UBC Social Ecological Economic Development Studies (SEEDS) Student Report

Scenario 1: Desirability of Re-localization

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**University of British Columbia** 

**AGSC 450** 

April 11, 2005

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# Scenario 1: Desirability of Re-localization

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April 8<sup>th</sup> 2005 Agricultural Science 450 TA: Lorenzo Magzul

#### Abstract

The University of British Columbia Food Systems Project has been developed to increase the sustainability of the UBC food system. One of the main objectives of this project is the re-localization of the food system. Therefore, our task in 2005 was to develop a survey that determines 1) whether or not, and to what extent, the University of British Columbia's population is willing to buy local foods and 2) if a high interest is indicated to purchase local foods, whether or not the UBC's population is willing to pay more for it. This is an important aspect of determining how to proceed with re-localization of the food system.

A draft survey was developed from sample questions provided by previous AgSci 450 and Sauder School of Business students as well as discussions within our group. The original survey was submitted to the 2005 AgSci 450 class for suggestions and completion. Based on their responses, the questionnaire was revised again and used to survey a small sample population across campus and again the AgSci 450 class. Often the answers received from the AgSci 450 class were slightly different from the small sample population across campus. This enforced the importance of testing the draft survey on a small sample of the perspective population when developing a quality survey. The results were then used to further evaluate the questionnaire and develop suggestions for the 2006 AgSci 450 class.

#### Background

In the last 50 years, food buyers have come to expect year-round availability of an extensive variety of foods stuffs from many regions of the globe. In order to meet these demands, four key developments have taken place on a global scale: 1) the building and maintenance of a transportation infrastructure with low direct cost; 2) intensification of agricultural technology; 3) widespread commitment to global free

trade policy; and 4) vertical and horizontal consolidation and centralization of the corporate food system (Kloppenburg, Hendrickson and Stevenson, 1996:2).

Long distance food trade is "economically efficient" due to the fact that communities and nations can buy their food from the lowest-cost provider. However, these foods are artificially cheap as loss of local food self-reliance brings a range of ecological, social and economic costs that are not directly paid by the consumers (Halweil, 2002). The environmental and ecological costs include the release of carbon emissions, which contributes to global warming, depletion of wildlife habitat, loss of genetic diversity and soil, air and ground pollution. Social costs include the distancing of consumers to producers and a disparity in the distribution of wealth. Economic costs include declining profit margins for farmers, and increased costs of mitigating environmental impacts, and global food transport (Richer, 2004).

According to the University of British Columbia Food System Project (UBCFSP) guiding principles, re-localization is a step towards improving the sustainability of the food system at the university. Our task in 2005 is to develop a research methodology to be carried out in 2006. We are required to develop a survey that determines 1) whether or not, and to what extent, the University of British Columbia (UBC) population is willing to by local foods, and 2) if a high interest is indicated to purchase local food, whether or not UBC's population is willing to pay more for it. We have examined all the survey questions suggested by previous Agsci 450 and Sauder School of Business students and developed a questionnaire which we thought would best evaluate the UBC population's willingness and capacity to purchase local foods. The survey questions were tested on a small sample population to determine the effectiveness of our questionnaire.

The seven principles play a significant role in ensuring sustainability of the UBC food system. However, we recognize that in order to comprehensively address all seven principles, making compromises among them would be necessary. Therefore, continual efforts need to be made to find an appropriate balance among these principles at different planning and implementing stages of the project progress. Moreover, our group found that the UBCFSP Vision Statement lacks emphasis on awareness of UBC food system in a global context. A food system can not be truly sustainable unless it actively works with systems around it. For example, in order to ensure that the foods provided to UBCFS are safe and nutritious, UBC must help the systems around it, such as local farmers and food distribution channels, to build their own sustainable systems that can continuously supply good quality products to UBC. As a result, we strongly recommend adding an eighth principle to address the issue of looking at UBC food system in a global context and being aware of the reciprocal impacts the UBC food system and those systems around it have on one another.

This paper will discuss the process of developing a survey that addresses the questions of our research methodology. This includes determining a sampling technique, obtaining suggestions from other Agsci 450 students, modifying the original questionnaire, and polling a small sample population. The results of the small sample population were then used to further evaluate the questionnaire and provide recommendations for the Agsci 450 class of 2006.

