

Farmers Markets Surplus Food Redistribution Program  
Final Report

LFS 350, 2016-17, Term 1

on

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## INTRODUCTION

The aim of our project is to investigate the possibility of distributing left-over produce from Vancouver farmers' markets to vulnerable populations in Vancouver's West End community. The West End is a densely populated community recognized as the largest lesbian, gay, bisexual, transgender, and queer (LGBTQ+) community in western Canada (City of Vancouver, 2013). It encompasses two major downtown areas, namely Davie Village and Denman Street. Davie Village has long been the centre of the city's LGBTQ+ community and is home to Health Initiatives for Men and Dr. Peter Centre, which are organizations that aim to improve the health and wellbeing of gay men and support individuals living with HIV and AIDS, respectively (Our Mission, Vision, and Values, n.d.; About Us, n.d.)

This project could decrease food waste and increase community food security in Vancouver. Community food security is "when all community residents obtain a safe, personally acceptable, nutritious diet through a sustainable food system that maximizes healthy choices, community self-reliance and equal access for everyone" (Gibson, Kneen, Houghton, 2004). On a global scale, 45% of fruits and vegetables and 45% of roots and tubers grown are wasted, totalling a third of all food produced (FAO, 2016). Forty percent of food produced in Canada is wasted (Gooch *et al.*, 2012). Food redistribution is the most promising means to mitigate the problem and requires the collaboration of food system stakeholders. As an example, FareShare collects surplus food, processes, sorts, and redistribute it to organizations that cook and serve the food to vulnerable populations. In 2015, FareShare collected over 9,070 tonnes of food and redistributed it to nearly 2,500 charities and community organizations to serve 18.3 million meals (FareShare, 2014).

Currently there is no information specific to Vancouver that addresses food waste from farmers markets or the possibility of its redistribution. We seek to inform the possibility of creating a food redistribution program in Vancouver.

#### **OBJECTIVES & INQUIRY QUESTIONS**

Our objectives are to (1) create a database of farmers and community organizations who wish to collaborate to provide low cost meals to at-risk populations in the West End and (2) determine what infrastructure exists and is lacking in order to connect leftover food with community organizations and make recommendations to promote the success of the project. We will inform these objectives by asking (1) Who are the stakeholders and what will they need? and (2) How can this project be structured to make it accessible to incoming stakeholders and sustainable in the long run?

#### **METHODS**

We used a multi-modal case study to understand the perspectives of both farmers and community organizations to determine the feasibility of our goal. We collected information by three means: structured and unstructured interviews, direct and participatory observations, and surveys to determine the wants, needs, and existing assets of farmers and community organizations.

We collected information from farmers using unstructured interviews, direct observations, and surveys. We used structured interviews with interested community partners to develop context for the project and better understand the needs of the people who will benefit from it. We created a database of information regarding interested farmers and summarized the key findings of the DPC's requirements.

#### **STAKEHOLDERS & REQUIREMENTS**

19 farmers are willing to donate their leftover produce (Table 1). Farmers have variable amounts of leftover produce, ranging from zero to 200 pounds. Generally, this

surplus is eaten, processed, donated, or composted. Farmers would require the surplus produce to be picked up and transported. They are not motivated by financial incentives nor are they interested in match programs or donation boxes to help to quantify donations.

The Dr. Peter Center (DPC) is the community organization we investigated primarily. The DPC has strict food safety requirements since they serve immunocompromised individuals. Low concentrations of food-borne bacteria such as *E. coli* can be potentially dangerous or deadly to immunocompromised persons (Fiona Kwan, personal communication). Therefore, the DPC requires Hazard Analysis Critical Control Point documentation from all of their food providers. HACCP is a food safety control plan that ensures that food is properly processed by addressing critical control points, which are points in food handling and processing at which food safety “controls” can be taken to reduce food safety hazards (Government of Alberta, 2016). The DPC has accepted donations from Farmers Markets in the past, however they only accept produce in absolute perfect condition and require it to withstand refrigeration for up to a week (Fiona, pers. comm.)

Rainbow Soup Social is a program run out of the Gordon Neighborhood House in Vancouver’s West End community. This is a weekly event where LGBTQ+ individuals and allies are invited to come together to cook soup for a free meal program (Gordon Neighbourhood House, 2016). Rainbow Soup Social does not require a HACCP paper trail for donated produce, but instead requires a one-on-one interview between the food producer and their food program manager to ensure food safety standards are met (Rainbow Soup Social, personal communication).

## PROGRAM STRUCTURE & LONG-TERM FEASIBILITY

Transportation will need to be provided to move leftover produce from markets to the receiving community organization. Further, some form of food safety standards must be

maintained. Farmers are more than willing to donate produce, so the structure of the program will likely be most influenced by the needs of the community organization.

