9.3</td>
<td>6.2</td>
<td>4.1</td>
<td>$78,894</td>
</tr>
</tbody>
</table>
Economic development – a more entrepreneurial approach to community gardening, where the community sells the produce it harvests;
Youth education, development and employment – using gardens to serve as alternative forms of enjoyment and training for young people;
Preservation of open space – preserving valued space in a community in addition to safe places for community members to gather;
Crime prevention – this was sometimes seen as an unintended consequence of the establishment of a community garden;
Neighborhood beautification – especially true in urban areas where gardens are established on vacant or abandoned property;
Cultural preservation and expression – ethnic community gardens that have been established are seen as a mechanism to preserve as well as promote a culture;
Relationship building – depending on the roles established in community gardens for members, the garden and the work surrounding its maintenance can be the impetus for the establishment of individual and group relationships in a community; and
Community organising and empowerment – since community gardens are a gathering place, they can also be utilised as a place for people to join together to work on other community initiatives (Draper and Freedman, 2010: 480–485).

The first element in establishing the Monmouth University Community Garden was to find a piece of land that would accommodate a good-sized garden that was not already in use at the University. The garden intern worked with the vice-president for Facilities Management to identify three potential spaces for the garden, and the site that was chosen was the best of the three. It was located on a corner lot, with plenty of sun and access to street parking for people who were going to come to the garden. This lot was in an area on the north side of the campus across the street from resident dormitories, and next to a tennis court that included a restroom and electrical outlets if needed. The space measures approximately 90 feet by 90 feet square. It is also interesting to note that this parcel of land was once contested by the University’s neighbors when a plan had been submitted to the town to build a dormitory on this property about 10 years ago. The neighbors won their lawsuit against the University, and the land remained vacant until the community garden was proposed for this site.

A number of elements were taken into consideration regarding the scope, purpose and functioning of the garden before the first shovel went into the ground. The Center for Human and Community Wellness Committee believed that the garden should allow for both individual plots that could be ‘rented’ for the growing season (April–October) along with community plots where the harvest would be donated to local agencies supporting food-insecure families. In a study that reviewed 15 community gardens that had been established in Illinois through the McLean County Wellness Coalition, the authors found that 53 percent of these gardens donated their produce to local service agencies, while 47 percent used the food in their own organisation (Lanier et al., 2015).

There was also the belief that the garden should help to promote good relationships between the university and its neighbors as well as foster new relationships between the gardeners themselves. It was also intended that the garden could be a place for student learning and volunteering. With all these ideas in mind, the Monmouth University Community Garden began to take shape in the fall semester of 2009.

Once the site was confirmed, the MSW intern began to work with several Monmouth County Master Gardeners to work out the logistics of the garden: planning the size and configuration of the plots (both individual and community), deciding whether to plant ‘in ground’
Community gardening

or use raised beds, what plants to begin with and other matters. The garden at Texas Christian University has utilised support from their county health department (Aftandilian and Dart, 2013), and demonstrated that others can be brought in to help in various ways. The Monmouth garden has received a great deal of both in-kind and financial support from the County Master Gardeners who have donated time, resources and knowledge to the garden. An additional support to the garden has come from the Home Depot Corporation. For the first two years of its existence, Home Depot provided a $2,000 HD gift card to the garden to purchase supplies, from dirt and manure to tools. When Home Depot supports a project like the garden, the local employees also supply ‘sweat equity’, and since 2011 has provided a crew on opening day to help till the soil, replenish dirt and manure to the beds, and to plant donated plants in the community side of the garden.

Deciding how to run the community garden was the next issue that required thought. An application was developed for community members who wanted a plot in the garden, and meetings and newspaper notices bought the first group of gardeners into the garden. However, after the first growing season in summer of 2010, there was a realisation that more structure was needed in terms of the weekly management and maintenance of the garden and so a Steering Committee was established. It comprised mostly of gardeners (four to five) who were renting plots along with the dean of the School of Social Work (since social work was housing and partially funding the garden) along with a professor of biology whose specialty was in plants. Stakeholders are important to all community gardens and depending on the purpose of the community garden, who these are will vary. However, the literature is quite clear that multiple stakeholders need to be involved to secure a garden’s success (Scoggins, 2010; Henderson and Hartsfield, 2009; Firth et. al, 2011; Twiss et.al 2003). Siemens (2012) has also stated that the meaning of the partnership must also be clear and communicated effectively to all those involved in a university–community project.

