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Exploring potential community gardens in Thessaloniki

Rachel Lee Swanson

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DIGGING INTO COMMUNITY GARDENS

EXPLORING THE POTENTIAL FOR COMMUNITY GARDENS IN THESSALONIKI, GREECE

By:
Pavolas Christidis
Eiko Iwashita
Rachael Naoum
Rachel Swanson

THESSALONIKI PROJECT CENTER, 2017
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Intense urbanization and the fiscal crisis has decimated greenspace in Thessaloniki, Greece over the past century, leaving citizens unengaged with their communities. Our project assisted Eleftheria Gavrielidou, the Executive Director of the nationally recognized community garden, Kipos3, to further understand the impact of community gardens on their participants. This knowledge was collected and used to identify unused spaces that have the potential to be transformed into new community gardens. Though significant potential for community gardens exists in the city of Thessaloniki, there is a lack of citizen awareness. The use of outreach campaigns or other educational activities to inform citizens about the benefits of community gardens may help engage individuals with their communities.

MEET THE TEAM

Pavolas Christidis

Pavolas is from Fairport, New York and majors in mechanical engineering with a minor in physics. He plays on the WPI men’s varsity soccer team and enjoys spending time with family and friends. Pavolas was responsible for the Background, Methods, and Findings.

Eiko Iwashita

Eiko is originally from Japan but has lived in Malaysia, Austria, and the US. She majors in Biochemistry and Professional Writing, and enjoys learning about different culture, and getting to know people from all over the world. Eiko was responsible for the Background, Methods, Findings, and the Conclusions and Recommendations for Future Research

Rachael Naoum

Rachael is from Marlborough, Massachusetts and majors in Mechanical Engineering with a concentration in Mechanical Design. She enjoys video games, martial arts, and crafting things by hand. Rachael was responsible for the Abstract, Introduction, Background, Methodology, and Conclusions and Recommendations for Future Research.

Rachel Swanson

Rachel is from Thousand Oaks, California and is double majoring in Mechanical Engineering and Society, Technology and Policy. She enjoys being outdoors and is passionate about sustainability. Rachel was responsible for the Background, the Findings, the Conclusions and Recommendations for Future Research.
INTRODUCTION

DIGGING INTO COMMUNITY GARDENS

Past urban development practices in Thessaloniki have contributed to a lack of public greenspace in the city center. The rapid and unregulated expansion and development of the city from the 1950s onward has resulted in a congested and polluted city with little open space (Bastea et al., 2013). Changes to the city’s ratio of undeveloped–to–developed land in the 1950s and 1960s limited greenspace in favor of densely packed, highly trafficked apartment complexes. Furthermore, municipal policies surrounding the use of public space were not supportive of community driven initiatives, which prevented quick and easy repurposing of unused spaces into functional and beneficial places for communities. Today, Thessaloniki is looking at increasing its ability to cope with physical, economic, and environmental challenges associated with climate change by participating in the 100 Resilient Cities Initiative and promoting the creation of greenspaces (Office of Urban Resilience, 2016).

Our partner, Eleftheria Gaviolidou, Executive Director of Kipos3, a non-profit organization in Thessaloniki, wants to mobilize citizens by involving them in the repurposing of public spaces. Kipos3 is a community garden in the heart of Thessaloniki that was converted from a municipal parking lot and now has the participation of residents from the surrounding buildings. Our work in the garden has highlighted room for further community engagement and ways the municipality can better support future gardens.

Our project goal is to understand how Kipos3 functions as a community garden and how this knowledge can be used by the city to turn unused lots within the city into collective spaces using the community garden model. In order to achieve this goal, we wanted to discover how community gardens impact those involved with them by investigating the stories of community gardeners, what the potential is for new community gardens to be established in Thessaloniki, and how the municipality can best promote community gardens.
BACKGROUND

THE EFFECTS OF THESSALONIKI'S URBAN DEVELOPMENT ON GREENSPACE

Thessaloniki’s urban landscape has changed drastically in the past century, beginning gradually during the decline of the Ottoman Empire (Hastaoglou–Martinidis, 1997). In 1869, the Ottoman Empire established Westernization reforms, allowing the city to expand its borders and accommodate more citizens (Bastea et al., 2013). Further drastic changes to Thessaloniki’s urban character occurred shortly after its annexation to Greece in 1912 (Bastea et al., 2013). A devastating fire raged through the historic center of the city in 1917, destroying 128 hectares of land and leaving approximately 70,000 citizens homeless (Gemenetzi, 2016). The city was rebuilt along the “new European lines” with a monocentric model, designed by Ernest Hebrard, that placed the main city in the center of a set of rings of different sectors. The plans for the main city included expansions which allowed for a population of 350,000 people and covered 2,400 hectares of land, as well as an outer ring dedicated to greenspace surrounding the city. A large park was planned for the eastern part of the city that would contain the Aristotle University campus (Gemenetzi, 2016).

Unfortunately, the plans for this greenspace were nullified by the influx of 117,000 refugees who filed into Thessaloniki between 1920 and 1928 during the Greek and Turkish population exchange. Between 1922 and 1930, more than fifty settlements were established to house an overwhelming number of refugees (Bastea et al., 2013). These settlements were constructed spontaneously wherever free land was available. Streams that originally ran through the city were redirected to the outskirts to allow for more development (P. Christidis et al., April 4, 2017). This rapid, unorganized construction eliminated the ring of greenspace around Thessaloniki.
In the first few decades after World War II, the population of the city continued to expand, resulting in the enactment of policies leading to the rapid decline of available green space in Thessaloniki. From the Greek–Turkish population exchange until the mid-1970s, clusters of illegal housing, housing that was neither planned nor approved by the city, continued to be constructed on dwindling amounts of greenspace as rural migrants sought employment in the urban economy. From 1930 to 1975, Thessaloniki expanded westward as industry and the working class population increased (Bastea et al., 2013).

In an attempt to reduce this mounting housing dilemma, the government made the decision to mobilize private capital. The building coefficient, which is the land-to-building ratio for a given area, increased dramatically in 1956 and 1960, which allowed for “extensive exploitation of building plots” (Bastea et al., 2013). The idea was that this would allow housing complexes to be more mixed, thus lessening the stratification. Unfortunately, this also meant that the already scarce supply of greenspace in Thessaloniki became even scarcer. During this time, internal migration within Greece continued to increase the size and population density of the city at the expense of the greenspaces around it (Bastea et al., 2013).