## **DISCUSSION**

In Vancouver, the homeless and under-housed are especially food insecure and lack cooking facilities, which heightens their dependence on charitable meal services. A large proportion of homeless and under-housed individuals are also marginalized from living with HIV/AIDS and identifying as LGBTQ+ (Miewald & Ostry, 2014). Supporting charitable meal programs and increasing the nutritional quality of the meals is essential to improving the health and wellbeing of Vancouver's vulnerable populations.

Our findings help inform the foundational understanding of the project. By knowing the existing assets of our stakeholders and their requirements, future LFS 350 groups can build a redistribution system that will best suit the needs of the individuals involved. Having a database of interested farmers will be useful for contacting them in the future and organizing market schedules for picking up produce.

The farmers and community organizations have different perspectives on and requirements for participating in the project. Community organizations require proper food handling and would prefer a donation quota. Farmers can contribute a variable amount of produce and simplicity and provided transportation are their primary requirements. There is great opportunity here to connect leftover food to causes promoting social gain, however the needs of participating stakeholders do not perfectly align.

Online surveys are a poor means of collecting information. Our data analysis was severely limited by not receiving survey answers from farmers within our timeline. In-person interviews are a better method of collecting information. Further, interviews need to be arranged in generous advance and the appointment should be confirmed before the interview.

## **CONCLUSION**

Our research has shown that providing meals for immunocompromised individuals requires high food safety standards, which is infeasible with donated produce from farmers markets. The ability to provide consistent quantities of food and transportation between markets and organizations will be imperative to the success of the project. These are novel findings and add substantially to our understanding of the situation. Furthermore, the best way to engage and learn from stakeholders is to meet with them in person.

We do not know what consumers' thoughts are on donating and redistributing food. Knowing the level of interest in consumers to participate in food donations and match programs may help to increase or, at minimum, quantify the amount of food allocated to community organizations.

Connections with other community organizations providing meal programs in Vancouver will need to be established, as working with the DPC is not feasible nor measurably helpful to their program. Ideally, community organizations should have lower food safety requirements and a means of transporting produce. Consumers should be polled to determine their interest in contributing monetary donations or donating produce directly at the time of purchase at farmers markets.

Although, at this point, the project appears infeasible within the community that it was initially intended for, the core idea of redistributing food waste can potentially be applied in many other food insecure communities within Vancouver. The knowledge that farmers are willing, and excited to donate to such a program suggests that finding potential receivers of the donated food is the next step in making this project both feasible and successful.

**Student 1's reflection:**

Our CBEL project was the first project that I've worked on that focused on taking an asset based community development approach (Mathie, 2003). Our group started by listening to our community partner's goal for the project, but as the project developed our partner became less involved in the project and thus our project became much more our own. With that said our group considered our community partner's goal at each step, and our project would not have become what it is without the initial inspiration from our community partner at HIM.

Our group was particularly grateful to be working with one another, and we recognized from the beginning that each of us has unique skills, interests and knowledge that could contribute to our project. We also found that we worked particularly well when we all worked together on a given assignment, instead of breaking it up into separate parts to be completed individually. The flexible learning sessions were helpful in that aspect, as it gave us a time that we were all available to work together. Personally, I enjoyed the use of a group blog, it allowed us to reflect on what we were doing well and assess our next steps. The blog also gave us the ability to consistently reflect on the significance of our project, which I found kept us motivated and brought us back to our initial purpose and excitement for the project. Overall, the project was challenging, but was a very rewarding and valuable experience.

**Student 2's reflection:**

This was an exciting yet challenging project to work on. Working with multiple stakeholders helped me gain a better understanding of the importance of clear, consistent communication. Our community partner's vision for the project was motivating and provided a fantastic platform to launch the project from, however I expected to receive more direction from him over the term. Instead, he allowed us to design the project as we saw best from

learning about the needs of our stakeholders. I regret that we were not able to accomplish more over the term, such as getting agreements from our stakeholders regarding participation, but I feel that we have created an excellent foundation for future LFS 350 groups.

I feel incredibly fortunate to be a part of Group 23. Each member contributed a different perspective and set of skills and it has been rewarding and exciting to watch how our different strengths combined in this project. I feel that we were all honest with each other throughout the term and provided respectful, constructive criticism to each other which contributed to our success.

I immensely appreciated the flexible learning sessions, as it created time for us to meet and work on the project. This project would have been more difficult to work on if we had to schedule time to meet outside of class hours. I did not find the blogs to be useful for our group, however I can see their utility for communicating with the teaching team and stakeholders.