The Steering Committee began to meet monthly in 2010 and worked on rules for the garden, how to establish harvesting days, where to donate and deliver harvest to community agencies, along with a host of other issues. The Steering Committee continues to exist and has had new members join the Committee over the years since its establishment. It is still predominantly comprised of gardeners who have been gardening in the community garden for some time and who have a great interest in seeing the garden flourish.

Since the community garden’s inception in 2009, the Monmouth University Community Garden has enjoyed several accomplishments:

- Over 60 community residents or Monmouth University employees have been gardening annually. Gardeners tend to be local and reside in the surrounding communities next to the University. A number of the gardeners find the community garden an excellent place to grow their own vegetables or flowers, largely due to the resources that the garden is able to provide. It is fenced in, has a water supply, has its own tools for gardeners to share, along with the expertise that is shared with the gardeners by the Master Gardeners.
- Over 300 students have been involved in working in the garden, mainly through the ‘Big Event’, a volunteerism day at the University and in hosting other Monmouth University classes when the students go to the garden to learn.
- A Freshman Seminar class was called ‘Playing in the Dirt’ was developed. It involves faculty from social work and science and has the students learning about food insecurity, the biology of plants, and nutrition along with physically working in the School of Science greenhouse and the community garden. This class has run during the spring semester for four years and counting.
• Four local social service agencies and a girl scout troop have plots in the garden.
• The garden has begun to annually provide summer ‘Lectures in the Garden’, which are open to the general public and have focused on a variety of topics, including ‘How to put your garden to bed’, ‘Good bugs, bad bugs’, ‘Composting’ and ‘The Beatles and Strawberry Fields Forever’.
• A Community Garden Conference was held for four days in August 2015, which brought in participants from several states to present and share information on four topic areas: health and gardening, community and sustainability, urban gardening and poverty, gardening and education.
• Donations from the community plots are provided on a rotating basis to 10 local agencies, including several food kitchens and soup pantries, a senior citizen center, and an organisation that works with and houses HIV-positive adults.
• Since the first growing season in 2010, the garden has donated over 14,000 pounds of fresh, organic produce to the 10 local agencies involved in the project.

These accomplishments have benefited a number of people and organisations. There is a direct link from the garden to the School of Social Work, as it allows the School to live its vision that revolves around human rights and social justice. Students have benefited from the garden as a tool for their learning. Gardeners have benefited from the ability to have fresh food themselves as well as participating in something tangible that allows them to give back to their community, and the University has also benefited from the ability to collaborate with the community on a ‘green’ initiative. All of these aspects are crucial to community development as taught in the social work curriculum and as promoted in the green social work model.

In terms of food security, there has been no research to establish the impact of the garden except through anecdotal evidence from the agencies to which the community harvest has been donated. During the summer months, when harvest donations occur, the influx of fresh vegetables to the food banks and soup kitchens in the local Monmouth area have been a welcome addition and have provided additional nutrition to clients/service users. Most food banks do not have access to fresh fruits and vegetables and so the diets of those using their services are lacking in certain nutrients.

Lessons learned

The building of a ‘social community’ in the community garden is a very important aspect of any gardening endeavor (McIlvaine-Newsad and Porter, 2013: 73). No matter how a community garden is established, it is necessary to tend to the relationships among and between all who are involved from the very beginning. Establishing a structure for how the garden will operate along with developing a communication strategy are necessary components of helping to build these relationships. The importance of clear communication in university–community collaborations is emphasised in the work of Siemens (2012) and Ostrander and Chapin-Hogue (2011).

The establishment of the Steering Committee greatly helped to provide structure and the beginning of communication patterns. The Steering Committee has only a secretary position in its formal structure (rather than the full complement of chair, treasurer and others). This was done so that the Committee was assured of one person being responsible for meeting minutes, emails to gardeners, as well as correspondence on behalf of the garden (thank you notes, for example). A website for the garden was developed and several Steering Committee members were organised to be able to access the website to make changes to it and to communicate with gardeners via this mechanism.

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There have been fluctuations in overall communication with the gardeners from year to year, and it has been found that in those years where communication was more regular (on a weekly or bi-weekly basis as was needed), were those that the garden tended to have fewer difficulties. During the years where communication was not as regular, the garden tended to have some issues – for example, gardeners would not come out to help tend the community plots, some were leaving their plots to become overrun with weeds, and the main harvesting and delivery of community vegetables was being left to a handful of people.