By the 1980s, immigration into Thessaloniki began to slow down, but illegal housing clusters continued to be built because middle class workers wanted to live closer to their workplaces (Leontidou, 1990). Residential development was focused in the eastern end of the city, while industrial development was prioritized in the west, leading to transportation problems for commutes in this direction. To combat this new traffic pattern, the city developed what is known as the Inner Ring Road, a highway that skirts around Thessaloniki. While this improved traffic, the construction consumed even more of the city’s greenspace. This road also furthered the uncontrolled expansion of urban areas, known as urban sprawl, by allowing people to reach their workplaces from outside the city (Gemenetzis, 2016).
"We should give people the opportunity to get out of their homes and have a good free time in the park, not just go and sit there on these red benches and wait for the parks to come."

- Dr. Avraam Mavridis

Urban sprawl advanced as the building industry continued to thrive, with bank loans, road improvements, increased income, and private car ownership contributing as well. These factors also contributed to the economic growth of Thessaloniki in the mid-1990s, which were heightened further when Greece changed its currency to the Euro (Gemenetzi, 2016). Despite having the opportunity to capitalize on the competition among international municipalities, Thessaloniki did nothing to benefit from its geographical location or natural beauty. Instead, the streams that had been redirected to the outskirts of the city were covered with dirt mounds so that construction and expansion of the city could continue over them, and greenery in public spaces was paved over (P. Christidis, et al., April 4, 2017). The city developed and built upon nearly all of its allotted greenspaces, resulting in a congested and polluted city (Gemenetzi, 2016).
BACKGROUND

CURRENT GREENSPACE MANAGEMENT PRACTICES IN THESSALONIKI

Presently, Thessaloniki struggles to maintain a limited number of urban greenspaces within the city. Employees for the Department of Green typically work from early morning, approximately 4:00 AM, to midafternoon. Directors delegate tasks to the employees, within a budget, put forth to manage public greenspace within the city (P. Christidis, et al., April 4, 2017). The public greenspaces are underutilized because of their poor maintenance, outdated design, and history of vandalism (Office of Urban Resilience, 2016). As a result, the city of Thessaloniki has made addressing the issue of managing public spaces one of its top priorities.

In 2014, the 100 Resilient Cities initiative accepted Thessaloniki into its program and the city has devised a strategy to promote co-ownership of public spaces in order to improve resiliency. As mentioned before, some of the parks and public greenspaces are outdated and poorly kept. As a result, Thessaloniki is looking into a new approach for maintaining public greenspaces. With a limited budget, empowering the community and citizens to take responsibility of some of these public spaces is more cost-effective than having the municipality workers manage the spaces (Thessaloniki Resilient Team, 2017). A policy will be put in place to promote the use of co-creation as a tool for city leaders (Thessaloniki Resilient Team, 2017). Co-creation requires citizens to be involved in every step of the design process of city projects (Thessaloniki Resilient Team, 2017). A manual will be distributed, as a part of this policy, to civil leaders as a guide to use the concept of co-creation to encourage co-ownership, with examples of best practices for implementing public space projects (Thessaloniki Resilient Team, 2017).
One example of an initiative that is found in the Resilience Strategy encourages citizens to co-create public spaces such as pocket community gardens. The purpose of this objective is to promote urban agriculture and repurpose the vacant greenspaces located throughout the city (Thessaloniki Resilient Team, 2017). This is one of the first efforts to publicize and promote a policy regarding community gardens in Thessaloniki.
BACKGROUND

SUCCESSFUL POLICIES FOR PROMOTING AND MANAGING COMMUNITY GARDENS

Various cities, states, and countries around the world have recognized the value of urban and community gardens to their citizens and have written policies and created programs in order to promote and support them. Seattle, Washington sets up its community garden program in this manner. In other cities, nonprofit organizations organize and support community gardens, with some help from the local government. Worcester, Massachusetts manages community gardens in this way.

Seattle's community garden program, called P-Patch, focuses on municipal support and promotion of community gardening within the city. The 88 community gardens in Seattle, shown in the map below, are managed by the staff of P-Patch with the goal to build community, awareness and security of all participants (Department of Neighborhoods, 2016). Gardeners gain use of a plot in one of the gardens through a rental system, that consists of a monetary contribution and a volunteer requirement to maintain common areas (Department of Neighborhoods, 2016). New community gardens are created through interest of a community member and a vigorous creation process, that includes community outreach and landscape design, to ensure success of the gardens (Department of Neighborhoods, 2016).
Worcester’s community garden system is based on community initiative and nongovernmental organization of support. The Regional Environmental Council (REC), an NGO founded in 1971, supports a network of 62 community gardens within the Worcester area (REC, n.d.). The goal of these gardens is to ensure food security and food justice throughout the city. The REC works with the city government to secure water and other resources for the gardens. These gardens are begun by community members approaching the REC to request support to transform a vacant lot in their community into a garden (Swanson, 2017).

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<th>Managing Agency</th>
<th>Seattle P-Patch</th>
<th>Worcester REC</th>
<th>Kipos3</th>
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<tr>
<td>Number of Gardens</td>
<td>88</td>
<td>62</td>
<td>1</td>
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<tr>
<td>Initiative for new gardens</td>
<td>Community members</td>
<td>Community members</td>
<td>Outside Source</td>
</tr>
<tr>
<td>Funding for new gardens</td>
<td>P-Patch Trust</td>
<td>Grants and Private Donations</td>
<td>External Grants</td>
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<tr>
<td>Support Provided</td>
<td>None</td>
<td>Outreach necessary for creation of new gardens, Harvest Donation Programs</td>
<td>Management, Structural Improvements</td>
</tr>
<tr>
<td>Community Outreach</td>
<td>Annual Events, Volunteer Opportunities</td>
<td>Poster Campaigns</td>
<td></td>
</tr>
</tbody>
</table>
BACKGROUND

CHANGING GREENSPACE IN THESSALONIKI: KIPOS³

In Thessaloniki, there is an urban vineyard and a community garden located on Agiou Dimitriou street, opposite of Kaftanzoglio National Stadium. The land was originally a parking lot for municipal vehicles and caused a large amount of pollution. People living around the area complained about this problem and how it negatively affected the citizens living in the neighborhood (Christidis et al., 2017). After listening to these complaints, the municipality made the decision to improve the area by installing an urban vineyard in 2013.