#### **Sampling Techniques**

When using questionnaires and surveys in research, the target population must be defined and the method of polling must be established before one can even begin to collect data. After reading the previous years' UBCFSP research on this topic, we decided that our target population would be all the UBC food outlet customers. This

was because this survey is designed to answer specific questions about the respondents' demand and willingness to pay a premium for locally produced foods at these outlets. Thus, a target population of all customers allows for an accurate depiction of total demand for more locally produced foods on the UBC campus.

However, previous research also pointed us to a major problem that must be solved before this survey can be effectively implemented. There is much debate as to what the boundaries of the UBC food system includes, when referring to UBC food outlets. Some groups include food outlets in the University Village, and some groups include the growing numbers of private residences on UBC lands, which will require a grocery store. When discussing how to draw the boundary for this survey, our group decided to focus on AMS Food and Beverage, UBC Food Service, and University Village food providers, because the south campus community is not developed enough to effectively gauge the market through polling and we assume most people think of University Village as food on campus. It also reduces the complexity of the sampling methods involved in this kind of market research.

UBC food outlets do far too much business to make polling the entire target population practical, so instead we must choose a representative sample of our target population. Group 1 of the summer 2004 AgSci 450 class suggested using a proportional stratified random sampling method to achieve the most accurate representation of the entire target population. This type of sampling divides the target population into strata that are sampled in proportion to their actual numbers in the whole population (Addison, Lee & Purewal, 2004). This allows for a more detailed analysis of specific trends within each stratum. However, this method has several complications when we try and apply it to the UBCFSP survey. First, it is difficult to get a truly random sample of the target population in each stratum; it requires much

more resources than a convenience sampling method. Also, it is difficult to define the strata in a way that maximizes their usefulness.

Due to the scale of this survey and the current state of the UBCFSP, we did not have the time or resources to implement a full-scale survey of our target population. Instead, we focused on developing an effective questionnaire to be implemented by the 2006 AgSci 450 class. In order to develop the questionnaire, we performed a pilot study to gauge the effectiveness of our questions. We tested our questionnaire on the 2005 AgSci 450 class with a WebCT based survey along with small quotas of convenience samples taken at different UBC food outlets on campus, including: the Barn, Totem Park cafeteria, the SUB, the UBC Hospital Cafeteria, 99 chairs, the University Village and outside the Buchanan complex. Quota sampling is similar to stratified random sampling. The target population is divided into strata in the same way, except the strata are not randomly sampled. Instead the administrator of the questionnaire chooses the subjects either by convenience (i.e. whoever walks by) or judgment (StatPac Inc., 2005). This makes collecting responses easier, but makes it impossible to judge the accuracy of the data collected, due to the fact that the standard error cannot be calculated. However, such a sampling method does give valuable feedback on question design. For example, it is still possible to notice approximate trends in the responses that can be used to indicate a poorly worded question.

#### **Sample Size**

There are several factors that influence a decision about sample size in survey design. Large samples require more resources than small samples. The more varied the responses within a sample, the larger the sample needs to be to keep the same level of accuracy. Also, non-response rates must be calculated and factored into the

sample size. Group 1 from the summer 2004 AgSci 450 class demonstrated an ideal sample size of approximately 400 respondents based on the statistical formula:

 $n = \frac{N}{1+N(e)^2}$  where n is the sample size, N is the total population and e is the maximum error desired. This assumes a total population of approximately 46,000 and 5 percent error as well as maximum variability and a confidence level of 95 percent (Addison, Lee & Purewal, 2004). However, because this calculation totally depends on target population size, it is impossible to determine a good sample size for the 2006 AgSci 450 class to use without first defining how large the target population is. Thus, more consultation with stakeholders is needed to understand exactly how large our target population is.

#### **Research Methodology**

As stated above, the purpose of our questionnaire was to evaluate the UBC campus population's desire, willingness, and capacity to consume and purchase locally produced food. Our group developed twelve questions for this purpose. The draft questionnaire was submitted to the entire AgSci 450 class, who provided feedback on the questions. This feedback was incorporated into a final questionnaire consisting of the following twelve questions:

1. Are you a: UBC Undergraduate Student	Department:
UBC Faculty Member UBC Staff	Gender: M / F
UBC Graduate Student Other:	Age (Please circle one): 18 & under 19-30 31-55 56 & over

The first question was simply developed to identify different demographic groups, which could be used later for further analysis. For example, the question could be asked, would the people who consume the majority of food on campus be the people most interested in purchasing local foods? In addition, Andrew Parr of UBC food services indicated that there are several niche markets on campus which are often related to area of study. Therefore, these results may indicate which areas of study are particularly interested in local foods on campus and which could be used to determine the best starting points for a local foods campaign.