Firth et al. (2011) speak to the concept of social capital as a central theme of how strong social networks and positive relationships can be developed: ‘Social capital is viewed as the connections among individuals or social networks and the norms of reciprocity and trustworthiness that arise from those connections’ (Firth et al., 2011: 558). In a case study of two community gardens in Nottingham, England, the authors look to identify three types of social capital: bonding, bridging and linking. These are all related to the interconnections between people from those connections that are very strong, like family ties (bonding), to connections that are more distant, like work colleagues or acquaintances (bridging) to those connections between people who are not very alike (linking). All three are needed to help build a strong community and there must be balance between all three types for the greatest participation among community members (Firth et al., 2011: 558).

The Steering Committee realised that positive relationships needed to be developed among all who were participating in the garden, and so in addition to communication, a number of activities have been developed in the garden to assist with this, like community weeding days or clean-up days where all the gardeners are invited to come out and help as a group. The lectures in the garden during the summer months have also provided educational opportunities for the gardeners, as did the community garden conference. Having students come to the garden to volunteer has also provided another means for gardeners to ‘give back’ to the University community and help teach another generation of young people to become interested in gardening, sustainability and the benefit of interacting with people one might not be as inclined to establish a relationship with.

Finding a stable source of funding for the community garden has been an ongoing issue. The ‘rent’ that annual gardeners pay for the growing season is $30 (up from the $25 the garden started with). This brings in a modest amount of money that can be put towards supplies that are needed in the garden, but it does not cover everything. After the first growing season, water irrigation lines needed to be installed in the garden with their connection to a water meter (from the township) was required. Monthly water bills are paid by the School of Social Work from a community garden account. However, the annual rental fees do not cover the year-round water bills. Water is shut off during the winter months, although the meter charge is for the entire year. Donations to the garden have come from local banks, individuals and local gardening clubs. However, these are not large enough to sustain the garden over time. Funding the garden remains a yearly priority for the dean.

Stakeholder support for a community garden is absolutely necessary. Scoggins (2010) makes a point of illustrating the various stakeholders that university gardens must work with, including faculty, students and administration. The community garden at Monmouth University has benefited from strong support from all three groups, especially our Facilities and Police Departments. The vice-president for Facilities at Monmouth University was involved in helping to choose the site for the community garden from the very beginning. As she saw the garden develop and the number of local community residents becoming involved rise, she continued to support this endeavor. There is a member of the facilities crew whose responsibilities include the community garden – for weed whacking, mowing grass and disposing of garbage or recycled material. Other
members of the Facilities Department are responsible for the water turn-on or shut-off and have assisted in storing large pieces of machinery for the garden (e.g. the mulcher/chipper). In turn, the community garden has become part of the ‘greening efforts’ of the university, and three years ago, was actually placed on the university map.

The campus Police Department has also supported the garden. There are regular ‘rounds’ of the campus that also include the garden. The police also know that garden members all have orange baseball caps (a gift from one of the gardeners) so that they are identifiable. Campus police have actually stopped to question people in the garden without a baseball cap, and have also responded to one or two emergency calls when a gardener has been overcome by heat.

To thank these stakeholders, Steering Committee members make vegetable baskets each summer for the Facilities and Police Departments, the president of the University and the provost.

Questions for the future

The impact of the community garden on our community–university relationship (the town/gown phenomenon) has definitely been positive. The University has not conducted formal research on this topic, so this is an area to investigate for the future. However, the University does know that the garden has received positive feedback from the community – from members involved in the garden to those who come to garden events; or even those who pass the garden on their daily walk or run. Each year brings new gardeners who want to join the garden, and in the spring of 2015, we expanded the garden by another 10 feet outwards to accommodate several new individual plots.

Similarly, our impact on food security in our local area is another subject for research. The Steering Committee receives ‘thank you notes’ from the agencies that they donate to, and the community garden conference featured a panel presentation from representatives of three of the organisations that garden harvest has been donated too. All spoke of the benefits of being connected to our community garden, including the ability to provide fresh, organic food to their clients/service users, the ability to teach them about proper nutrition and the basic notion that the garden helped to provide more food to their clients/service users that was so necessary for their survival.

Those of us involved in the garden also need to examine how the garden has been of benefit to the gardeners and community in other ways – like eating habits, nutrition, health benefits. Additionally, there has not been an investigation into whether participation in the garden has been a conduit for other community organising efforts among the gardeners. Now that the community garden is fairly stable in terms of its operation and management, it is time to truly assess its influence in this local community.

References


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www.feedingamerica.org [Accessed 8 December 2016].  
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Sustainable Development Goals:  
Part IV
Food (in)security