Two years later, the community garden, Kipos3, was created next to the urban vineyard. Kipos3 is an initiative to create a network of community gardens in Thessaloniki. The first phase was to map the city to find the best place to begin the first of the gardens. Unbuilt spaces were evaluated in terms of ownership status, accessibility, size, existing community integration and cultivation potential. Six plots fit the requirements, but the space ultimately chosen came with the support of the Municipality (Gavriilidou et al., 2015). The next step was to survey the community through posted signs that asked whether or not the installation of a garden on the space would be a positive or negative addition. (Gavriilidou et al., 2015). Of the six signs posted, all indicated positive responses to the addition of a community garden in the neighborhood (Gavriilidou, et al., 2016). The garden was installed from November 2014 to March 2015 (Gavriilidou, et al., 2016).
Our project goal is to understand what Kipos3 means to its participants and how this knowledge can be used by the municipality to identify and transform vacant public spaces into community managed spaces, using the concept of community gardens as a tool. To achieve this goal, we outlined three objectives:

**OBJECTIVE 1**

**DISCOVER WHAT COMMUNITY GARDENS MEAN TO THEIR PARTICIPANTS**

In order to gain an understanding of the meaning community gardens have to the people who are involved in them, we participated in a series of activities to forge and strengthen bonds with the members of Kipos3. These activities included working alongside Kipos3 gardeners to clean up the communal areas of the garden, observing a school trip to the garden, and participating in the expansion of the garden. Deepening our ties with the Kipos3 community allowed for more open sharing of personal experiences, which greatly improved our ability to interview some of the gardeners.
To further our knowledge about Kipos3, we became involved in the work that goes on to maintain the garden. The very first activity we did in the garden was clean up the communal rock garden and install birdhouses to a few nearby trees, side-by-side with the gardeners. This activity provided us with an opportunity to conduct participatory observation where we were able to observe how work is done in the garden while taking part in a communally organized activity (Coplen, n.d). By working with members of the community, we were able to experience the way Kipos3 operates firsthand, giving us a basis from which we could conduct further observations and interviews.
"I loved being able to contribute to the garden at the get go. As soon as we got there, we were able to jump right into helping out. The rock garden went from being a mess of weeds to a neat area in which the herb plants were actually visible. But, it did worry me that we had to be the ones to clean up this space of the garden. We will not be here for long, so I don’t know how long the improvement we were able to make will last once we leave. I wish we were able to involve more gardeners in doing this so we could have just been there for support rather than doing the majority of the work."

In addition to cleaning the garden, we also participated in a school visit to Kipos3. A group of approximately thirty middle school aged students visited Kipos3 to learn about greenspaces in Thessaloniki and participated in activities that we helped to set up. These activities included planting flowers, painting, and decorating a paper model of Kipos3 itself. Through participatory observation, we were able to learn about how a community garden such as Kipos3 can function as a classroom.
The final and possibly the most impactful activity we participated in within Kipos3 is the expansion of the garden. We worked together with some of the Kipos3 gardeners to construct eleven new raised beds. Through this participatory observation, we were able to engage in informal conversations with the gardeners and non-gardeners who were attracted by the construction. We asked both groups questions about the neighborhood and their opinions regarding the Kipos3 space. We were also able to take many photographs of the construction when appropriate.

Pavolas -
"My excitement for helping out with the Kipos3 garden expansion had been building since I arrived in Greece. I not only helped in the expansion of the garden by building eleven new raised beds and filling them with soil, but I also expanded my relationship with the gardeners. From having lots of gardeners come out to work with us on the expansion, to sitting around on the bench talking about the excitement of having new people join the community garden, I felt as if our team was now a part of the community, instead of an outsider working on a school project."

Eiko -
"I felt more comfortable talking to the gardeners during our in-depth interview because it was our sixth time visiting the garden. I feel like we were able really get to know the gardeners as people, and not just as a research subject. I felt comfortable talking to the gardeners because they were happy to share with us their experiences in the Kipos3 garden and it felt as if we were also part of the community."
While the expansion was going on, we were able to conduct a series of interviews which informed us about the personal feelings certain gardeners had in regards to Kipos3. We had the opportunity to talk to Yannis, Christina, and Katia during the expansion where they told us about how they became involved in Kipos3, what their favorite parts of the garden are, and how they think Kipos3 can be improved. All of the interview questions may be found in Appendix A.

Yannis -
He is a middle aged man who works as a CT-scan technician and lives in one of the apartments surrounding Kipos3. He has plots in Kipos3, as well as on his roof and in PERKA, the community garden that was previously an abandoned military camp. Yannis has been gardening for about four years with no prior experience.

Katia and Christina -
They are a mother-daughter duo who live in one of the apartments surrounding Kipos3. Katia has been participating in the garden for just under a year. Her parents and grandparents had their own gardens, so she was very excited to get involved with Kipos3. Christina is a student in high school, working on her exams this year.
Yannis was also kind enough to invite us to PERKA for a personal tour. While at this other community garden on the west side of Thessaloniki, Yannis discussed the similarities and differences between the communities of Kipos3 and PERKA. In addition to learning a new perspective on community gardens, we took photographs of individual garden beds and tasted some of the organic produce.
OBJECTIVE 2

IDENTIFY LOCATIONS FOR COMMUNITY GARDENS IN THESSALONIKI

So that we may determine the potential for new community gardens in Thessaloniki, we first had to discover potential locations. Our partner, Eleftheria, recommended three specific regions to us to investigate: above the waterfront, throughout Ano Poli, and the west side of the city, with one full day dedicated to the investigation of each.
We set a goal of five potential spaces for each region, with a minimum of ten total, though some regions had significantly more vacant spaces than others. We found four locations above the waterfront, six in Ano Poli, and two on the west side of the city, resulting in twelve total locations. Maps of our walks through these three regions may be found on this page. These walks were unplanned prior to arriving in each region, and when we found a location we liked, we assessed it based on the following criteria. Only spaces that were estimated to fit more than ten, four square meter plots were considered. We also inspected the amount of sunlight and the health of the weeds to determine if the location would be able to bear a successful crop.