2.	Do you live:	2a. If you live on Campus, do you live in Totem
	On Campus	Park or Place Vanier?
	Off Campus	YesNo

This question will allow us to separate the responses of the people who live on campus and those who depend on a cafeteria for meals. The people living on campus, and those eating their meals from residences with cafeterias are of particular interest to food outlets on campus, as this population makes up a large portion of their consumer base.

3.	How many ti	imes a weel	k do you pu	rchase food o	n campus? (including in The Village)	
	0	1-3	4-6	7-9	10+	

Similar to question two, we would like to be able to categorize the responses of people who eat more, or less often on campus. The attitudes of people who eat on campus more often may be of greater interest to food outlets. This question was altered from its draft form based on input from the AgSci 450 class. Categories that the respondent could circle were added rather than allowing them to fill in the exact number of food purchases. This change will facilitate the analysis of the questionnaire results and make it simpler for the respondents.

4. How would you define locally produced foods?

Question four was chosen to assess the current population's knowledge, and personal definition of "local" foods. We would like to know what the consumer expects of a product labeled as local. In addition, consumers who have no concept of locally produced foods will probably not be motivated to preferentially select them at food

outlets. The AgSci 450 class suggested offering options that the respondent could choose from, but this would eliminate one objective of this question. A blank or unrelated answer will allow the respondent to state his or her own opinion or indicate a lack of knowledge or concern over local food. Including options could also increase the survey's bias towards locally produced foods. If answers are suggested, respondents may be prompted to choose an answer that they would not have thought of. Open-ended questions may also provide us with answers that we had not previously considered. Some researchers cite them as being the most useful in gaining information from respondents (Fitzgerald, 1996). In consultation with Andrew Parr, Director of UBC Food Services, he indicated that the only responses that had proven useful in the past came from open-ended questions.

5. What are the benefits of eating locally produced food?6. What are the drawbacks of eating locally produced food?

Questions five and six were originally one question in our draft survey, but based on the suggestion from seven groups in the AgSci 450 class the question was broken up into two individual questions. A related question from our draft survey regarding the concept of seasonal foods was omitted in the final version after feedback from the AgSci 450 class. Although seasonality is linked with local foods, this relationship is already explored in questions five and six. These questions accomplish two things. Firstly, they will determine if the respondent has any knowledge about locally produced foods. Secondly, the respondent's opinions on local foods will be determined. This will aid in developing advertising and products for food outlets, but also provide insight into areas where public education is required.

7.	Which do you feel is more important?
	The distance that food has traveled
	The country in which the food is produced

This question was significantly altered from its original format in our draft questionnaire. The AgSci 450 class provided numerous suggestions on the wording and format of the original question, though there was no clear consensus. The question was obviously unclear; therefore we completely changed the wording and format into a new question that removed most areas of confusion. Question seven is tied to the definition of locally produced foods. Often food from another country may be closer to consumers geographically, and therefore create less environmental impact during transport. However, some consumers will selectively buy food based on the food's nationality for economic and political reasons. This question was designed to determine the proportion of people who fit into each of these categories.

For the remaining questions, *locally produced food* will refer to food grown within British Columbia

This statement was added into the final questionnaire before the questions regarding consumer preference towards local food. Our own group, as well as the majority of the AgSci 450 class felt it was necessary to establish a definition of 'local' in order to maintain consistency in the responses to the remaining questions. In consensus, with the majority of the AgSci 450 class, the definition of local was determined to be "BC grown". We felt this provided a variety of food options and adequate land area without becoming too large. In addition, using the provincial boundaries would make it simple for respondents to visualize the area being considered as local.

8.	. Would knowing a food item was produced locally encourage you to purchase it if it was the same			
	price as an identical item produced outside the province?			
	YesNoNeutral			
9.	Would you like to see seasonal BC food items at UBC food outlets?			
	YesNoNeutral			
-				

Question eight and nine were developed to determine if there is consumer preference towards locally produced food. These questions are related to one of the main purposes of the questionnaire, evaluating the UBC population's desire to consume local foods. Responses from AgSci 450 students indicated that questions 8 and 9 were clear and didn't need modification.

