

UBC Social Ecological Economic Development Studies (SEEDS) Student Report

Connecting UBC Farm and Sage Bistro in a Local Food System: 2008 UBC Food System

Project, Scenario 4 Report

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AGSC 450

April 11, 2008

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Local Food System:
2008 UBC Food System Project, Scenario 4 Report**

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Abstract

The University of British Columbia Food System Project (UBCFSP) aims to increase food security on the University of British Columbia (UBC) campus through initiatives with several partners, such as the Faculty of Land and Food Systems (LFS), UBC Sustainability Office, UBC Farm, UBC Food Services (UBCFS), and UBC Sage Bistro. Scenario 4 focuses on ways of increasing farm-to-institution programs, and thus on-campus consumption of local food, through the development of a “UBC Farm to Campus Food Provider Program”. This is an important initiative since many institutions’ food systems are characterised by food produced, manufactured, and packaged miles away from where it is consumed, which contributes to increased greenhouse gas emissions, and lost profits from small local farms. By proposing ways to increase farm-to-institution programs, local food systems can be created and the aforementioned problems reduced.

To create a “UBC Farm to Campus Food Provider Program”, our team investigated the possibility of establishing a contract between UBC Farm and Sage Bistro, using a community-based action research approach. This included an extensive literature review focusing on current farm-to-institution programs, previous Agricultural Sciences (AGSC) 450 UBCFSP reports, the West Coast Seeds Catalogue, and UBC Farm Sales Data. Additionally, personal interviews and communications were conducted, as well as specific information pertaining to UBC Farm and Sage Bistro was collected from guest lecturers presented in class. Through this our team was able to identify food items that were desired by Sage and capable of being produced at UBC Farm. This led to the creation of a contract stating that UBC Farm will provide Sage with weekly deliveries of butternut squash for one month, and a memorandum of agreement that Sage will purchase firstly, when possible, select items from the Farm. It is in hopes that further contracts will be created between these two establishments to increase local food consumption on campus that and ultimately further the sustainability of the food system.

Introduction

In today's insecure and unsustainable global food market, the need to consume locally is becoming essential. With an international food system, food is over processed and must travel thousands of miles before reaching one's plate; thus contributing to vast amounts of greenhouse gas emissions, to the disconnection of individuals from their food, and to unhealthy human populations (Pollan, 2006; Bentley & Barker, 2005; Halweil & Nierenberg, 2007). For this reason, the UBCFSP is focused on creating a sustainable food system at a global, regional, and local level (Rojas, Richer & Wagner, 2007).

UBCFSP is an ongoing collaborative research project that was created in 2001 by the Faculty of Land and Food Systems and UBC's Sustainability Office's Social, Ecological, Economic and Development Studies (SEEDS) program (Rojas et al., 2007). Since 2002, student groups in AGSC 450 LFS III course, a required capstone course, have been researching and proposing ways to increase the sustainability of UBC campus. From previous group reports, it has been discovered that UBC farm products have been incorporated into numerous on-campus food provider menus over the last several years, most notably during 2006 and 2007. The most prominent project came from Group 13 in 2006 where they incorporated UBC Farm squash pizza at on on-campus food provider, "Pie R Squared" (Chan et al., 2006). To continue building upon progress made by the UBCFSP, our group has been asked to investigate the feasibility and desirability of increasing the amount of campus connections through creating a business proposal for a "UBC Farm to Campus Food Provider Program" (Richer & Rojas, 2008).

This report will cover the following: an outline of our scenario problem definition and how it is connected to global food system problems, group reflections on the UBCFSP Vision Statement and our value assumptions, the methodology followed to carry out our research, the findings and discussion to pertinent research, our proposed business plan between UBC Farm and Sage, and finally recommendations to various UBCFSP stakeholders for improving future AGSC 450 projects.

Problem Definition

In a world where any food item is easily obtained through planes, trains, boats, and automobiles, we now have a food system where food is produced, manufactured, and packaged thousands of miles away from where it is consumed. Not only does this globalized food system incur negative environmental impacts, it distances consumers from their connection to food, and it decreases farmers' incomes, (Bentley & Barker, 2005; Pollan 2006). With populations growing accustomed to a global food market, people forget the importance of a local food system and its invaluable benefits. Environmentally speaking, the global food market increases transport of perishable food items by airplanes and trucks, (Bentley & Barker, 2005) which results in 40 times more greenhouse gases emitted than by boat or rail transport (Bentley & Barker, 2005). As Bentley & Barker (2005, p.10-11) note, "if you switched from eating all imported food to eating only locally produced food, you would already be half way towards achieving [Canadian climate change targets]".

Moreover, having a global food market where people can access any food at any time of year also contributes to a disconnection from local and seasonal foods (Pollan, 2006). As Pollan reveals, "A global food market, which brings us New Zealand lamb in the spring, Chilean asparagus in December, and fresh tomatoes the year round, has smudged the bright colours of the seasonal food calendar we all once knew by heart." (Pollan, 2006, p. 253). A local food markets not only reduces greenhouse gas emissions, it enables people to connect to their food, by allowing them to see where their food comes from and how it is grown (Pollan, 2006; Halweil & Nierenberg, 2007; Bentley & Barker, 2005).