Once the previous criteria were met, we set a timer for five minutes and counted the number of vehicles and people passing by the space. We made note of any potential sources of pollution as well as access to water. We also assessed the security of the locations by observing street vantage points and relative distance from more popular landmarks, such as cafes and markets. We decided to look into these criteria based on our research and interactions with Kipsos3 gardeners. We took many pictures of each location and recorded personal observations for them as well, in addition to pinning the coordinates of each space on Google Maps using our phones so we could return to them. We used GIS software to determine the exact area and perimeter of each of the twelve vacant spaces as well as our estimated budget to convert them into community gardens which can be found in Appendix B (www.ktimanet.gr, 2017).
<table>
<thead>
<tr>
<th>Time</th>
<th>Amount of sunlight</th>
<th>Access to water</th>
<th>Foot traffic</th>
<th>Vehicular traffic</th>
<th>Security</th>
<th>Size</th>
<th>Pollution sources</th>
<th>Soil quality</th>
<th>Relative distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>12:17</td>
<td>Good, mostly full</td>
<td>Questionable</td>
<td>17 people/5 min</td>
<td>20 cars/5 min</td>
<td>Visible to street</td>
<td>477.5 m²</td>
<td>trash in space, close to road so some pollution from traffic</td>
<td>Plants look to be doing well but the plants are all weeds.</td>
<td>Half a block from the main road on either side</td>
</tr>
</tbody>
</table>

Rachael's observations

This was a triangular shaped space with lots of weeds and some trees. in front of a street connecting two main roads with nothing to separate this space from the road. parking spaces on the road. cafes next door and across the street. an airy and sunny area that would be nice for a garden but in a very busy area.

Pavlos's observations

a very comfortable area, in between two main roads but far enough away that the cars dont make too much noise. lots of trash in the area. lots of vegetation growth which are mostly weeds but soil is promising. lots of sunlight, very safe and secure, no obvious sources for water.

Eiko's observations

Open and completely visible to street, parking lot in the front, one way road. next to a cafe, big.

Rachael's observations

Great sunlight at 12:17 PM. LOTS of green, quiet, lots of parked cars, elderly and adult passersby but is definitely not exclusive to that demographic, pretty big space, apartments and shops nearby, very open, no fences, potentially live palm trees, some litter, seemingly no stray animals, definitely a public space.

Rachael -

"We spent three days walking around the different sections of Thessaloniki. It was fun, we got to be tourists and take lots of pictures, but it sure was exhausting! The entirety of Ana Poli is on a very steep hill, so I got to break in my hiking boots. We got some weird looks from people; one elderly woman in particular even started questioning us about what we were doing and clearly wanted us to leave. An older man also questioned us and seemed very grumpy once he realized we couldn’t speak Greek. Both of these incidents occurred in very quiet residential areas above the waterfront. They probably thought we were some young punks slinking around in the alleys between apartment buildings."
Pavolas -
"Our team walked about fifteen miles searching for potential community garden sites within the city. I was very tired after the three days of walking and observing the vacant greenspaces. I was really excited with some of the hidden gems we found because I could imagine myself gardening in these spaces. Seeing all the vacant greenspaces around the city makes me believe there are a ton of potential sites for people to change into something amazing."

After compiling our photos, notes, and observations for each space, we determined our top three favorite potential community garden locations to investigate more in depth. Our decision was based on our personal impressions and discussion amongst the four of us. We also made sure that we chose one potential location per region.

Rachael -
"We went with our gut feelings when we chose our top three locations; it was basically love at first sight, especially the Hill Garden in Ano Poli. The other ones are really nice too, but that one is the best. It’s so beautiful and serene, I felt very comfortable imagining myself staying there for several hours tending to my garden. Being there made me feel happy."
Rachel -
"Choosing which spaces we were going to focus on was a fairly simple process, because Eleftheria wanted us to use our intuition to choose the spaces. The space on the hill in Ano Poli was our favorite space by far because of the aesthetic value, with the views, and because of the novelty of gardening there. The space is unique from the rest that we found and we thought it would be really cool to be able to garden there."

Eiko -
"Walking around Thessaloniki finding vacant spaces was an interesting experience! From getting strange looks from citizens to walking miles to find the place we wanted to take a look closer, I felt frustration as well as excitement. I enjoyed imagining people working in these vacant lots as many of the sites were like blank canvases, waiting to be changed into a space to relax and spend time with others while gardening."
After deciding which three locations we wanted to investigate further, we created a survey with seven questions to gauge the interest level of the surrounding community. The survey was written in both Greek and English and may be seen in Appendix C. The demographic information can be found in Appendix D.

Accompanying the surveys was a sign with the phrase “Show us how you imagine this place” written in Greek. We stood with our sign directly in front of the space in question, with two of our members holding clipboards and pens with blank surveys. The final team member took photographs and stood across the street to engage passersby from a distance. Many people walked past us and did not take the survey, but did shout their responses to our sign, which we recorded on the backs of the surveys.

Rachael -
"My Girl Scout cookie selling days prepared me to stand proudly next to our colorful poster and cheerfully use my limited knowledge of the Greek language to ask passersby to take our survey. Those who did seemed to care very much about the spaces we were trying to bring attention to, and the comments they made in passing really drove home the importance of our project. From what we heard, people don’t like living next to a patch of grass covered in trash and graffiti, nor do they like living next to barren concrete wastelands. People want and need greenspaces where they can get away from the hectic city streets and enjoy the beauty of nature. Being able to help with that, even a little bit, is a wonderful feeling."
OBJECTIVE 3

LEARN HOW THE MUNICIPALITY CAN BEST SUPPORT COMMUNITY GARDENS

The Resiliency Strategy of Thessaloniki for 2030 includes the creation of new pocket community gardens as a method to revitalize the urban landscape. We wanted to learn more about the municipality’s plans for community gardens as well as how public space is currently managed, so we conducted an interview with Pashalia, an employee from the Department of Green. We met her in the municipal vineyard next to the Kipos3 garden one morning and she told us about how her department manages greenspaces in the city.

We also interviewed our partner, Eleftheria, in order to learn about her experiences with the municipality regarding the building of a community garden from scratch. We wanted to know about what she learned regarding policies surrounding community gardens from her travels as well.
While on our walks throughout Thessaloniki, we came across twelve different spaces that might be able to be converted into community gardens. The following four pages display all twelve spaces with accompanying information. The three spaces we chose to investigate further are labelled in yellow and are described in depth on later pages.
Gated-In
An alley–like space that currently serves as a front walkway
Size: 280 square meters
Possible Plots: 19
Traffic: Moderate
Budget: €2,088.00
We liked this space because there was already vegetation growing and it was quiet. We thought the possibility of having a community garden directly outside of an apartment building was very interesting.

