

Project Proposal for Gordon Neighborhood House's Rooftop Garden

Group 14

Zara Neukom

Sarah Mackenzie

Serafina Liotti

Faye Li

Jin Wang

LFS 350

University of British Columbia

Introduction & Context

The overarching aim of our project is to assist Gordon Neighborhood House (GNH) with their urban farming programs and to help further their goals of fostering community connection through food. Our project will focus on assisting in development of the newly acquired rooftop garden space. More specifically, this proposed project will assist GNH in creating a site plan and map of the rooftop garden for the purpose of planning and to contribute to a business license application. The site plan will provide a visual guide of what the rooftop garden has to offer in terms of growing space, and will provide the foundations needed for complimentary crop planning. The site plan is also required for a business license application, which would allow GNH to sell the produce from the rooftop garden at their Food Hub, and in other venues.

Gordon Neighborhood House is a community hub in the West End of Vancouver, BC focused on community connection and development. GNH works with the community to facilitate connection, engagement and collaboration by offering adaptive programs and services which suit the needs of the West End (Gordon Neighborhood House, 2017). The GNH has been providing free and low cost programs, such as community lunches, capacity building workshops and neighborhood socials, since 1942. They work closely with members of the community, sister organizations, and policy makers to foster inclusion and equality. GNH takes a food-centered approach with all of their endeavors. They believe that food brings people together and establishes a common ground for people to connect. Their philosophy is built from the idea that food not only nourishes a person physically, but also has the potential to nourish relationships between people (Gordon Neighborhood House, 2017).

This project will assist GNH with their goals of providing fresh produce to the community, and keeping their programs food focused. The rooftop garden space is an

opportunity to increase the overall produce yield for GNH, and further along plans to sell produce throughout the west end. By working with Joey Liu, the farmer and program coordinator at GNH, to create a site plan and get the rooftop garden ready for spring, we will be contributing to the overall goals of the organization.

Significance

In order to develop a comprehensive plan for the GNH rooftop garden, a review of the current literature is necessary in order to provide a framework and define nuances that will guide this project forward. Firstly, an understanding of the environmental as well as social benefits of urban farming within a contemporary context is essential.

Urban farming has the potential to improve food security, contribute to environmental sustainability, stimulate the local economy and bring people closer to the food they eat (Orsini et al., 2013, Lui et al., 2016). With the growing population and the increase in urbanization, reducing food miles can increase the nutritional value and produce less waste/emissions (Orsini et al., 2013). Thus, Urban agriculture contributes to ecological footprint of cities by reducing waste, improving air quality and biodiversity, and using less energy related to food storage and transportation (Orsini et al., 2013).

Urban farming, although generally centered on production and economic gain, is often tied to social missions related to food security, education, and community building (Dimitri, Oberholtzer, & Pressman, 2016). Communities with marginalized populations often have lower gross incomes and are more likely to be entwined in social programs, as well as experience inequality, food insecurity and discrimination (Dimitri et al., 2016). Urban farms can be a source of community engagement, employment opportunities, access to nutritious food and provide an

increase in autonomy to community members. Currently, social missions are the primary cause of the recent growth of urban farms (Dimitri et al., 2016).

An extensive 2-year study on the resource needs for urban agriculture in metropolises defined stakeholder goals and situated them within the broader context of urban farms (Cohen & Reynolds, 2015). The data and the five goals of this analysis provides a framework for how the GNH rooftop garden could be developed, it also creates a standard that ideally, this project could reflect.

1. *Environmental goals*
 - a. Increasing green space
 - b. Utilizing empty lots and rooftops
 - c. Fostering environmental stewardship
 - d. Increasing the aesthetics of the area with green spaces
2. *Public health goals*
 - a. Providing access to nutritious food
 - b. Educating the community
3. *Social and Educational Goals*
 - a. Job skills
 - b. Environmental/agricultural education
 - c. Empowerment for women and youth through leadership roles
4. *Economic goals*
 - a. Financially secure plan for the farmer, for the sustainable farming system
5. *Community goals*
 - a. cultivating community empowerment; community organizing and development; increasing connections between producers and consumers; creating safe public spaces; fostering intergenerational interaction; and increasing the visibility of community-led efforts (Cohen & Reynolds, 2015)

In terms of rooftop gardens, most of the research is surrounding existing spaces, and the theories that have shaped them. Because rooftop farming is relatively infantile compared to the broader urban agriculture landscape, research that illustrates how rooftop gardens are implemented starting from square one, i.e. finding an appropriate site all the way to crop development and harvest will be extremely beneficial. Thus, this project will attempt to provide:

- Topography of an existing rooftop garden

- Data for other prospective urban farmers to use in order to develop a rooftop garden within similar context and climate
- How urban farms can be both productive and have a social mission!

Objective & Inquiry Questions

The aim of this proposed project is to create a suitable layout for the new rooftop garden which includes crop mapping and site development/management so that GNH may obtain a business license for this space. In order to successfully accomplish our objective, the following are some questions that will help guide our process:

1. What type of crops are most suitable for the climate on the rooftop garden?
2. What crops are desired and considered culturally appropriate by the community and for the programs at GNH?
3. How many people rely on the food grown on the Urban farms?

Methods

The execution of this project will be focused around site visits to the rooftop garden. The layout of the garden will be done under the advisement of Joey Liu, using mapping techniques that GNH has used previously. We will be assisting in everyday gardening activities, and will use our experience on-site to guide our research for the site plan. By spending time at the garden, we will have a better idea of the context and environment. We will draw a rough layout of the garden, and take pictures during our first site visit as a reference for our project. We plan to engage in further research in areas that will help Joey, and GNH (specific research topics tbd). During our weekly visits to the garden we will make field notes regarding the progress of the crops planted, the health of the current crops and how the space impacted by external elements. For example, if we observe one area is more exposed to wind this will be noted, for Joey's reference, and taken into account in our crop planning project.

References

- Cohen, N., & Reynolds, K. (2015). Resource needs for a socially just and sustainable urban agriculture system: Lessons from new york city. *Renewable Agriculture and Food Systems*, 30(1), 103-114. doi:10.1017/S1742170514000210
- Dimitri, C., Oberholtzer, L., & Pressman, A. (2016). Urban agriculture: Connecting producers with consumers. *British Food Journal*, 118(3), 603-617.
- Gordon Neighbourhood House. Retrieved January 27, 17, from <http://gordonhouse.org/about-gordon-neighbourhood-house/mandate-vision/>
- Lui, T., Yang, M., Zhinguo, H., & Ow. D.W., (2016). Rooftop production of leafy vegetables can be profitable and less contaminated than farm-grown vegetable. *Agronomy for Sustainable Development*, 36, 41.
- Orsini, F., Kahane, R., Nono-Womdim, R., & Gianquint, G. (2013). Urban agriculture in the developing world: a review. *Agronomy for Sustainable Development*, 33, 695.