10. If it were to cost more to offer	locally produced foods at UBC food outlets, how much more would
you be willing to pay?	
0%	11-15%
1-5%	16-20%
6-10%	price is not important
	1 1

This question was developed to quantify the respondents desire to purchase locally produced food, and also give insight into the capacity they have to act on such preferences. Respondents who answered yes to questions eight and nine, and then chose 0% or 1-5% in question ten reveal that they have little capacity or interest to pay more for local foods. Comments from several groups in the AgSci 450 class suggested including examples, or quantifying the percentages in dollar amounts. We felt this question was fairly clear, and were a bit concerned in utilizing a monetary language. Originally, we tried to add a monetary example but since they would be needed for every option it made the question overly confusing. Not all local items would increase in cost by the same increment; therefore, this question probes more at overall spending amounts.

11. What are the top three factors that influence your food purchasing choices?		
(Please rank them in order)		
Price	Quality	
Organic	Fair trade	
Convenience	In season	
BC Grown	Other:	

In question eleven, we hope to evaluate where local production fits in with other priorities a consumer may have. This question was not altered significantly from its draft form. The order in which the factors were listed was re-arranged from the original to a more random grouping, which was suggested by several AgSci 450

groups. Only the first three factors were ranked, because often as the series being ranked gets larger, the reliability of the responses decreases (StatPac, 2005).

12. At the cost of eating fewer in	nported foods (li	ke bananas), would you be willing to eat more local	lly
produced food (like apples)?	)		
Yes	No	Neutral	

Question twelve was developed to determine if the UBC population is willing to incur non-monetary costs in order to localize the food system. This question was completely re-worded, after nearly half of the groups in AgSci 450 pointed out that the original version's wording was confusing. The order of the questions was also rearranged from the draft to group the related questions together. Several groups from AgSci 450 also suggested the use of a 'neutral' option, which was incorporated into several questions. The previous twelve questions made up the final questionnaire, which was administered in the pilot test on the UBC population.

#### **Results & Discussion of the Pilot Test**

The pilot test was administered to analyze the effectiveness of the questionnaire design. To accomplish this, we used quota sampling because statistical analysis is not needed and we had a limited time frame. Furthermore, this method kept sampling simple and efficient. However, the results of the pilot survey can serve as a guideline for our colleagues in 2006 to administer the final version of the survey.

We used both a field survey and a class survey in our pilot test. In the field survey, we polled 49 individuals at food outlets across the campus. In the class survey, we polled 60 AgSci 450 students through WebCT. We have summarized the results for both surveys in Appendix 2. In the following paragraphs, we are going to discuss the differences between the results of the surveys and the problems of our questionnaire design and interview process. The demographics from questions 1 and 2 are summarized in Table 1 in Appendix 2. Questions 2 asked respondents if they live on campus and whether they live at residences that provide food outlet services. Only 9 respondents live on campus with residences that provide food outlet services. This is not a representative sample because students with UBC meal plans are a large segment of the UBC Food Services market. Results for Question 3 showed that great majority of the respondents would make food purchases on a weekly basis; very few responded that they do not purchase food on campus. This implies that the respondents have some familiarity about UBC Food Services outlets when they completed the survey.

Also, the results of Question 3 for both surveys are summarized in Table 2 in Appendix 2. The responses to the open-ended questions (Questions 4, 5, and 6) and the results are summarized in Tables 3, 4, and 5 in Appendix 2.

For question 4, the respondents were asked to define locally produced food. The results of the Field survey showed 18 out of 49 respondents either left the question blank or provided totally unrelated answers to the question. This may have resulted because the general UBC population didn't have sufficient knowledge about the food system or had insufficient English language skills to understand or answer the question properly. Some respondents also vocalized their disdain for open-ended questions, especially at the beginning of the survey; therefore, this may have also contributed to the blank answers for this question. In contrast, there are no respondents who left this question blank from the class survey. This may due to their stronger educational background about the food system, which made them more comfortable answering this question and their direct involvement and interest in the UBCFSP.

The results of question 5, which asked about the benefits of eating locally produced food, are summarized in Table 4 in Appendix 2. Because this question is an open-ended question, it is important to note that each respondent may have multiple answers, therefore the total number of votes exceeded the number of the respondents in both surveys. Also, from the field survey, there were 13 out of 49 respondents who didn't answer this question, and as explained previously, this may be due to lack of food system knowledge or willingness to answer open-ended questions. In addition, both survey results indicated that the most commonly stated benefits of eating locally produced food included growing fresher and cheaper food, and supporting local economic growth. Moreover, the respondents from the class survey may have provided more opinions that were lacking among the UBC general population. For example, some opinions suggest that eating locally produced food would be helpful for better social sustainability and biodiversity. Again, this would be due to AgSci 450 students' strong background regarding the concepts of locally grown foods.