Hidden Oasis
Open and leafy space in the middle of a city block
Size: 600 square meters
Possible Plots: 42
Traffic: Light
Budget: €4,256.00
We liked that this space was hidden from the road and was very quiet. The privacy it afforded was unique from the other spaces we encountered.

Palm Tree Patio
Space full of potted trees in front of an apartment building
Size: 176 square meters
Possible Plots: 12
Traffic: Light
Budget: €1,296.00
We liked that this space already had signs of gardening. It was also very sunny and bright, making it an enjoyable place to be.
High Rise
Triangle-shaped space facing a road
Size: 477 square meters
Possible Plots: 33
Traffic: Heavy
Budget: €3,088.00

We liked the size and openness of this space. It also had a good balance of sun and shade, and privacy and accessibility.

Let's Make A Deal
Large open space that currently is for sale
Size: 1760 square meters
Possible Plots: 123
Traffic: Light
Budget: €10,408.00

This space is very large and we liked the idea of having many people involved in one space. It was also very accessible, sunny and open.

Hill Garden
Space on a hill with a few flat areas perfect for gardens
Size: 900 square meters
Possible Plots: 63
Traffic: Light
Budget: €6,160.00

This space was by far our favorite of all of them. The views were the main part of this space that drew us, as well as the thought of how interesting it would be to have a garden on a hill property like this.
Church Courtyard
Small area near a church that overlooks the city
Size: 171 square meters
Possible Plots: 12
Traffic: Moderate
Budget: €1,328.00

We liked this space because of how much vegetation there was, as well as the awesome views of the city and bay. There was also a nice mix of shade and sun.

Sea of Cement
Dirt parking lot in the middle of a commercial area
Size: 729 square meters
Possible Plots: 51
Traffic: Moderate
Budget: €4,896.00

We liked this space because of the size and accessibility. It is also very sunny and open.

Park Place
Small lot in a residential area across from a large park
Size: 233 square meters
Possible Plots: 16
Traffic: Moderate
Budget: €1,648.00

We liked the proximity of this space to a large park and a school. We thought it presented interesting opportunities for a garden.
Gravel Lot
Small lot in a residential area across from a large park
Size: 165 square meters
Possible Plots: 11
Traffic: Moderate
Budget: €1,216.00

We liked this space because it was sunny and open. It was also hidden road ground through a small neighborhood, and next to lots of apartments. There were also lots of vegetations already growing.

Stroll in the Park
Space currently outfitted as a park
Size: 620 square meters
Possible Plots: 27
Traffic: Heavy
Budget: €2,960.00

When we went to this space, there was a farmers’ market occurring nearby. We thought having the farmers market next to the space would be pretty amazing.

Frontyard Farm
Many small areas scattered through a government housing complex
Size: Variable
Possible Plots: Variable
Traffic: Light
Budget: €46,336.00

This space offers a lot of opportunity to expand, because of the connected green areas throughout the apartment complex. We liked that possibility along with the sunny, green spaces.
This space was the fourth one we found on our first day of walking. It is situated on a fairly busy road and is enclosed on three sides by apartment buildings. There are a few cafes down the road and there were many people walking by when we were there.

Talking to the people who we surveyed, it seems as if people are interested in the place changing b.e it a park for children or a community garden. One of the people we surveyed had told us that he would be interested in seeing a change in the space and would like to see the community around the neighborhood grow. Through the surveys we found that many of the people wanted to have a place to meet and use the space as a place for children. Another common theme we found through the survey was that the people did not like the space because it has a lot of trash and the place was kept unclean. From this we can tell that people would like to see a change and have a cleaner space nearby.
HILL GARDEN

This space was our favorite one of all the spaces we surveyed. It was the second space that we found on our second day of walking. It has great views of the city, the bay and, on clear days, the mountains across the bay. It has two flat areas suitable for cultivation and the road going through it is used frequently by people passing through.

The interest level at Hill Garden was higher than most of the sites and there seemed to be younger people (age 20–30 years old) interested in seeing a change in the space.

Many of the younger people were excited to help us out with the survey and expressed their interest in changing the space. We also had several people who did not participate in the survey but call to us that they wanted to see a park and a place for children in the space. We also found out through a man passing by that the space was registered to be a school but nothing has been done yet. We thought that this information was interesting as the place seemed to be abandoned but from what we found out through the man, the vacant space was supposed to be a school.
This space is many individual areas scattered throughout government housing. The exact area and budget for this space is unknown, because there are a variety of options for how big to make a garden here. It could begin in one of the spaces and grow as awareness of the garden grew. All the areas are grassy and well-shaded. Front Yard Farm had less participants in the survey because there was a small number of people walking around the space. Moreover, if we approached people to take our surveys, we found that people were either too busy or not interested in taking our surveys. Since the apartment buildings around the Front Yard Farm are low-income housing, we thought we might get more interest from the neighbors since the might want to get a garden so they can grow their own food. However, maybe because of the language barrier or the fact that people just weren’t interested in seeing a change on the site, there were not many interest in taking the survey.

From the small sample size of the survey as well as the people who approached us and tried to talk to us in Greek, we found that a common theme in the Front Yard Farm was that people found the place dirty and that they wanted a cleaner place. Another common theme we felt was that the citizens felt that even if the place was to be changed, the citizens will not be able to care for it and would end up becoming an unclean space that nobody wants to garden, even though the space was transformed.
FINDINGS

BENEFITS OF COMMUNITY GARDENING

Through interviews and observations, we were able to learn about how community gardens benefit their participants. We learned about the garden functioning as a classroom, a place for family, community, and as a reliever of anxiety. These themes are explored below.

“... you can’t put any water in a full glass. When you start something new you are an empty glass, you can put a lot of information and see what inspires you.”

- Yannis
THE GARDEN AS A CLASSROOM

One of the benefits that the Kipos3 garden provides to its participants is an opportunity for education. Using the garden as an untraditional learning space allows participants to gain knowledge in a different and interactive method. We learned about the garden as a classroom during the high school’s visit to the Kipos3 garden and our interview with Yannis, one of the gardeners at Kipos3.