**Student 3's reflection:**

LFS 350 proved to be a much more interesting course than 250 mostly because of the different assignments and projects that 350 had. Although the academic aspect can not be ignored and overlooked, I feel like the flexible learning that I got from this class was far more important for me. Things like meeting with other community partners and stakeholders and listening to their concerns and looking at things from their viewpoints are skills that can not be learned in a university setting. Even though we only had one meeting with our community partner, I feel like it gave me a better understanding of the West End population and its vulnerable population and issues in comparison to the scholarly articles that I read for my Academic Experiential Review paper.

The other aspect of this course that I thoroughly enjoyed was the different types of course material that we had that ranged from podcasts to papers to videos and other things. I

personally think that this was a great way to ensure that students with different preferences can all partake in course material and be actively engaged in course discussions. However, I did not seem to engage very positively with the blog posts and I believe there can be other ways that we can ensure communication between us and our community partner. At the end, I think I have been very lucky to be a part of group 23 and have the chance to work with such great team members that all come from very different backgrounds.

**Student 4's reflection:**

The CBEL project helped shape my learning outside of LFS 350. Throughout the term, I found myself writing research papers, group projects, and policy papers on topics such as food security, and food waste reduction strategies. This goes on to show how actually experiencing something can go a lot further than learning about something; however, it also helped that I am quite interested in such issues. Between the meetings with Josh, our community partner, the group assignments, the tutorial meetings, and our blog reports the CBEL project provided me ample opportunity to learn in multiple different ways, and from multiple different people.

During the initial meeting with Josh we each took turns introducing ourselves and identifying which program/Faculty we were studying in. Afterwards, Josh connected our interests and fields of study to the objectives of the CBEL project. Even though Josh's statements seemed apparent, no one recognized their true value. We did not recognize the value of our group's diversity until it actually came time for implementation; for surveys, interviews, blog posts and crafting reports. For me, this was one of the greatest takeaways: you can have the strongest group on paper, but if the group has no synergy, different ways of knowing, or expression then there will be no development.

**Student 5's reflection:**

LFS350 offered a unique opportunity for student leadership, autonomy, and practical implementation of knowledge. Getting to work directly with a community organization on a tangible project was an extremely rewarding experience. Our project had a tangible goal, and because it was the first step of a larger project, made the work feel important and influential. In class we learned about issues and ideas within the food system, which we were able to see in action as we worked on our community project. The community project given to us allowed for a lot of freedom and decision making. I felt that this autonomy provided more ownership and investment in the project, which in turn made me more passionate about seeing it through to my best ability. This project was also unique in that my group provided a positive, encouraging, and inspiring atmosphere. As a team it was clear we were able to perform and implement our project better than if we were working as individuals. This was an empowering experience for me, as my group was formed of students of different backgrounds and disciplines, but everyone had the same interest in decreasing food waste and redistributing food through the Vancouver community. This shows that people can come together and work best when there is a common goal.

**Student 6's reflection:**

Community based learning experiences are among the most valuable lessons you can get out of your university experience. Students are able to apply their thoughts and lessons learned in academic settings, to real life issues, and work with those people that have experience and carry a certain role of leadership/influence in that setting. When our group sat down together for the very first time to prepare for our meeting with the community partner, I immediately realized that everyone had great ideas and we all were on the same wavelength. We then went on to meet the community partner and had an amazing talk, and cleared up all of our initial questions and concerns; we all knew exactly what we were supposed to do for

this project, and were able to construct a solid proposal, with realistic goals. However, soon we noticed that we lacked in actual community contacts; Josh from HIM (Health Initiative for Men) was able to deliver connections to community centres, but had no real way of promoting the initiative to the people running them. Josh did the best he could by offering the contact points, but seeing that he had no real influence within the centres we were looking to, the connection started breaking down. Therefore, I believe it is best to involve a community partner with that necessary influence to make changes. In the end we were still able to come up with key findings and ideas for further development by future LFS350 classes.