The results of the drawbacks of eating locally produced food from both surveys were summarized in Table 5 in Appendix 2. Question 6 asks respondents about their opinion on the drawbacks of consuming locally produced food. Both AgSci 450 students and the general UBC population agreed that expensive price and less food choice as the drawback for eating local. Again, AgSci 450 students gave answers that provided insights to the question, such as lack of cultural/ethnic food and food seasonality limitations. Similarly, in the field survey, there were 13 respondents which left the question blank any may be the result of previously discussed reasons.

From the discussion above, we have proposed some possible bias that may have contributed to the differences between the results of the two surveys. For questions 4, 5, and 6 in our questionnaire, some answers provided by the field

respondents indicated either confusion with the question or lack of knowledge. In addition, the style of our interview may have affected the respondent's concentration on the survey. Therefore, it may be better if the interviewers orally asked the interviewees the questions found on the questionnaire and wrote down the answers. Through this more interactive style of interviewing, we could improve the respondent's focus on the questionnaire to avoid any question unanswered. However, sometimes, an unanswered question says just as much about the market as an answered one.

The results of question 7 for the two surveys were significantly different. Half of the respondents in the field survey felt that the country in which the food is produced was more important than the distance the food has traveled, but in the class survey there were more than 2/3 (41 out of 60) of the respondents who felt the same. The relatively high variability of these results could show the many different opinions people hold regarding the benefits of locally produced food. Thus, this question was effective in finding out an important aspect the of the respondents' definition of locally produced food.

For questions 8 and 9 in the questionnaire, the results of these two questions between both surveys are quite distinctive and are recorded in Tables 7 and 8 respectively in Appendix 2. It is noticeable that the AgSci 450 students, based on the results of questions 8 and 9, seem to understand the implications of re-localization better **than** the people in the field survey. For instance, for question 8, 57 out of 60 (95%) respondents in the AgSci 450 class are more willing to buy locally produced food, even it is the same price as an identical item produced outside of BC, whereas only 31 out of 49 respondents (63%) in the field survey agree. The local food production is an effective way to approach the local sustainability in which the

environmental impact is minimized and the local socioeconomic benefits are also acquired. Therefore, because of their previous knowledge, Agsci 450 students would automatically choose the answer that supports the localization of food system even though they may not eat local foods themselves. Therefore, it seems that there is a need for a strong marketing campaign to inform the public about these issues to increase their desire, willingness and capacity to purchase local foods.

As seen in Table 9 in Appendix 2, most people from the field survey didn't seem to be willing to support local food production by paying more for locally produced foods. Although the AgSci 450 students were willing to pay more for locally produced food, only 4% of the respondents in both survey thought price doesn't matter. Thus, from this result, we can conclude that price is still a very important determinant in people's choices of food. In addition, the critiques of this question from the AgSci 450 class on Mar 16<sup>th</sup>, 2005 showed that the AgSci 450 students seemed concerned over the answer options presented in this question; for example, the class suggested that we should have included examples or quantifying the percentages in dollar amounts in our answer options. However, the respondents did not seem to require examples, or dollar figures to relate the percentages to their spending habits. So, overall, this question worked well.

It is important to note that for question 11, we specifically asked the respondents to "rank" the top three factors that influence your food purchasing choices. However, 62 out of 109 respondents simply checked the box for the factors but didn't rank them. We inferred the reason for this misunderstanding may have occurred for two reasons. First, it is because the interviewers didn't emphasize the fact that the choices in question 11 need to be ranked. Secondly, in the survey paper,

we didn't bold or italicize the word "rank"; therefore, they would misread the question as the respondents skimmed through.

Once again, in question 12, summarized in Table 11 in Appendix 2, the AgSci 450 class seemed to have demonstrated its interest in re-localization of the UBC food system. Its revised version seemed to perform well during the pilot test. There did not appear to be any confusion on the part of the respondents of either the class or the field surveys surrounding this question.