The garden was used as a classroom to educate students about greenspace and environmental issues during a school trip to the garden. While in the garden, the students were able to draw on a plan of the garden in order to add structures they thought would improve the garden, as well as create art designs for a blank wall at the back of the garden space. They also had the opportunity to plant a variety of vegetation the rock garden we helped to clear and in flower pots. The garden, through these activities, served as a way to introduce more hands-on and interactive learning experiences, an opportunity not generally available in a traditional school setting. The activities put on during that session gave the students the chance to immediately engage with the subject at hand and try to create solutions. The issues presented to them, the design of the garden and replanting the communal areas, were real ones facing the gardeners and the students were able to participate in tangible ways to solve relevant problems. The garden was a suitable setting to educate the students in environmental issues and in how to take action.
Another way we saw the garden as a classroom is through speaking to Yannis. Yannis’ main reason to begin gardening was to provide food for him and his family during the financial crisis. He stated that because food was the only necessity to which he was not guaranteed access, he wanted to learn to garden in order to supply food. He first started to grow food on his terrace and rooftop, then got a plot of land in Kipos3 to cultivate. The financial crisis was the first time that Yannis had found the need to begin to garden, so he has relatively little experience with growing food. But, when we asked about this further, he did not see his lack of experience as a weakness but as a strength.

To Yannis, Kipos3 was a laboratory where he was able to experiment and learn about gardening. He also wanted to use the space as a place of inspiration to see what could be done in a garden, once referring to his gardening as art. From listening to Yannis talk about his experience learning how to grow, we think Kipos3 has benefited Yannis by providing him a place to experiment and explore his style of gardening. By having the space as a place to investigate an idea and learn about gardening, Yannis was able to gain knowledge and experience in working in the soil.
Another benefit of being involved with a community garden is that the garden provides a space for family to gather. During our interviews and conversations with Katia and Yannis, we learned that they both enjoy taking their family members to the Kipos3 garden. We believe that one of the benefits that participants can gain from the garden is the opportunity for family to spend time together. For the two gardeners we interviewed in the Kipos3 garden, spending time with their family in the garden seems to be an important component of being in the garden. Katia mentioned that one of her favorite moments in the garden was when she brought her nephews to the garden and they spent hours pretending to be druids, making a potion made with water, soil, and grass. In the end, she used this potion to water her garden because it was “magical”. Yannis also mentioned that he often brings his son to the garden to spend time together. For both of the gardeners, having an opportunity to spend time with their family outside of their homes seemed to be important. Gardening is also a tradition in some of the families that garden, like Katia, who had informed us that gardening was a tradition in her family. From her grandmother to her father, she has grown up around people that garden and has continued to carry on the tradition of gardening. Her daughter, Christina is also very involved in this family tradition, as she informed us that she may want to potentially work in one of the new plots from the expansion. To have a community garden in a neighborhood benefits those that want to carry on a family tradition. The garden provides a place for the family to continue gardening and teach their children how to garden.
Whenever we visited Kipos3, there would usually be more than one gardener working on their plots or the gardeners would come by to say hello if they are walking by the garden. The two gardeners we interviewed in Kipos3 were able to make friends with the other gardeners and met people that they would never have met otherwise. Yannis told us that the financial crisis had made him feel helpless. But, participating in Kipos gave him a larger support system and helped him feel stronger. The community was able to help and learn from each other, connected by this common pursuit.

Katia had also mentioned that she made some friends by gardening in Kipos3. She informed us that the Kipos3 garden had a Facebook page where they communicated their ideas and that they would often meet each other in the garden. From this we learned that the community created by the garden went beyond just the garden space. Katia also told us that some of her friends were going to get new plots in the expanded garden. The garden serves not only as a way for people to meet but also as a place for connections to be deepened. Kipos3 brings together new friends and old ones to connect over a shared passion.

“Sometimes you think you can't do something but when you are in a community, you feel much stronger.”

-Yannis
THE GARDEN AS A PLACE FOR PSYCHOLOGICAL RELIEF

Psychological relief was a common theme between the two gardeners that we interviewed. To the two gardeners, gardening was something they did to relax and enjoy their moment. Katia had mentioned that she benefits from gardening in Kipos3 as “it relieves anxiety”. Yannis had also mentioned that gardening is something that he did to relax. For both the gardeners, Kipos3 was a place where they could be closer to nature, occupy their minds, and have food security, which helps them psychologically. Community gardening allows the gardeners to come in direct contact with the soil as opposed to working with potted plants. When Katia was asked what the difference in gardening on a terrace and in Kipos3 was, she mentioned that “it is immediate contact with the Earth.

Being able to work in the soil allows the gardeners to feel closer to nature and allows them to feel a sense of calm. To have a space in the neighborhood that the two gardeners can relax in is beneficial for them as they are able to take a break from their daily struggles. Moreover, by keeping themselves busy in the garden, they are able to provide themselves with food. This helps the gardeners in terms of food security because they are self-sustaining. Yannis’ reason for starting to garden was to be able to provide for himself in the financial crisis so the fact that they are able to garden and grow their own food relieves the gardener’s anxiety.
Through our observations and the data we gathered, we saw a strong interest in community gardens. However, we found obstacles to starting a community garden in Thessaloniki, including a lack of initiative amongst citizens to begin a garden, a lack of awareness of what a community garden is and an absence of strong municipal support. To learn about these themes, we administered paper surveys to people in order to gauge the interest level of the participants for wanting a community garden at three of the vacant greenspaces. Additionally, we did in-depth interviews with the gardeners at Kipos3 and Eleftheria who told us their thoughts on the difficulties of starting a community garden in Thessaloniki. Furthermore, through background research, we found important differences between the support structures for community gardens in Thessaloniki, Greece; Seattle, Washington; and Worcester, Massachusetts that may account for differing success levels.
The surveys we did in vacant greenspaces gave contradictory data for interest in and knowledge of community gardens. First, six people participated in our survey at “High Rise”. Of those six people, five had never heard of a community garden, but four of these people said they would be interested in a community garden. Next, nine people took a survey in the Ano Poli district at the site called Hill Garden. Here, three out of nine people said they were very interested in having a community garden in the space while six of these people in total had never heard of a community garden. Finally at the site called Front Yard Farm, three out of four people we surveyed said they were very interested in a community garden, but only two had heard of or participated in a community garden. Compiled data from all survey sites can be found in the graphs on this page and the next. Graphs of data from each site individually can be found in Appendix D.