## APPENDIX

<b>Farmer/Vendor</b>	<b>Markets</b>	<b>Contact Information</b>	<b>Willing to Participate</b>
Beckmann Berry Farm	Trout Lake	Harmeet; 604-614-2502	Yes
Crisp Organics	Trout Lake, Kitsilano, West End, Downtown	Andrew; 778.808.3494 or info@crisporganics.com	Yes
Cropthorne Farm	Kitsilano, West End	info@cropthornefarm.com	Yes
Earth Apple Farm	Trout Lake	Shirlene Cote; earthapplefarm@gmail.com	Not confirmed
Forrest Nelson Certified Organic Produce	Trout Lake, Kits	forrestn@nethop.net	Yes
Forstbauer Family Natural Food Farm	Trout Lake, West End	604-794-3999 or farm@forstbauer.com	Yes
G&D Growers		dhaliwal.j@gmail.com	Yes
Golden West Farms	Trout Lake, Kitsilano, West End, Downtown	Al Fisher (UBC Faculty of Agri. Alumni); 250-486-6031	Yes
Helmer's Organic Farm	Trout Lake	Anna Helmer; annahelmer@hotmail.com	Yes

Ice cap organics	Kitsilano, West End	icecaporganics@gmail.com	Yes
Klippers Organic Acres	Trout Lake, Kitsilano, West End	klippersvolunteer@gmail.com	Yes
Organic Farm Connection	Trout Lake	info@gloriousorganics.com	Not confirmed
Ossome Acres	Unknown	info@ossomeacres.com	Yes
Ostro Organics	West End	N/A	Yes
Shalefield Organic Gardens	Trout Lake, Kitsilano, Downtown	treenerds@gmail.com	Yes
snowy mountain organics	West End	205-499-57-15	Yes
Sole Foods	Trout Lake	Kelsey; info@solefoodfarms.com	Yes
Stein Mountain Farm	Trout Lake, Kitsilano	erincoghlan@gmail.com	Yes
Tsawwassen First Nation Farm School	West End	Emily Halloran; halloran.emily@gmail.com	Yes
Urban Digs Farm	Trout Lake	Jess Landing, jess@urbandigsfarm.com;	Yes
Anderson Organic Farm	Unknown	604-819-5252	No
Apple Lane Orchards	Trout Lake, Kitsilano	N/A	No
Farmer Koo (Southern Acres Nursery & Farm)	Kitsilano	N/A	No
Hannah Brook Farm	Trout Lake	N/A	No
Paul's Produce	Trout Lake, West End	N/A	No
Rai Produce	N/A	N/A	No
S&G Fresh Produce LTD.	Trout Lake, Downtown	N/A	No
Sull Farms	N/A	N/A	No
Sweet Earth Farms	Downtown	N/A	No
<b>Table 1. Farmers Contact Information.</b>			

<b>Requirements</b>	<p>§ DPC’s primary requirement is food safety</p> <p>§ May serve up to 100 plates of food per meal</p>
<b>Safety regulations</b>	<p>§ There needs to be evidence that food donations follow all food safety guidelines i.e. Critical control points</p> <p>§ “Any produce that is received that is not in perfect condition is immediately composted”</p>
<b>Food Types</b>	<p>§ Each meal is nutrient-dense, high-calorie, and high-protein</p> <p>§ “Common” produce is used so that the meal is well received by all clients i.e. “carrots, onion, celery, leeks, cauliflower, broccoli, squash, potatoes, peppers, beans, tomatoes, fresh herbs, cabbage, apples” are staples used on a regular basis</p>
<b>Meal Service Preparation</b>	<p>§ May serve up to 100 plates of food per meal</p> <p>§ The same ingredients may be used multiple times a day</p> <p>§ Use 11-15 Kilos per day for a typical meal service</p> <p>§ DPC has a constant food stock</p> <p>§ Leftover food is repurposed into other meals, or handed out to clients</p> <p>§ DPC receives produce from Sysco, Canada Bread, Island Farms, J&amp;K Poultry, and FreshPoint.</p> <p>§ An item will not be served if there is not enough for everyone</p>
<b>Operations</b>	<p>§ There is a Day Health Program (includes Breakfast and Lunch), and a Residence Program (includes Breakfast, Lunch and Dinner) which are prepared onsite</p> <p>§ Budget limits DPC’s food services team from catering to everyone’s food preferences.</p> <p>§ There are 375 clients registered in the Day Health program</p> <p>§ Most of the clients are from the Downtown Eastside</p> <p>§ Cost is the organization’s biggest limitation</p> <p>§ DPC receives produce from Sysco, Canada Bread, Island Farms, J&amp;K Poultry, and FreshPoint.</p>
<b>Meal Service Considerations</b>	<p>§ An item will not be served if there is not enough for everyone</p> <p>§ “Common” produce is often used so that the meal is well received by all clients i.e. “carrots, onion, celery, leeks, cauliflower, broccoli, squash, potatoes, peppers, beans, tomatoes, fresh herbs, cabbage, apples are our staples which we use on a regular basis.”</p> <p>§ The meal services create a sense of community</p> <p>§ Food is a harm reduction strategy</p>

**Table 2. Summary of Findings from the Dr. Peter Centre.**

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