#### Conclusion

The food system has developed into a global food exchange. Unfortunately, this has numerous ecological, social and economic costs. A key objective of the UBC food security project is the re-localization of the food system to increase its sustainability. Therefore, our task was to develop a survey to test the desire, willingness, and ability of members of the UBC community to purchase locally grown foods, which could be implemented in 2006. Through suggestions by the AgSci 450 class, several original questions were modified. The revised survey was then tested again on the AgSci 450 class and also on a small sample population across UBC campus. The results were used to further analyze the questions to produce a better survey and used to make recommendations for the 2006 AgSci 450 class.

#### Recommendations

After administering the pilot test of our survey and interpreting the results, we have developed recommendations to incorporate into future questionnaire designs and research methods. In addition, we have proposed a timeline for the completion of this research within the UBCFSP.

As mentioned previously, the target population and sampling techniques must be defined and established prior to the collection of data. In order to effectively

assess the problem of the demand, willingness and capacity of the UBC community to help with the re-localization of the UBC food system by purchasing more local foods, we recommend that the target population is defined as all UBC food outlet customers, with the focus on the three major food providers that are involved in the UBCFSP, AMS Food and Beverage and UBC Food Service controlled food outlets, as well as those in the village. In order to obtain an accurate and representative sample of our target population and statistically significant results, we suggest using a stratified random sampling method that is proportional to the different market segments. For example, Students purchasing food in residence cafeterias make up a large portion of the market for UBC Food Services and should be reflected in a similar proportion when sampling. To determine a representative sample size, the UBCFSP stakeholders must first establish the size of the target population. In addition, the non-response rates must be calculated and factored into the sample size.

To receive the best feedback possible on open-ended questions, we recommend that the interviewer ask the respondents orally. This way, important feedback and information from the respondents will not be lost. The answers to open ended questions, if any, are useful to obtain valuable insight from respondents, to test the knowledge of the respondents, and to provide us with answers that we had not previously considered. This type of oral interviewing could be done through the use of 15-person focus groups consisting of random members of the target population and one interviewer. Assuming a sample size of around 400, 27 of these focus groups would need to be held. While this would be far too big a task for one or two AgSci 450 groups to administer in 2006, several more groups could make this type of polling effective.

Other methods of survey administration that may be more practical would be a wed-based survey or a questionnaire that restaurant staff could provide to randomly selected customers. Web-based surveys are easy to randomize, however they are not necessarily capable of sampling our entire target population. Having the restaurant staff administer the survey adds a great deal of complexity to the research process because all the staff will need to be educated on how to administer the survey. All three of our suggested methods of survey administration have benefits and drawbacks. Thus, it is up to the stakeholders of the UBCFSP and the 2006 AgSci 450 class to determine the best administration method. In any case, we still recommend that with any large-scale surveys that are administered on the UBC campus, incentives should be provided to encourage respondents to participate and complete the full survey. For example, gift certificates to the bookstore or food outlets may be practical.

As stated in the discussion of our results, question 11 was poorly worded. Many respondents only checked their top three preferences instead of *ranking* them. Therefore, we suggest replacing question 11 with a new version similar to the following example, where we have used bold text to emphasize the need to rank preferences.

**Place in order of importance to you the following features of a food item** (*Indicate by numbering from 1-3 in order where 1 is the most important*)

Organic Price Convenience BC Grown Fair Trade Quality In Season Information pamphlets on local food, sustainability and information regarding where the results of the survey can be found should be given to the respondents after completing the survey. In the results from the sample questionnaire, several of the open-ended questions were left blank. Although this may have occurred because respondent didn't want to answer an open-ended question, it may also indicate a lack of knowledge in that area. Therefore, information pamphlets could help to increase their knowledge about local foods, sustainability and the importance of eating locally.

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# Appendix 1:

Please take a moment to fill out this important survey on consumer preferences and knowledge towards food.

1. Are you a:	Department: Gender: M / F	
UBC Undergraduate Student UBC Faculty Member UBC Staff		
UBC Graduate Student Other:	Age (Please circle one): 18 & under 19-30 31-55 56 & over	
3. Do you live:  2a.    On Campus    Off Campus	If you live on Campus, do you live in Totem Park or Place Vanier? YesNo	
<ol> <li>How many times a week do you purch Village)</li> </ol>	ase food on campus? (including in The	
0 1-3 4-6	7-9 10+	
14. How would you define locally produce		
15. What are the benefits of eating locally	produced food?	
16. What are the drawbacks of eating loca	lly produced food?	
17. Which do you feel is more important? The distance that food ha The country in which the		

#### G

For the remaining questions, *locally produced food* will refer to food grown within British Columbia

- 18. Would knowing a food item was produced locally encourage you to purchase it if it was the same price as an identical item produced outside the province?
   Yes \_\_\_\_\_No \_\_\_\_Neutral
- 19. Would you like to see seasonal BC food items at UBC food outlets? \_\_\_\_\_Yes \_\_\_\_No \_\_\_\_Neutral
- 20. If it were to cost more to offer locally produced foods at UBC food outlets, how much more would you be willing to pay?

0%	11-15%
1-5%	16-20%
6-10%	price is not important

21. What are the top three factors that influence your food purchasing choices? (Please rank them in order)

Price	Quality
Organic	Fair trade
Convenience	In season
BC Grown	Other:

22. At the cost of eating fewer imported foods (like bananas), would you be willing to eat more locally produced food (like apples)?

Yes No Neutral

Thank you for your time, your responses will contribute to the UBC Food Security Project

Comments:

# **Appendix 2: Results from the Pilot Test**

	Field Survey	Class Survey
		F
	Field Survey	Class Survey
UBC Undergraduates	30	59
Faculty member	2	0
UBC Staff	7	0
UBC Graduates	6	1
Others	4	0
Male	27	10
Female	20	50
Didn't Answer	2	0
Under 18 yr old	3	0
19-30 yr old	35	56
31-55 yr old	8	4
Above 55 yr old	3	0

# Table 1: Question 1, results from the field and class survey. Field Survey Class Survey

#### Table 2: Question 3, results from in the field and class survey.

	Field Survey	Class Survey
0	4	9
I to 3	19	40
4 to 6	16	9
7 to 9	3	1
>10	7	1

# Table 3: Question 4, results from in the field and class survey.

	Field Survey	Class Survey
Food produced in BC	15	31
Distance that food Traveled	3	13
Food produced in Canada	3	2
Food produced in Lower Mainland	7	6
food grown in Neighborhood	3	2
others	2	6
Blank/or Unrelated Answers	18	0

	Field Survey	Class Survey
Fresher and/or Cheaper	18/49 votes	32/116 votes
Increase local GDP growth	16/49 votes	33/116 votes
Convenient	5/49 votes	0 votes
Less environmental impact	9/49 votes	18/116 votes
Community Sustainability	0 votes	21/116 votes
Less transport costs	1/49 votes	18/116 votes
Others	3/49 votes	4/116 votes
Blanks	1/49 votes	0 votes

 Table 4: Question 5, results from in the field and class survey.

# Table 5: Question 6, results from in the field and class survey.

	Field Survey	Class Survey
Lack of variety	14/52 votes	25/72 votes
More expensive than imported food	14/52 votes	14/72 votes
Seasonality limits	2/52 votes	16/72 votes
Less quantity (supply)	0 votes	6/72 votes
Less convenient	1/52 votes	2/72 votes
Inferior quality	6/52 votes	2/72 votes
Others	2/52 votes	4/72 votes
Blanks	13/52 votes	3/72 votes

#### Table 6: Question 7, results from in the field and class survey.

	Field Survey	Class Survey
Distance that food has traveled	22	19
The country in which the food is produced	26	41
Blank	1	0

#### Table 7: Question 8, results from the field and class survey.

	Field Survey	Class Survey
Yes	29	57
No	6	2
Neutral	14	1

# Table 8: Question 9, results from the field and class survey.

	Field Survey	Class Survey
Yes	31	57
No	0	0
Neutral	18	3

	Field survey	Class Survey
0%	20	4
1-5%	18	25
6-10%	5	23
11-15%	1	5
16-20%	1	1
price doesn't matter	4	1

 Table 9: Question 10, results from the field and class survey.

# Table 10: Question 11, results from the field and class survey.

	Field Survey	Class Survey
Price	39 / 131 votes	50 / 166 votes
Quality	35 / 131 votes	43 / 166 votes
Convenience	24 / 131 votes	35 / 166 votes
BC Grown	5 / 131 votes	14 / 166 votes
Organic	12 / 131 votes	9 / 166 votes
Fair Trade	4 / 131 votes	2 / 166 votes
In Season	6 / 131 votes	5 / 166 votes
Others	6 / 131 votes	8 / 166 votes

# Table 11: Question 12, results from in the field and class survey.

	Field Survey	Class Survey
Yes	18	26
No	14	13
Neutral	17	19