Compiled Data of Interest Level in Community Gardens

- Very Interested: 53%
- Interested: 16%
- Slight Interest: 16%
- Neutral: 5%
- Not Interested: 11%

n = 19
The difference between the interest in and the knowledge of a community garden demonstrates that citizens like the idea of a community garden but have no prior experience with the concept. This discrepancy will be a significant barrier to creating more community gardens because most people would likely want a different type of improvement in these unused spaces. In the open ended part of the survey, about half of the respondents wanted the area to become some sort of greenspace or park with flowers and greenery while the other half said they would like to see a playground for children in the space. Though there is a strong interest in community gardening demonstrated in one part of the survey, the preferred use of the spaces is not community gardening. The lack of awareness of community gardening is most likely a significant factor in this finding.
Many of the citizens of Thessaloniki are preoccupied with the current fiscal crisis and might not have the time and energy to start a community garden. We asked Yannis about this and he said “We do not have enough people who can start such a project.” The reason he gave for this opinion is that the economic crisis in the country has made people depressed so they do not want to take a risk on spending time to start something new such as a community garden. In their busy lives, time is a precious commodity and investing it in a project that may not succeed could result in a loss of money, due to unpaid working time, or time with family. Additionally, we talked to approximately thirty people when we were surveying in the potential community garden sites, either to take the survey or say a few words about the space. The overwhelming impression we got was the majority of people would not want to attempt to change the space. This could be due to people in a low socio-economic class focused on work, younger people taking care of their families and studying, or older residents wanting to see a park for their grandchildren.

Additionally, in the Kipos3 garden, there are opportunities for people to work in the communal areas like cleaning up the plant waste from the overflowing composting bins, taking care of the communal raised bed, and weeding in the herb garden. Even in a community garden, we observed that participants did not take responsibility for the areas over which they did not have exclusive ownership. However, currently, there is no governance structure in Kipos3, most likely due to the small number of gardeners involved and the short time the garden has existed. This absence of governance and the external motivation a governing body could provide could be the reason in Kipos3 for the insufficiency of the care given to communal areas. This hesitancy to take care of places for which there is no explicit ownership may be a barrier to the progress of community gardening in Thessaloniki.
The municipality also wants to work with the youth and help them with their ventures or ideas. Our observations from our time surveying tell us that the youth of Thessaloniki are the most likely population to want to improve their city. For example, one twenty-one year old male who had just graduated from university had a lengthy conversation with us about the need to take on initiative to engage residents in vacant spaces. He seemed interested and inspired by our project and connected with our goal to revitalize the unused spaces. Similarly, Eleftheria wants the younger generation in Greece to take a more active role in taking on projects such as Kipos3. She stated “Only … some group of students… with great energy that have ideas” and “the initiative to overcome all the bureaucracy to implement” would be able to take on the job of making the city engaging. The youth in Thessaloniki seem to be the most engaged and motivated when it comes to reinvigorating the urban landscape.
ABSENCE OF MUNICIPAL SUPPORT

The community garden programs in Seattle and Worcester have been fairly successful in terms of organizing and supporting interest in urban agriculture. Both have established networks of gardens for its citizens to secure the benefits of community gardening that each has identified. There is no community gardening program in Thessaloniki, only two independent gardens in the greater metropolitan area, Kipos3 and PERKA. These gardens are lacking much of the municipal support that the programs in Seattle and Worcester enjoy. The city of Thessaloniki does not have a support system for community gardens and an outreach method to promote the gardens.

In Seattle, the city government itself has taken on the task of supporting and promoting community gardening. In Worcester, there is a well-established and well-known non-governmental organization that coordinates gardening, though it is important to note that it does struggle for funding. In an interview with Eleftheria, we learned that the municipality in Thessaloniki has no “mechanism to run” community gardens and it has no experience “on how to manage this kind of project”. One of the major differences between the programs in Seattle, Worcester and Thessaloniki is the existence of some sort of system for the creation and management of community gardens. There is no established method for implementing this sort of project in Thessaloniki, as there is in Seattle or Worcester.

Due to the lack of established methods in Thessaloniki, Eleftheria says there is an absence of support from the municipality, such as weeks of delay in the approval of the planned garden expansion. In our observation, these delays served to decrease her faith in the municipal process, which could lead to hesitancy to begin such a project again. While talking to Eleftheria, she said she would “not start again the whole process from zero”. The difficulty she encountered is due to an unfamiliarity with these sort of projects on the part of the municipality, not any type of incompetence, but poses an obstacle to growing community gardens in Thessaloniki. The inexperience of the municipality of Thessaloniki in this regard is a significant barrier to the development of future community gardens.
Throughout our time here, we have made an effort to understand what Kipos3 means to its participants and determine how this knowledge can be used by the municipality to identify and transform vacant public spaces into community managed spaces. We went out into the city and discovered a handful of fairly decent vacant spaces that could become community gardens. Our interactions and communications with members of Kipos3 taught us several ways community gardens can benefit those who participate in them, namely by providing opportunities for learning, a space for family, a setting for the creation of a community, and a respite from daily worries. We believe these benefits make the pursuit of the possibility of new community gardens worthwhile for the citizens of Thessaloniki, but there are a number of obstacles that must be overcome before such an initiative can be successful. These obstacles include the absence of a municipal structure for the approval and management of community gardens, the scarcity of initiative of Thessaloniki citizens, and the lack of awareness of the concept of community gardens throughout Thessaloniki.

The first step to overcoming these obstacles is for the municipality and citizens to work together. The “top-down” approach provided by the municipality and the “bottom-up” approach provided by the people should meet in the middle to collaborate efficiently. Kipos3 itself is a result of a combined effort, and as a nationally recognized community garden, we believe it to be an excellent model for a “middle-ground” approach. The “top-down” portion allows for a smoother legal process and provides some consistency in the organization of different projects. The “bottom-up” contribution is equally valuable because only the citizens themselves can provide expertise about their own communities. They are also able to give relevant input regarding the types of projects that are needed and ensure commitment from their fellow community members. Significant investigation must be conducted regarding the operations of “top-down” and “bottom-up” approaches before any further steps can be recommended. We have provided some questions that may beneficial to look into.
Questions for Further Research:
1. How can enterprising citizens secure land rights or building permits?
2. How can citizens be motivated to make a physical change in their communities?
   a. How do demographics and socioeconomic statuses affect motivation?
   b. How do citizens currently mobilize each other to make a change? Do they?
      i. If not, what needs to change in order for citizens to take action?
3. Is it possible to start another greenspace initiative similar to PERKA, in relation to guerrilla gardening?
   a. Why or why not?
4. What support do enterprising citizens require to revamp an abandoned space?
   a. What type of support from fellow community members?
   b. What type of support from the municipality?
5. How do the citizens want to see their abandoned spaces changed?
6. How can students get involved in taking initiative within Thessaloniki?