Furthermore, global food production results in farmers receiving a reduced percentage of each food dollar. With the elimination of crop price supports and the corporatization of farms, prices have been constantly declining. As prices drop, farmers will often increase their production; however, a proceeding year of crop surplus will further

depress crop prices (Pollan, 2006). It is the food processing companies who profit instead of the farmers, by converting the majority of cheap crop commodities into value-added goods (Pollan, 2006).

In an effort to counteract the negative externalities of a global food system, the reestablishment of a local food system is required. Among the numerous relocalization strategies, one is a farm-to-institution program. Such programs connect farms with institutions, such as campuses, to provide fresh local food, while the farm serves as a research and educational site (USCS Center for Agroecology & Sustainable Food Systems [CASFS], n.d.). A successful example of a farm-to-institution program is University of California Santa Cruz (UCSC), where seven local farms provide the UCSC campus dining halls and restaurants with fresh, local, organic food (USCS Food Service Working Group [FSWG], 2007).

The farm-to-institution program is a more sustainable way of providing food for a campus, as it benefits the producers, food providers, and consumers. Producers benefit by selling their produce at premium prices through local business networks, thereby receiving a greater portion of each food dollar. Food providers benefit from such programs by improving their appearance as ethical purchasers, by offering more nutritious foods, and by investing in their local economy (CASFS, n.d.; Bentley & Barker, 2005; FSWG, 2007). As a previous AGSC 450 group, Group 19 (Wan et al., 2006) stated, “spending in BC will benefit the provincial economy, strengthen the tax base, support jobs in the agricultural sector and can help influence local policy towards supporting BC purchasing initiatives”. Therefore, when purchasing locally it not only benefits the environment but also the economy. Finally, consumers benefit by being able to see and learn what their local food system can provide for them, which enables them reconnect to their local food (CASFS, n.d.; Pollan, 2006; FSWG, 2007).

Farm-to-institution programs also create the opportunity for students to get involved with local farms and learn about sustainable agriculture. Additionally, by consuming local food students can increase their food

awareness (CASFS, n.d.; FSWG, 2007). Therefore, for the reasons stated above our group has been assigned the task of creating a business proposal for the development of a “UBC Farm to Campus Food Provider Program”.

Vision Statement and Values Assumption

In order to focus on the goal of a sustainable food system at UBC, the UBCFSP partners developed a Vision Statement for groups to follow (Richer, 2005).

Vision Statement for a Sustainable UBC Food System: *Plain Language Version*

The overarching goal of a sustainable food system is to protect and enhance the diversity and quality of the ecosystem and to improve social equity, whereby:

1. Food is locally grown, produced and processed
2. Waste must be recycled or composted locally
3. Food is ethnically diverse, affordable, safe and nutritious
4. Providers and educators promote awareness among consumers about cultivation, processing, ingredients and nutrition
5. Food brings people together and enhances community
6. Is produced by socially, ecologically conscious producers
7. Providers and growers pay and receive fair prices

Our group agrees with all the guiding principles stated. These principles are important for us since we are focused on increasing the provision of local food on campus. Furthermore, the principles are essential for the establishment of a contract between Sage Bistro and UBC Farm, since this enhances the university food community and could launch future contracts.

Within group discussion, we questioned statement 3. In light of increasing greenhouse gas emissions and amount of imported items in our food system, the ability to produce ethnically appropriate foods may present itself

as a challenge in the near future (Bentley & Barker, 2005). We recognize the value of importing food when it cannot be grown in the region, however as transportation and environmental costs rise, the need to eat local is gaining importance. By UBC actively promoting a local food system, a common food culture identity may emerge to compensate for the decrease in imported foods that previously supported ethnic diets.

Moreover, with regards to vision statement 5, one group member recommends that the context in which food is eaten should be addressed. He believes that communal dining is a healthy way to consume food as it creates a relaxed atmosphere and the ability to spend a longer time sitting, which he feels aid in effective digestion. As such, he encourages the UBCFSP Vision Statement to address eating in a communal dining atmosphere.

Our group is most aligned with the weak anthropocentric paradigm. For us, this means that as human beings, we rely most heavily on other humans to support us; therefore, it is critical to create and sustain healthy human relationships. By having this value assumption our group recognizes the importance of business relationships, which are based on good communication and consistency (A. Kodis, personal communication, March 7, 2008; S. Golab, AGSC 450 lecture, March 5, 2008). Additionally, by recognizing that UBC Farm is threatened by proposed residential development, our group understands that in order to effectively gain support for the Farm, more social connections need to be made with campus through increased market relations.

Methodology

Methodological Perspective

The methodological perspective of the UBCFSP is Ernest Stringer's "Community-Based Action Research" (CBAR). CBAR is a non-traditional approach to research that treats all participants, both researchers and subjects, as equal members and contributors. It follows three steps: Look, Think, and Act (Stringer, 1999). "Look" is the process of gathering information, while "think" involves analyzing, interpreting, and explaining the gathered information. Finally, "act" is the step where a plan is implemented (Stringer, 1999).

Methods of Data Collection

Our research began by reviewing other farm-to-institution programs, to gain a better understanding of what they entail. We particularly focused on UCSC since it has a successful program that continues to grow (FSWG, 2007); however, we also investigated other schools, such as Evergreen College and Dickinson College. Next, we reviewed previous 2002-2007 UBCFSP reports that seemed relevant to our scenario to understand what has previously been done and/or been suggested from past AGSC 450 groups. Furthermore, we reviewed the West Coast Seeds Catalogue, 2006/2007 UBC Farm Sales Data, UBC Food Services Website, and finally the farm-to-college website. By reviewing the various resources, our group furthered our understanding of the importance of a farm-to-institution program and choosing local food.

After conducting the literature review, we obtained the most useful information for determining the feasibility of a proposed business plan for UBC Farm through class presentations, personal communications, interviews, and email exchanges. The class presentations with Andrew Parr (Director of UBC Food Services), Steve Golab (Head Chef of Place Vanier Dining Hall), Amy Frye (UBC Farm marketing coordinator), and Mark Bomford (Program Coordinator for UBC Farm) informed us of the details of these operations, as well as the limitations in establishing contracts between food providers and the Farm. Our interview with Andreas Kodis (head chef of Sage Bistro), on March 7, 2008, both informed us of his interest to bring more local food into Sage Bistro, and enabled us to collect a list of items that Sage would like to purchase from UBC Farm. Finally, our email exchanges and conversations with Tim Carter (UBC Farm production manager) defined which of these listed items the Farm would be capable of producing and providing to Sage. For both our personal interviews and email communications, ethical consent forms were signed to ensure our project followed the ethical guidelines.

Methods of Administration: Why We Chose Sage

In our decision to work with Sage Bistro, there were several considerations taken into account. Firstly, UBC Food Services' procurement standards emphasize purchasing from local, sustainable producers and reducing the number of deliveries each week (UBC Food Services, n.d.). Purchasing from the Farm both enables Food Services to buy locally as well as to reduce delivery distance and frequency (A. Frye, personal communication, March 12, 2008). Furthermore, Sage has previously purchased from UBC Farm, and in 2006/2007 composed 4% of the total Farm Market Garden Sales (Frye, 2007), and have expressed willingness to purchase more (A. Kodis, personal communication, March 7, 2008). Secondly, Sage's continually changing menu and intimate atmosphere allows for the promotion of UBC Farm produce to customers during their meal, which provides both advertising for the Farm and a trigger for a conversation about local food (A. Parr, personal communication, March 5, 2008). This is beneficial since promotion of the Farm can affect Sage's wide range of clientele (students, professors, and individuals living in the surrounding community) (A. Parr, AGSC 450 lecture, March 5, 2008) in hopes that they will visit the Farm themselves, or learn more about the importance of local food. Thirdly, since Sage Bistro is UBC Food Services' fine dining restaurant; their flexible budget allows them to purchase local food, which is usually higher priced than food from conventional distributors (A. Parr, AGSC 450 lecture, March 5, 2008; A. Kodis, personal communication, March 7, 2008). Also, since Sage is smaller than other UBCFS food outlets, it does not require as much produce, thus making the Farm more capable of meeting Sage's demand for various items (A. Parr, AGSC 450 lecture, March 5, 2008; M. Bomford, March 5, 2008). Finally, one of the group members currently works at Sage thus it allowed for continual communication.

Findings and Discussion

Literature Review

University of California Santa Cruz (UCSC) Farm-to-Campus Movement

Findings

- UCSC has a 25-acre farm and a 3-acre farm. Both serve as research sites and outdoor classrooms for individuals to learn about organic farming (CASFS, n.d.).
- The Farms' produce is sold to the campus' Market Cart Stand and to the dining halls (CASFS, n.d.).
- To supply produce to the campus dining halls, UCSC has modelled the "farm-to-college" program and has connected with a produce distributor, Agriculture and Land-Based Training Center (ALBA) (CASFS, n.d.; FSWG, 2007).
- The UCSC Food Systems Working Group worked with the Center for Agroecology, Sustainable Food Systems, and Dining Services to develop two strategies to bring local, organic food onto campus. These strategies included drafting guidelines for purchasing food for the Dining Services in May 2004, and "[educating] and [organizing] students to demand socially just, organic food in dining halls" (FSWG, 2007). These guidelines state that food must be local (within 250 miles of Santa Cruz), seasonal, certified organic, humanely produced, directly purchased, certified fair trade, and from worker-supportive producers (FSWG, 2007).
- UCSC has a variety of credited courses offered that utilize and support their farms. A few examples include a six month Apprenticeship in Ecological Horticulture, the freshmen 'Harvest for Health' program, an Introduction course to organic farming, and the 'College Eight Garden Internship' (FSWG, 2007).

Discussion

After researching these programs at UCSC, it became apparent that there is ample funding for their farms as well as plenty of support and interest from students. In addition, the Dining Services is dedicated to promoting and providing local, organic food to students (FSWG, 2007); by promoting where the food is from, students are able

to generate an interest in the farms. Furthermore, UCSC offers a required farm-based course to freshmen (FSWG, 2007) which enable students to begin growing an interest in the farms earlier on in their academic career.

This is a positive example of a farm-to-campus program that UBC should model for various reasons. Firstly, we identified UBC Food Services' lack of promotion for the amount of local food that is being used on campus. In 2005-2006, UCSC widely advertised having purchased 15% of their total food from local sources (FSWG, 2007). UBC purchases far more than 15% of their food from local sources and yet there is no promotion of this fact (L. Richer, personal communication, February 13, 2008). Therefore it became apparent that for more interest to be generated about the benefits of eating local food and supporting UBC Farm, more advertisement of these topics is needed within campus food outlets.

West Coast Seeds Catalogue and BC Direct Farm Market Association

Findings

- West Coast Seeds sells numerous varieties of over 47 vegetable crops, which reflect the diverse types of crops that can be grown in BC's coastal climate.
- Vegetable and fruit production on BC's West Coast is seasonal; fruits and vegetables are available predominantly between late spring and fall months.

Discussion

Although BC's West Coast has the longest growing season in Canada, production steeply declines in the winter months (West Coast Seeds, 2008). Winter crops, such as root vegetables, serve as fresh produce during winter months if properly stored in the ground or in a root cellar. Therefore, we consider that to maintain consistent market relations between Sage Bistro and the UBC farm throughout the entire year it would be beneficial to have winter crops to sell during the winter months.

Class Presentations

Andrew Parr, Director of UBC Food Services

Findings

- The food policy of UBC Food Services is defined as 'SPICE', an acronym for sustainable, people-first, innovative, caring and excellence.
- UBCFS is made of 4 business segments: Cash Operations in cafeterias, snack bars and franchise operations; residence dining at Totem Park and Place Vanier; UBC Catering; and University Center, which encompasses Sage Bistro and Sage Catering.
- UBCFS is currently undergoing several sustainability initiatives increasing the amount of local food purchased. One initiative involves working with Allied Food and Discovery Organics distributors to provide local apples on a year-round basis.
- One limitation to purchasing more from distributors in this area is that most local foods are not available during UBCFS busiest months (September to May).
- Sage Bistro provides 7% of the total revenue for Food Services and is slightly different from the rest of their operations as it targets a more diverse clientele beyond the student body, and has a continually changing and flexible menu.
- Sage has increased the total amount of food it buys from the Farm over the past few years.
- In a personal discussion with Andrew Parr, he expressed that Food Services is willing to contribute funding towards a produce storage facility at the Farm. This storage facility would extend the availability of produce to be sold to UBC food outlets through the winter months. For the Farm to receive funding, a sound business plan that clearly details the storage facility's costs, as well as its educational purposes, is required.

Discussion

After this presentation, it became clear that UBCFS is invested into creating a more sustainable food system by increasing the amount of local food on campus. This demonstrates that they have the same vision as the UBCFSP, making them a desirable business to create a contract with. We also felt it was particularly important that UBCFS would be willing to invest into the construction of a root cellar. This is a promising business proposal since a root cellar extends the year-round availability of UBC Farm produce, which would increase consistency of market relations with UBCFS outlets. Moreover, a root cellar would serve as an educational resource by demonstrating a low energy method of storing food items. However, after consulting with Mark Bomford he indicated that the Farm was not currently interested in constructing a root cellar and that their priorities lay in improving farm efficiency and productivity, and increasing connections with campus. Alternately, if the Farm increases storage facilities, they would prefer offsite storage sites or the use of greenhouses to extend their growing season (M. Bomford, personal communication, March 12, 2008; T. Carter, personal communication, March 19, 2008). Our group still recommends that the construction of a root cellar should be further investigated since it would be a valuable facility at the Farm.

Steve Golab, Head Chef of Place Vanier Dining Halls

Findings

- A problem for a large food outlet to purchase from a small, local distributor is that they often cannot meet the Dining Hall's high demand for various food items, such as tomatoes, eggs, and lettuce.
- Place Vanier prefers to buy commercially pre-sliced/peeled/diced produce, as it reduces labour costs. However, this can be problematic for the UBC Farm since they do not have the labour or financial capability to provide these types of valued-added products.

Discussion

Due the vast quantity of produce that Place Vanier requires, our group decided that they were not a feasible establishment to create a contract with UBC Farm. Although the Dining Hall has the potential to increase their procurement of local food and it is interested in doing so, they do not purchase the Farm in large amounts from, as it cannot guarantee product consistency (S. Golab, AGSC 450 lecture, March 5, 2008). One way to market UBC Farm produce to students at the residences would be to offer a different meal each week that incorporates a local and seasonal item. This has the potential to get students interested in participating or volunteering at the Farm.

Amy Frye (UBC Farm Marketing Coordinator) and Mark Bomford (Program Coordinator for UBC Farm)

Findings

- UBC Farm sells over 200 varieties of vegetables, fruits, herbs, and flowers. Sales consists of 69% from vegetables, 9% from fruit, 8% from merchandise, 5% from eggs, 4% from berries, 3% from herbs, and finally 3% from flowers.
- Demand for the Farm's produce exceeds supply.
- Potential items that the Farm could expand in production include: eggs, fruits, berries, garlic, winter squash, salad mix, cherry tomatoes, carrots, beets, and potatoes.
- The Farm has three sections of sales: the Saturday Farmer's Market, the Community Supported Agriculture (CSA) Program, and Direct Sales (i.e. selling to campus food outlet). As of now, the Market consists of 66% of sales, the CSA contributes 11%, and direct sales contribute 19%; the Farm would eventually like each sale to contribute 33%. This means that the Farm will have to expand since they will not reduce the Saturday Market sales.
- South Campus Community Planning will impact the Farm in approximately four years; either the Farm will maintain its current size, will be reduced in size or will removed to make way for residential developments.

For this reason, the UBC Farm wants to establish more market relations with campus food providers so that they can be seen as a food provider for campus.

- The campus food outlets that the Farm supplies produce to include: Sage, Sprouts, Agora, AMS Food and Beverage, UBC Food and Beverage, Green College, and St. John's College.
- Limitations for the Farm in supplying to campus food providers include weather unpredictability, pricing, produce quality and packaging. UBC food outlets can get consistent produce at conventional prices from other suppliers that are generally cheaper; therefore, they are more reluctant to use the Farm. Also the Farm does not process their food (i.e. cut and peel vegetables) which can be a challenge for some food outlets that do not have the time to process the large quantities of produce.
- The UBC Farm delivers its produce on Fridays between 3 and 9 PM, which poses a challenge for some on-campus food outlets that may not have staff to retrieve the items.
- The Farm's role should be to provide specialty items since it cannot produce large amounts of a common crop. The best specialty item is one that is small, recognizable and can be produced in large quantities.
- The Farm would like to establish long-term contracts but currently cannot ensure the consistency or the quantity of their product for a contract. In order to commit to a contract, the Farm requires a great deal of flexibility.
- The UBC Farm has limited storage space for produce, however, the Farm is not interested in building a root cellar, as they would rather invest their money and time into improving farming techniques

Discussion

After this presentation it became clear to our group that due to the Campus Community Plan, the Farm is focused on establishing greater relations with the campus community in order to gain support for advocating the Farm's preservation (M. Bomford, personal communication, March 12, 2008). By creating more connections with

campus, the Farm could be seen as more than just an educational practise; it would also be seen as an integral food provider for the community.

Furthermore, it was indicated from this presentation that the Farm cannot enter a large-scale, long-term contract due to their inconsistent crop yields (M. Bomford, personal communication, March 12, 2008). This created a challenge for our given that food outlets generally establish contracts with distributors that can guarantee consistent pricing, quantity and quality of produce (S. Golab, AGSC 450 lecture, March 5, 2008). Since the Farm has a great deal of variability in the amount, timing, and quality of what it can produce, it is difficult for them to enter into a formal contract (A. Frye, personal communication, March 12, 2008) and thus creating limits to our group's business proposal.

Our group was also disappointed to discover that the Farm is not presently interested in constructing a root cellar (M. Bomford, personal communication, March 12, 2008). However, we still argue that a root cellar would be valuable to the Farm and should eventually be built, as it would extend farm produce availability through the winter and allow the Farm to provide food to outlets for a longer period of time, specifically during the school months (September to April).

Personal Interviews

Andreas Kodis, Head Chef of Sage Bistro

Findings

- Andreas stated that he would purchase any produce that the Farm can provide him with. In past years he bought items such as lettuce, butternut squash, and tomatoes; however, last summer he had to get more tomatoes from another source since the Farm could not provide enough.
- By showing Andreas the West Coast Seeds Catalogue, which lists vegetable seeds suited to the Vancouver climate, Andreas selected the vegetable varieties he desired (Refer to "List of Produce Items that Sage Bistro Would like to Have Grown at UBC Farm" in Proposed Business Plan)

- Andreas is willing to establish a contract between the Farm and Sage since he would ideally have a restaurant that serves only local food.
- He is willing to get unprocessed produce since Sage kitchen staff can chop, peel, etc. the various produce items.
- Andreas indicated that 1/8 of produce bought at Sage is from the Farm.
- The Farm is always 25-50% more expensive than other distributors, however purchasing more food from the farm would fit into Sage's budget since the most costly items are proteins (half the menu cost is protein, the rest is produce, canned goods, dairy etc.)
- Whenever Sage uses UBC Farm food in a dish, they advertise this usage on their menu.

Discussion

Sage Bistro would be a good restaurant to establish a contract with for the following reasons: they share in the UBCFSP Vision, they are able to afford the higher priced Farm produce, they are willing to purchase unprocessed foods, their menu is based on the local seasonality of foods, and they advertise on their menus the use of Farm food (A. Kodis, personal communication, March 7, 2008). Furthermore, Andreas appeared eager to purchase additional Farm produce since he is very passionate about providing local food to customers and feels that the entire restaurant should be serving local, sustainable food (A. Kodis, personal communication, March 7, 2008). In the future, Andreas would like to become a part of the BC Culinary Tourism Society, a group that certifies restaurants that meet specific criteria, such as demonstrating a commitment to providing seasonal local food, incorporating at three menu items that promote BC food (i.e. BC salmon), and continuing to create connections with local growers. When certified, the restaurant will be advertised on the BC Culinary Tourism Society (BC Culinary Tourism Society, 2008). Therefore, by proposing a contract between Sage and UBC Farm, Andreas will be closer to achieving his goal.

However, when discussing barriers to establishing a contract with UBC Farm, it became apparent that the inconsistent weekly demands of Sage's catering operations may hinder the development of a business proposal (A. Kodis, personal communication, March 7, 2008). Therefore, our group suggests establishing a contract that will supply enough for the breakfast and lunch services, with the catering needs being purchased on top of those or from a different source. Additionally, the Farm could provide a niche or specialty item that would be incorporated into the restaurant's menu and excluded from catering's dishes, thus creating a constant demand.

Tim Carter, UBC farm production coordinator

- Tim expressed that although the Farm has worked with Sage Bistro in the past, the restaurant's demand for farm-grown produce fluctuates due to their catering functions, and therefore he is hesitant to form a business agreement with them.
- From Andreas Kodis' list of desired UBC Farm produce items, Tim stated which items would be feasible to grow (Refer to "List of Food Items UBC Farm is capable of Producing" in Proposed Business Plan).
- Tim mentioned that the Farm would be capable of creating a formal contract for butternut squash with Sage since it is a storable food item with well-established growing techniques and yields.
- Tim indicated that eggs are one of the better selling items along winter squash, tomatoes, and salad mixes; additionally, the Farm plans to increase egg produce via increasing the number of egg-laying hens from 95 to 150.

Discussion

Through communication with Tim, it became evident that butternut squash is a good starting point for establishing a contract with Sage. This contract would be realistic since the Farm can provide a high yield of squash and it has been previously supplied under contract to Pie R Squared (Chan et al., 2006). However, the

additional specified items that the Farm is capable of producing can be initially supplied under a memorandum of agreement, which provides flexibility and time to master farming techniques, then subsequently formalized under a contract. In the future, eggs could be incorporated into a contract or a memorandum, being that they are a profitable item and the Farm is increasing their number of egg-laying hens (T. Carter, personal communication, March 19, 2008).

Business Proposal: Furthering the Connection between Sage Bistro and UBC Farm in a Local Food System

Mission Statement:

This business proposal is intended to build a stronger market connection between UBC Farm and Sage Bistro for the purpose of increasing the amount of local food consumed on UBC campus.

Goals:

The short-term goals include establishing a one month contract between UBC Farm and Sage Bistro for weekly deliveries of butternut squash, as well as an ongoing memorandum of agreement for Sage to purchase various produce items firstly from UBC Farm. Another goal is to have the Sage Bistro servers travel to the UBC Farm for a firsthand experience of local farming. Moreover, long-term goals include further contracts established between UBC Farm and Sage Bistro that incorporate an extensive list of produce items for several months. Additionally, future contracts can be established to provide increased amounts of storage facilities at UBC Farm so that they can provide to campus food outlets during the winter months. In achieving these goals, UBC Farm land could avoid being sold for housing development since it will be seen as an essential campus food provider.

Desired and Producible Food Items:

Through communication with Sage Bistro and UBC Farm, the following was determined (A. Kodis, personal communication, March 7, 2008; T. Carter, personal communication, March 2008).

Food items that Sage Bistro would like UBC Farm to produce	Food items that UBC Farm is capable of producing
<ul style="list-style-type: none"> • Nasturtiums 	<ul style="list-style-type: none"> • Fava beans, Pole Beans

<ul style="list-style-type: none"> • Asparagus • Fava and Pole Beans (Not Dragon's tongue style) • Butter Beans • Maxibel bush beans • Romanesco Broccoli • Red cabbage for the winter • Celeriac • Parsnips • Butternut Squash • Danvers Carrots, Snow white, Atomic Red • White Corn • Peach corn • Japanese style Thin cucumbers • Fennel bulbs • Purple Kohlrabi • Leeks • Mizuna (does not desire large quantities) • Beets (Candy Cane, and Winter variety) • Winter Onions and any other variety • Cheddar Cauliflower • Gai Lan • English Sugar Snap Peas • Basil (Thai and Traditional) • Potatoes (except for Purple Russian) • Tomatoes (any Heirloom type) 	<ul style="list-style-type: none"> • Maxibel bush beans • Butternut Squash • Japanese Style Thin cucumbers • English Sugar-Snap Peas • Basil (Thai and Traditional) • Nasturtiums
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Pricing, Harvesting and Packaging Details

The following exemplifies UBC Farm’s estimated volume, pricing, harvesting and packaging details on the producible desired food items (Frye, 2007; A. Frye, personal communication, April 8, 2008).

Produce Item	Estimated Volume Farm can provide	Estimated Volume required by Sage	Cost per Unit	Estimated Preliminary Time for Harvesting	Post Handling Harvesting Practises	Packaging Requirements
Butternut Squash	2 tons (4000 lbs) over 4 months	50 lbs per week	\$1.80 per lb	60% of harvest in September, and 40% in October	Field cure for 10 days in the sun or cure indoors in a warm room for 4-5 days. To prevent mould, sponge the skins with solution of 10 parts water and 1 part Chlorine bleach.	No special requirements

					Store at 50-55°F with low humidity and good air circulation.	
Fava Beans	60 lbs over two weeks	Wide variability each week	\$2.92 per lb	August through September with possibility of harvest in July and October	Store at 40-45°F and 95% RH. Chill-injury may occur below 38°F.	No special requirements
Pole Beans	150 lbs	25 – 50 lbs per week	\$2.92 per lb	August through September with possibility of harvest in July and October	Store at 37-41°F with 95% RH.	No special requirements
Maxibel Bush Beans	150 lbs	25 – 50 lbs per week	\$2.92 per lb	August through September with possibility of harvest in July and October	Store at 40-45°F and 95% RH; chill-injury may occur below 38°F.	No special requirements
Basil (Thai and Traditional)	10 lbs over two months	Wide variability each week	\$16.12 per lb	Primarily in September, and in October	Immediately spread the leaves out on screens and dry quickly in a dark, dry, well-ventilated room.	No special requirements
Japanese style Thin cucumbers	50 lbs	20 lbs per week	\$1.70 each	50% of harvest in August, 40% in September, and 10% in July	Store at 50-55°F and 90-95% RH; chilling damage may occur at temperatures below 45°F and yellowing will quicken at higher temperatures. Avoid contact with ethylene gas.	No special requirements
Sugar-Snap Peas	200 lbs over 3 months	Wide variability each week	\$2.90 per lb	70% of harvest in September, 20% in July, and 10% in October	Cool immediately after harvest to avoid loss of sugar content. Store at 32°F and 85-95% RH.	No special requirements
Nasturtiums	8-10 flowers in a bag	Wide variability each week	\$2.00 per bag	Primarily in August; also available in July, September, and occasionally in October	n/a	No special requirements

Delivery schedule:

UBC Farm delivers its produce Friday afternoons between 3 and 9 PM, therefore once a week during this time they will drop off the butternut squash and other desired items to Sage.

Purposed Business Plan (refer to Appendix A):

The following proposed business plan will include two sections: a contract for supplying butternut squash, and a memorandum of agreement for a variety of produce items. Since farming techniques for butternut squash have reliably produce high crop yields and it is easily stored, UBC Farm has indicated that further contracts including butternut squash are feasible. For this reason, a contract stating that UBC Farm will provide 50 lbs per week of butternut squash to Sage Bistro for one month (totalling 200 lbs supplied; Refer to Appendix B). This contract will supply Sage with their demand for breakfast and lunch services and additional amounts can be purchased for their catering needs. A one month contract was decided upon so that it can provide flexibility to both establishments and if the one month contract is successful, it can be renewed for another month or longer. Another reason for the short duration of this contract was to avoid excessive squash production, as it is already being produce in large quantities for Pie R Squared. In the second section, a memorandum of agreement indicating that Sage Bistro will purchase firstly, when possible, the following items from UBC Farm: basil (Thai and traditional types), fava beans, pole beans, sugar-snap peas, Maxibel bush beans, Japanese style thin cucumbers, and nasturtiums. These items are included in a memorandum of agreement to provide flexibility in both the amount supplied and demanded.

Purposed Promotion Strategy

To strengthen the social relation between the Farm and the local community, promotion of their food is critical. For this reason, our team proposes that the Sage Bistro servers visit UBC Farm after a lunch shift in order to learn more about the Farm and gain firsthand experience with local food production. This will enable servers to

romance Farm food to Sage customers and inspire conversations pertaining to UBC Farm and local foods. Our group believes that word of mouth is a powerful promotional tool; therefore, through the conversation between servers and customers, knowledge of UBC Farm and local food can be spread throughout the community. Moreover, we propose for Sage to continue advertising UBC Farm food on their menu in order to spread awareness of the Farm.

SWOT Analysis of Business Plan:

<p>Strengths:</p> <ul style="list-style-type: none"> ▪ Increase financial security of UBC Farm by having guaranteed sold produce ▪ Sage will provide advertisement of UBC Farm which can increase their financial security ▪ Promote importance of local food by word-of-mouth through conversation between servers and customers ▪ Decrease food mile which helps reduce emitted greenhouse gases 	<p>Weakness:</p> <ul style="list-style-type: none"> ▪ Contract is short term due to seasonality ▪ Infrastructure limitations on the Farm does not allow supply to reach demand of produce therefore, the contract cannot reach its full potential
<p>Opportunities:</p> <ul style="list-style-type: none"> ▪ Increase the amount of local food consumed on UBC campus ▪ Increases in farming land if financial security is improved ▪ Further contract and on-campus connections to be established 	<p>Threats:</p> <ul style="list-style-type: none"> ▪ The possibility of UBC Farm land being sold and turning into housing development ▪ Weather uncertainties can affect crop yield

Recommendations

Based upon our groups findings and discussion we recommend the following to UBC Farm, Sage Bistro and UBCFS, 2009 AGSC 450 Students, AGSC 450 Teaching Team, and the Land and Food Systems Faculty.

UBC Farm

- Agree upon contract with Sage Bistro (refer to Appendix A).

- Once butternut squash contract is established, look into feasibility of creating further contracts with produce items indicated in Memorandum of Agreement (refer to Appendix A).
- Establish a day for Sage Bistro servers to come to the Farm and have a Farm liaison explain the importance of UBC Farm and the consumption of local food.

Sage Bistro and UBC Food Services

- Agree upon the contract with UBC Farm (refer to Appendix A).
- Have Sage servers go to the aforementioned Farm tour.

2009 AGSC 450 Students

- Focus on following through with 2008 AGSC 450 proposed business plans to ensure they are fully implemented.
- After business proposals are implemented, focus on creating a thorough business plan for the construction of a root cellar which clearly demonstrates the educational benefits of such storage facilities. This business plan should incorporate UBCFSP since they have expressed an interest in funding the project.
- Focus on increasing advertisement on the benefits of a local food system at UBC campus, particularly within the residence Dining Halls since it would target a wide variety of students.

AGSC 450 Teaching Team

- Create a compiled list of implemented UBCFSP projects initiated by AGSC 450 students to allow for ease of access and exemplify the project's progress over the years.
- Incorporate additional Faculties in the UBCFSP, particularly the Commerce Faculty. This will allow for more formal business proposals to be created and create awareness of the Farm in other faculties.

Land and Food Systems Faculty

- Develop graduate courses, to increase research funding on the Farm, and undergraduate courses involving the Farm. Not only is increased funding a measure of the educational importance of the Farm, but applied courses will also ensure that farming and food processing techniques remain generational and are not lost.

Conclusion

Throughout our groups research, findings, and discussion we were able to create a small but significant step towards obtaining a local sustainable food system on UBC campus. With the establishment of a contract between UBC Farm and Sage Bistro, not only will the Farm be valued as an integral campus food provider, but Sage will also be able to offer additional local food to its customers. Sage Bistro would be an appropriate establishment to enter into such a contract since they share the same vision of providing local food, they are able to accept and afford the Farm's unprocessed produce, and they are an on-campus restaurant that serves to a wide variety of community members. Despite the barriers of the Farm's current production capabilities and constraints to signing a formal contract, our group has been able to propose a plan that is financially feasible and that would generate advertising for both UBC Farm and local food in general.

Through meeting the goals and objectives of Scenario 4, our group has perpetuated the role of AGSC 450 students within the UBCFSP as important intermediaries in creating connections to increase the sustainability of the UBC food system. As a microcosm for larger communities in society, the UBC food system can act as a model for the implementation of sustainable measures (Rojas et al., 2007). For this reason, it is in hopes that this proposal will generate similar contracts which will further enhance the sustainability of UBC food system.

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Appendix A

Proposed Business Contract

Between: Sage Bistro

AND: University of British Columbia Farm

Re: Supplying Farm Produce to Sage

Section A: Butternut Squash Contract

THIS AGREEMENT made and entered into this ____ day of _____, 2008, by and between UBC Farm, the Seller, and Sage Bistro, the Buyer:

1. Seller hereby agrees to produce for buyer, the following goods: 50 lbs of Butternut Squash per week for four consecutive weeks. The approximate cost per week will be \$90 Canadian, resulting in \$360 Canadian for the total four week period.
2. Seller will deliver goods to Buyer on Friday between 3 and 9PM. A representative from the Buyer will be present to receive goods.
3. Buyer agrees to make payment upon placing an order.
4. A day will be organized for Sage servers to visit UBC Farm where a UBC Farm representative will provide a tour of the location and a talk on the benefits of consuming local food.

Section B: Memorandum of Agreement

It is agreed with this Memorandum of Agreement that when possible Sage Bistro will purchase the following produce firstly from the University of British Columbia (UBC) Farm before other distributors.

The produce to be purchased from UBC Farm includes:

1. Butternut Squash
2. Basil (Thai and Traditional)
3. Fava beans
4. Pole Beans
5. Sugar Snap Peas
6. Maxibel bush beans
7. Japanese Style Thin cucumbers
8. Nasturtiums

Both parties have previously determined that the above items are both desired by Sage Bistro and are currently being produced by UBC Farm.

DATE of Signing _____

For the Sage Bistro

For The UBC Farm

Appendix B

Sample pricing calculations: (Frye, 2007; A. Kodis, personal communication, March 7, 2008)

Average UBC Farm price of Butternut Squash: \$1.80 per lb

Amount required from Sage Bistro: 50 lbs per week

$$\frac{50 \text{ lbs}}{\text{per week}} \times \frac{\$1.80}{\text{per lb}} = \$90 \text{ per week}$$

$$\frac{\$90}{\text{per week}} \times 4 \text{ weeks} = \$360 \text{ for 4 weeks (one month)}$$