Perhaps a concise document or handbook can be created that describes the official process a citizen must go through in order to achieve municipal approval. It may be beneficial if there was a single compiled resource for interested citizens to learn about the necessary legal steps one must take to revitalize a space. Depending on the individual person’s plan, a large initiative could require finding sponsors for funding, writing letters to interested parties, or giving formal presentations in front of a committee of officials. A document that contains steps or tips on how to navigate these proceedings could be enough help for some people to take action within their communities.
Lastly, the citizens themselves should be engaged in the process of starting projects like Kipos3. Since there are countless benefits to those who directly participate in the garden, people should be part of the process of creating it. We believe that the youth populations would be the most likely to be involved in taking this leadership role, such as Eleftheria and the young man we talked to during our surveys. Since we don’t currently have enough information to make recommendations to this group, we suggest a number of questions to investigate further.

Questions for Further Research:

1. Why would citizens get involved in community gardens?
2. What populations would take the lead in this sort of project?
3. What support would they need to make a community garden successful?
4. What needs to change in order for citizens to take action?
5. How do community members mobilize their communities?
6. What do students specifically need in order to take initiative in the city?
ACKNOWLEDGEMENTS

The Kipos3 Team would sincerely like to thank our partner, Eleftheria Gavrilidou, for her continuous motivation and inspiration. This project would not have happened without your guidance and support.

We would also like to thank our advisors, Professor Hersh and Professor Elmes, for their constant support and feedback throughout this project. We appreciate your instruction and input to make this project successful.

We appreciate the gardeners of Kipos3 for welcoming us into their community for the past eight weeks. Your help and expertise greatly helped us develop our project.

We would like to give a special thank you to Yannis, Katia, Christina, Chrysoula, and Gabriel for making Kipos3 an enjoyable experience. We enjoyed getting to know you, and your input really helped make this a worthwhile experience for us.

We would also like to extend our special thanks to Dr. Avraam Mavridis. You helped us understand the situation of the greenspaces in Thessaloniki, suggested how we might evaluate them, and showed us how to use GIS. You also allowed us to use your pictures.

Finally, thank you to the American Farm School for hosting all of us. You have provided us with support in ways beyond our project and we appreciate all your help.

This report represents the work of WPI undergraduate students submitted to the faculty as evidence of completion of a degree requirement. WPI routinely publishes these reports on its website without editorial or peer review. For more information about the projects program at WPI, please see http://www.wpi.edu/academics/ugradstudies/project-learning.html.
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APPENDIX A

Gardener Interview Questions

These questions are for the gardeners in Kipos3 in order to learn about their experiences in the garden, their reasons for getting involved in the garden, and about the community around the garden.

1. Tell us about your experiences in the garden.
2. How do your experiences in the garden compare to your initial expectations?
3. Why did you start gardening? (community gardening?)
4. What have been your favorite times in the garden? Least favorite?
5. What can be done to improve the garden for the gardeners?
6. How has Kipos evolved?
7. How has the existence of Kipos affected the neighborhood?
8. What do you think about more community gardens around the city?
APPENDIX B

Budget Calculations

Fencing costs 8 €/m
A sample calculation is as follows:
perimeter of space*8 €/m = total cost of fencing (€)

Wood for raised beds costs 6 €/m. Kipos3 beds are 4 m2.
The wood required for a single Kipos3 bed costs €48.
To find the total amount of wood needed for a space, the area must be found using GIS.
A sample calculation is as follows:
€48*number of beds = total cost of wood (€)

Soil costs 18 €/m3. Three Kipos3 beds use 4 m3.
A sample calculation is as follows:
number of beds3*18 €/m3*4m3= total cost of soil (€)

The number of beds in a space is determined by the area, using Kipos3 as a reference model.
Kipos3 is 300 m2 total and the raised beds occupy 84 m2, which is 28% of the space. There are 21 beds total. For our purposes, we are referencing pre-expansion values.
A sample calculation is as follows:
0.28*(area of space [m2])(area of raised bed [4m2])= total number of raised beds

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</table>
We are a student group from Worcester Polytechnic Institute in Massachusetts, United States investigating the possibility of building new community gardens in Thessaloniki. We are doing this project as a requirement for our university. This survey is to gauge interest in making this space a community garden. We will use these results to make recommendations to the municipality of sites for new community gardens. Your responses will be kept confidential. If you are interested in the results of this survey or have any issues, please contact us at kiposD17@wpi.edu.

A community garden is land used by a group of citizens to grow produce, herbs, and flowers. It can be individually or communally cultivated and requires a commitment from participants to care for the space. The garden promotes a positive and sustainable environment for neighbors to work together.
1. How long does it take you to walk to this space from your place of residence? Place an X on the scale.

Less than 2 minutes 6 – 8 minutes More than 15 minutes

2. Would you be interested in seeing a community garden in this space? Place an X on the scale.

Not interested Neutral Very interested

3. What facilities would you want to see here? Write your response, you may use the back of the page if you want more space.

Facilities related to gardens and gardening
Other non-gardening purposes (dancing, playing, coffee, et cetera)

4. Describe your experiences with gardening (taking care of a flower pot, growing vegetables in the ground, et cetera). Write your response, you may use the back of the page if you want more space.

5. What do you like or not like about the space as it is? Write your response, you may use the back of the page if you want more space.

What do you like?

What don’t you like?
6. Why would you participate? Check all that apply.

- Access to fresh vegetables/growing my own food
- Learn about gardening
- Save money
- Socializing/Recreation/Community Involvement
- Enjoy gardening
- Other (write your response)

7. How familiar are you with other community gardens, such as the Kipos community garden, across from the Kaftanzoglio stadium? Place an X on the scale.

Thank you very much!

Prinzessingarten, Berlin
APPENDIX D

Survey Results

High Rise

Interest Level

Not interested  Neutral  Slight Interest  Interested  Very Interested

Gender Demographics

Female
17%

Male
83%
Reasons to Participate

- Food
- Learn
- Save Money
- Socializing
- Enjoy Gardening

Awareness of Community Garden

- Never heard of
- Heard of
- Visited
- Participates

Age Demographics

- 20-30
- 30-40
- 40-50
- 50-60
- 60+
Hill Garden

Interest Levels

Gender Demographics

Female
22%

Male
78%
Combined Demographic Data

Gender Demographics

- Male: 68%
- Female: 32%

Age Demographics

- 20-30: 2
- 30-40: 8
- 40-50: 2
- 50-60: 5
- 60+: