UBC Social Ecological Economic Development Studies (SEEDS) Student Report

Assessing the Potential for a Student-run Cooperative Organic Grocery Outlet in UBC's Student Union Building: The Sustainability of the UBC Food System Collaborative Project III

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The Sustainability of the UBC Food System Collaborative Project III

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Scenario5: Assessing the Potential for a Student-run Cooperative Organic Grocery Outlet in UBC's Student Union Building

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Abstract: The food system at the University of British Columbia (UBC), like most food systems, is a complex and dynamic system that is expanding to fill the needs of a growing population. For the past two years the AGSC 450 students, in the Faculty of Agriculture at UBC, have set out to assess the sustainability of this food system. Our work is part of the 3rd year of this five year study. We studied the models and findings from last year's class and tried to improve upon them; thus providing future researchers with a solid foundation on which to base their primary research. We also assessed the potential for a student-run cooperative organic grocery outlet in UBC's Student Union Building and identified its role in a sustainable food system. We assessed indicators and models from last year and reworked them to fit our subsection of the UBC Food System. The six indicators we chose track a combination of economic, social, and ecological sustainability of the Natural Foods Co-op. Overall, we found the Co-op could play a major role in pushing the UBC Food System towards sustainability; however, there are some challenges related to economics and community awareness that could hinder the Co-op's progress. We believe collaboration between stakeholders and research of other student-run food co-ops is the best way to overcome future challenges. The UBC Sustainability Office plays a large role in initiatives to promote sustainability on campus; therefore, we make a number of recommendations to the office as to how they can take part in making the Food Co-op a viable component of a sustainable food system at UBC.

1.0 Introduction

1.1 Problem Definition

The unsustainable status of UBC's Food System is indicative of the food system problems experienced at the global level. With the global population expansion placing increased pressure on our food production systems, it seems that that it will remain unsustainable unless we facilitate change (Brown 2003). Access to organic and ecologically produced foods is poor, as is global awareness of fair trade and socially sustainable goods (Fair Trade Federation 2002). Furthermore, there is little collaboration between the various stakeholders. This results in a compartmentalization of the food

system, where consumers have very little connection to the producers and food production systems. These problems are all evident at UBC. By addressing these issues, we can bring the UBC Food System closer to sustainability and provide a model for enhancing the sustainability of the Global Food System. Ideally, *this* would result in a Global Food System that is more ecologically and socially sustainable, while remaining economically viable.

1.2 Description of the Scenario – The Opening of an Organic Grocery Outlet

One aspect of the UBC food system for which there has been growing interest over the last few years, is the creation of a student-run cooperative organic grocery outlet located in the Student Union Building (SUB) (Fox 2003). In theory, this outlet would increase the sustainability of the UBC Food System by allowing the UBC community greater access to food, in particular organic and fair-trade goods (Fox 2003). The grocery outlet would also increase the awareness of these types of foods among the members of the UBC community.

Growing interest in opening an outlet resulted in the Natural Food Co-op opening a storefront in the SUB in January 2004 (Rojas and Wagner 2004). Although this operation is not yet sustainable, due in part to its limited operating hours, it enjoys the support of many groups on campus, including the Alma Mater Society (AMS), the Faculty of Agricultural Sciences, and UBC Farm (Miro 2003).

Through assessing the sustainability of the Natural Food Co-op, we can make **predictions** and suggestions about the sustainability of the larger UBC Food System. Assessment of this sub-system will foster understanding of the UBC Food System, honing suggestions for future stakeholders in the collaborative project while at the same time providing an initial indication of the sustainability of the Global Food System.

1.3 Value Assumptions

The global food system has been formed from an anthropocentric view; meeting the needs of humans first (Murdy 1993). This ethic, combined with our current economic view, has resulted in the ideology that what is good for the economy is good for society.

Our group feels this has led to problems in the global food system because focusing too greatly on the individual and economy causes us to loose the connections between society and the land. We feel it is important to focus on a community-based system in which the landscape is seen as part of the community and individual's actions are governed by mutual responsibility and stewardship (Kloppenburg and Lezberg 1996). Stemming from our community-based values, we believe that economic, social, and environmental viability cannot individually create a sustainable food system. The necessary synergy between the three facets can most easily be initiated at the local or community level. Making informed decisions and involving the community were key points we considered in the development of our model and food system research. We also focused on the importance of the interactions between the three pillars of sustainability.

One limitation that could arise from applying this view to the UBC Food System is that for many people, UBC is a temporary community. With such a high turnover rate of community members, it may be difficult to apply the same principles of citizen responsibility and stewardship; however, this can also be looked upon as a unique advantage because those who come to UBC are coming to learn and are open to new ideas.

2.0 Our Position on the Sustainability of the UBC Food System

2.1 Food System Sustainability Model

Our group particularly liked the sustainability models presented by last year's groups 9 and 14; although, we could not reach a consensus on which one was more comprehensive and easier to understand. Consequently, we combined the two models, using Group 9's amoeba model as our base and adding the colour continuum from Group 14 for improved visualization (Appendix 1).

We followed Group 9's lead and identified six categories for which we chose indicators. These included the three main dimensions of ecological, social, and economic sustainability, plus three categories linking them to one another. We gave each category/indicator an equal share of the total, and further divided each piece of the pie into

four levels of sustainability. An arbitrary, yet comprehensive numerical scale based on the four colour continuum was then identified for each indicator. Furthermore, we assigned a scale from 0 to 100 for each indicator.

This gives us a way to quantitatively evaluate the sustainability of each indicator within the food system. Once the level of sustainability is measured for each piece of the pie, we can easily see which areas of the system require improvement. Indicators that are greener and closer to the core are more sustainable, while indicators that are redder and farther away from the core are more unsustainable. Consequently, the redder the indicator the more improvement is required.

2.2 Ecological Indicator

Our ecological indicator is waste, more specifically, the waste generated by the Natural Food Co-op grocery outlet. Based on the principles of reduce, reuse, and recycle, our tool will measure the percentage of recyclable and organic compost material that is actually being recycled and composted by the Co-op. Surveys will be used to establish an initial understanding of the types and amounts of waste being generated (Appendix 2). After the initial data is collected, next year's groups will be in a better position for addressing specific waste flows. For example, a sustainable percentage would show anywhere from 75-100% of recyclable and organic compost material being recycled and composted.

Sustainable/Green	75-100% recyclable and organic compost material being recycled and composted
Mildly Sustainable/Yellow	50-74% recyclable and organic compost material being recycled and composted
Mildly Unsustainable/Orange	25-49% recyclable and organic compost material being recycled and composted
Unsustainable/Red	0-24% recyclable and organic compost material being recycled and composted

Limitations of the indicator

This indicator is limited because it does not account for or evaluate the reduction of waste; only that waste is being recycled or composted. It is possible that the Co-op could produce increasing amounts of waste while maintaining a sustainable rating if they were recycling the extra waste. Also, we are excluding the measurement and quantification of non-recyclables and other waste products which are equally important to ecological sustainability.

2.3 Economic Indicator

We chose to evaluate the profit margins and revenue of the grocery outlet for our economic indicator because we feel they best describe the financial status and viability of the outlet. The financial status of the Co-op reflects the economic health of the outlet, and staying in business will ensure that the Co-op continues to provide access to sustainably produced foods. To examine this, we are going to analyze all the financial statements with focus on the balance sheets and income statements of the organic grocery outlet.

Sustainable/Green	Outlet generating revenues over and above what is needed to pay both fixed and valuable costs. Profit margins >0.
Mildly Sustainable/Yellow	Outlet generating revenues equal to its fixed and valuable costs. Profit margins =0.
Mildly Unsustainable/Orange	Outlet generating enough revenue to pay only the fixed costs. Profit margins <0.
Unsustainable/Red	Outlet not generating enough revenue to pay either its fixed or variable costs. Profit margins much <0.

Limitations of the indicator

Simply measuring the profitability of the grocery outlet does not reflect the financial status of the suppliers and producers that the Co-op is connected with; therefore, cannot reflect the economic sustainability of the entire closed system**.**

2.4 Social Indicator

Food accessibility, particularly having easy access to organic and fair-trade foods, contributes to food security because it ensures people can obtain safe, nutritious food.

Thus, our social indicator is accessibility of the Natural Food Co-op, its products, and resources. Currently, Co-op outlet provides organic foods; however, limited store hours prevent sufficient food accessibility (Miro 2003). To assess the social sustainability, we would use a survey to evaluate when members and potential customers prefer to do their grocery shopping, and use the results to show whether or not the Co-op is accessible (Appendix 3).

Sustainable/Green	75-100% of customers can do their shopping within given operating hours
Mildly Sustainable/Yellow	50-74% of customers can do their shopping within given operating hours
Mildly Unsustainable/Orange	25-49% of customers can do their shopping within given operating hours
Unsustainable/Red	0-24% of customers can do their shopping within given operating hours

Limitations of the indicator

Food accessibility and store hours do not give us any information about food affordability and cultural appropriateness. If the foods sold at the Co-op are very expensive, then they will be unattainable for many members of the UBC community. Furthermore, the UBC community has a wide variety of cultural backgrounds; our indicator fails to show whether or not the products available at the Co-op meet a wide variety of cultural preferences.

2.5 Social-Ecological Indicator

Our social-ecological indicator is awareness of organic and fair trade food, local production benefits and food systems. We chose these topics because a central mandate of the Natural Food Co-op is to educate the public about food and trade issues. Our group thought that an appropriate beginning would be assessing the general awareness of the campus community towards these issues. To do this we designed a survey that would take no more than five minutes to complete while briefly addressing all relevant topics (Appendix 4). Through assessing the results of the survey, we can make a statement about the current sustainability of this indicator.

Sustainable/Green	75-100% of the campus community is aware of organic and fair trade food, local production benefits, and food systems
Mildly Sustainable/Yellow	50-74% of the campus community is aware of organic and fair trade food, local production benefits, and food systems
Mildly Unsustainable/Orange	25-49% of the campus community is aware of organic and fair trade food, local production benefits, and food systems
Unsustainable/Red	0-24% of the campus community is aware of organic and fair trade food, local production benefits, and food systems

Limitations of the indicator

One major limitation of our survey is the yes/no answer format restricts the depth of understanding we are able to test. For example, we cannot ascertain whether or not people know specific differences between organic and conventional production methods. The public may not know what those differences are or how they carry systemic problems in all the social, economic, and ecological aspects of our global food system.

2.6 Socioeconomic Indicator

The Food Co-op's mandate is to make sustainably produced foods available to the entire UBC community at a fair price; thus, we chose affordability of the food items at the Co-op as our socioeconomic indicator. As a large portion of the campus community is composed of students, with relatively low monetary resources, the affordability of food is essential. Also, the food producers deserve to receive a fair price for their product and labour, which the Co-op puts into practice by buying fair-trade goods. This creates a strong inter-relationship between the Co-op, producers, and consumers.

We propose to compare prices of various food items, such as fruit, vegetables, and grains, from the Co-op with prices from other stores that also supply organic and fair-trade foods, like Caper's and Choices (Appendix 5).

Sustainable/Green	Food prices at the Co-op are equal to or less than prices at other stores.
Mildly Sustainable/Yellow	Food prices at the Co-op are 1-37 % more than prices at other stores.
Mildly Unsustainable/Orange	Food prices at the Co-op are 38-74 % more than prices at other stores
Unsustainable/Red	Food prices at the Co-op are 75% or greater than prices at other stores.

Limitations of the indicator

We need to be aware that there are several reasons for the differences in selling price. Commercial grocery stores, like Caper's and Choices, are able to purchase in large quantities; thus, may receive a purchase discount. Additionally, they are profit driven enterprises and will therefore make use of price mark-ups to generate decent profit margins. At this stage in the study we are uncertain as to how this will affect the Co-op as the Co-op buys smaller quantities and makes minimal mark-up on the prices of its products (Miro 2003).

2.7 Ecological-Economic Indicator

The indicator we have chosen in this category is food source, which relates to the distance food travels prior to reaching the consumer. We can evaluate the sustainability of this indicator by comparing the percentage of food obtained locally with the percentage obtained from farther away. Having food produced and processed, locally will allow the Co-op to provide high quality food at a fair price for both the producer and consumer, while reducing losses and energy costs from transportation and packaging (Reference Kloppenburg *et al.* 1996; Pretty 2001).

In order to measure food source, we propose a geographical separation scale rather than calculating exact kilometres traveled. Our geographical location and interest in decreasing the number of complex calculations shaped our choice for food source ratios rather than food miles (Appendix 6). Four geographical areas were distinguished: the lower mainland, the interior of the province and Washington, the North American continent and International.

Calculating food sources as a ratio is an effective means to show ecological-economic sustainability. The shorter the distance food travels, reduces energy costs associated with distribution (i.e. transportation and storage) and consequently ecological impacts**.** Also, obtaining more foods from local sources will provide economic benefits by

redistributing money through local producers, vendors, and consumers, affectively closing the economic loop. A sustainable Co-op ensures that 75% of their food sold comes from local sources while 25% are imported.

Sustainable/Green	75% of food sold at the Co-op comes from a local source, 25% food items are imported.
Mildly Sustainable/Yellow	50% of food sold at the Co-op comes from a local source, 50 % food items are imported.
Mildly Unsustainable/Orange	25% of food sold at the Co-op comes from a local source, 75% food items are imported.
Unsustainable/Red	0% of food sold at the Co-op comes from a local source, 100% food items are imported.

Limitations of the indicator

There is a constant demand for imported internationally produced foods such as coffee and bananas. We can ameliorate this issue by ensuring the growers are producing the goods sustainably and receiving fair prices for their products. Moreover, it is difficult to measure the source of processed foods. For instance, granola contains many ingredients from various origins making the task of determining the exact food source extremely difficult and time consuming.

3.0 Our Scenario – The Student-run Cooperative Organic Grocery Outlet

3.1 Description of the Organic Grocery Outlet

The Food Co-op organic grocery outlet was opened on January 28, 2004, in the basement of the SUB. It is currently a small booth providing a limited variety of organic and fair-trade foods and operates during limited hours, i.e. 12-2 P.M. Monday to Friday. The Co-op plans to expand in the future to meet the growing demands for organic and fair-trade products in the UBC community (Fox 2003). This includes hiring UBC students, coordinating efforts with various stakeholders, and organizing educational and social events to promote the Co-op's mission.

The vision of the new Natural Food Co-op can be divided into three main points: 1) to make sustainable foods available to the entire UBC community; 2) to provide youth with

employment and leadership opportunities; and 3) to educate the public about food and trade issues, fostering critical-thinking and global citizenship (Miro 2003). The outlet is set to inspire a culture of sustainability throughout the UBC community by leading an "ethical revolution towards a more socially, ecologically and economically balanced global family" (Miro 2003).

3.2 How the Food Co-op Relates to the UBC Food System

The creation of a natural foods cooperative grocery outlet is a large step in the movement towards a more sustainable food system at UBC. The outlet will provide access to ecologically and socially sustainable foods, increase community awareness of the food system, and strengthen community ties. Although the Co-op makes a positive contribution to the UBC Food System, the outlet faces a number of challenges, primarily economic viability and community awareness.

3.2.1 Contributions

The Natural Food Co-op will have a positive effect on the environmental sustainability of the UBC Food System because the Co-op purchases foods that have been produced in an ecologically beneficial manner; however, there is still room for improvement. As the Food Co-op purchases more local foods, environmental impacts such as pollution from transport will be reduced (Bradbeer *et al*. 2004).

Social sustainability of the food system is enhanced by selling fair-trade and organic foods and educating the public; thus fostering critical thinking and global citizenship.

The Food Co-op can also provide many positive contributions to the economic viability of the UBC Food System. Students will be able to purchase a greater amount of their groceries at UBC, and will benefit from the employment opportunities available through the outlet. This would help keep money circulating within the UBC community.

3.2.2 Challenges

Maintaining an economically viable and self-sufficient grocery outlet is the biggest challenge for the Food Co-op. So far the outlet has relied on a mixture of grants, membership fees, and sales to cover start up and operational costs (Miro 2003). Securing funding, generating sales, and attracting new members to maintain revenues will likely remain a challenge in the future.

Furthermore, meeting the social needs of the UBC community will pose a challenge due to the diversity within the population. For many people, access to a wide variety of foods and convenience are important factors. Due to the limited selection and store hours at the Food Co-op, students may choose to shop off campus where they can meet all of their needs in one trip.

3.2.3 Solutions

Through awareness and education, the Natural Food Co-op is confident that they can maintain self sufficiency and successfully attract customers. When consumers are aware of the issues surrounding food production, we believe they will be more likely to support initiatives such as the Natural Food Co-op. Thus, community support will be a major factor in creating a self-sufficient grocery outlet.

3.2.4 Partnerships

The Natural Food Co-op would benefit from partnerships between AMS, UBC Food Services, the UBC Farm, and the various faculties around campus, especially the Faculty of Agricultural Science. These would result in mutual benefits and a strengthening of the UBC food system.

The Food Co-op has already collaborated with AMS, which has provided space in the SUB for the grocery outlet free of charge (Miro 2003). The collaboration between the AMS and the Co-op has the potential to expand, especially if the AMS were to use the Co-op as a supplier for the food outlets in the SUB.

UBC Food Services is another potential partner. Collaboration would provide access to a greater proportion of the campus, especially resident students who rely on cafeterias. It is important to note that the Food Co-op is currently too small to meet the all of the needs of the AMS and UBC Food Services, but support from these enterprises will help the Food Co-op to grow and become a key participant in the food system.

Collaboration with the UBC Farm is an integral step in moving towards sustainability of the UBC food system. The UBC Farm can supply the Co-op with fresh produce that is produced in an ecologically and socially sustainable manner, while the Food Co-op can provide the Farm with increased revenues and exposure to the campus community. Once a large enough demand is established, the Farm could expand production to meet the needs of Co-op customers. We recommend having a Farm/Co-op liaison person on the Co-op executive committee to facilitate collaboration between these two groups.

Connections to the Faculty of Agricultural Science (FAS) should be fairly easy to establish as the faculty has made sustainable food systems and community involvement integral parts of their core programming. The FAS could dedicate course work and problem-based learning cases to expand research, ideas, and solutions for the Food Co-op. For example, FAS students could investigate possible food sources within the region, or create nutritional food plans for seasonal foods. There could also be a link between the Co-op and Agora, a student run food outlet located in the basement of the MacMillan building. By purchasing foods from the Co-op, Agora could increase food accessibility by catering to students and faculty at the south end of campus.

To achieve sustainability in the UBC food system, participation from all the members of the community is required. Therefore, we feel all faculties should have the chance to be informed about and involved in the Food Co-op.

In order to be successful, the Co-op will need liaison people to connect with each of the aforementioned groups. This would open up the lines of communication and facilitate collaboration.

3.3 Research Suggestions: Recommendations for Documentation of Lessons Learnt from Other Student-run Co-op Operations

Preliminary research of existing student-run food cooperatives at various Universities and Colleges has suggested that the Internet will be an effective tool in tracking successful and problematic experiences. Investigating the experiences of other co-ops will aid the Natural Food Co-op in steering away from common errors and alert the Co-op about obstacles they are likely to encounter. This research will allow the Natural Food Co-op to learn from other co-op's experiences, thus making the process of turning the UBC Food Coop into a significant player within the UBC Food System more efficient.

The AMS website is a good place to start as it offers links to other university-run food coops. A second option is a Google-based Internet search, as it enables the researcher to access information from both student and community-run food co-ops. These sites also offer contact information where any further enquiries or specific questions may be addressed. To facilitate further research, we have designed a research tool which includes questions that will guide future researchers, but our list is not exhaustive (Appendix 7).

Aside from the Internet-based research tactic, our group also considered contacting executive members at other university and college food cooperatives to establish a social network. This could be created through e-mail, telephone, or personal meetings.

3.4 Our Findings and Vision

Our group agrees with the view of Brighten *et al.* (2003) in that a sustainable food system as one that is economically viable and meets the community's needs for nutritious food at an affordable price, while conserving the food system's natural resources and environmental quality for future generations. In addition to this, our vision for creating a

sustainable food system at UBC involves increased awareness and participation from community members.

Creating sustainability at UBC is a difficult and complex challenge, but the ability to collaborate with student groups, campus organizations, and active community members will help make it possible. The indicators we chose provide markers for assessing the current and future status of UBC's sustainability. Our model provides a visual representation of these indicators.

We believe that the existence of the Food Co-op on campus will have a positive effect, enhancing the sustainability of the UBC Food System. The Co-op's mandate of increasing the availability of affordable sustainably produced foods and increasing community education will allow people to see how our microcosm at UBC fits into the Global Food System; thus, encouraging people to act as though they are part of our global community (Miro 2003).

4.0 Conclusion and Final Reflections

4.1 Discussion

We feel there is a long way for the Natural Food Co-op to go before it achieves full sustainability. The main reasons for this are the lack of community awareness of the grocery outlet and the low level of collaboration between the stakeholders. These weaknesses reflect local, regional and global characteristics of our food systems. In the UBC community, groups that work towards sustainability are fragmented and lack connection. Although these stakeholders work very hard, they tend to work without synergizing their efforts. This is mainly due to limited resources and lack of intermediaries who could initiate and facilitate the linkage between these individual groups. This problem stimulates us to critically think about the Global Food System, which we believe is unsustainable due to similar reasons as the UBC Food System. We see the GFS as a magnified version of the UBCFS and the Natural Food Co-op. By ensuring the Co-op's sustainability we can facilitate the global move towards sustainability from the ground up.

4.2 Recommendations to the UBC Campus Sustainability Office

The UBC Campus Sustainability Office (UBCCSO) has been hard at work over the last few years improving the overall sustainability of the UBC Campus. While they have had great success implementing recycling programs and reducing water, electricity, and paper usage, they have made little progress to advance the sustainability of the Food System; although, this is one of their goals for the future (UBC Campus Sustainability Office 2003).

The UBCCSO could improve the Co-op's sustainability by facilitating collaboration between the Natural Food Co-op and student groups, UBC Faculties, and the UBC Farm. Furthermore, it would be beneficial for the UBCCSO to introduce topics regarding organic and fair-trade foods, the UBC Farm, and the Natural Food Co-op into their already existing sustainability discussion circles. We believe that increasing awareness of the Food Co-op, their goals and their ideals, is an important first step. UBC has the unique opportunity of being able to provide a model and set a precedent for other institutions, both within Canada and abroad. Through leading by example, UBC can help bring our Global Food System closer to sustainability.

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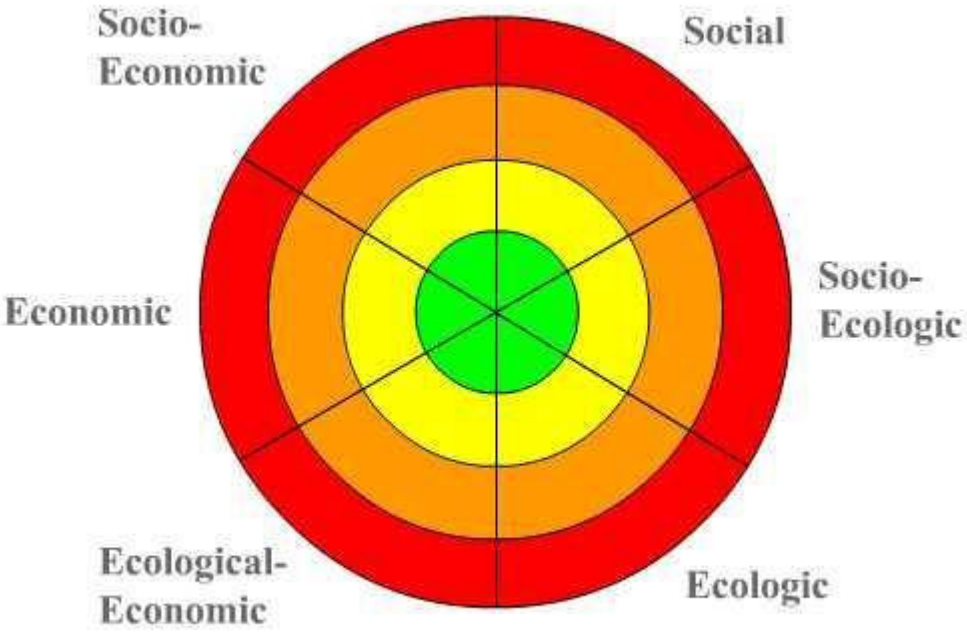
Appendix #1

The graphical representation of our model



Red – Unsustainable

Orange – Mildly Unsustainable

Yellow – Mildly Sustainable

Green – Sustainable

Appendix # 2

Survey for evaluating the waste produced at the Natural Food Co-op (Ecological Indicator)

1. What types of waste are being produced?
    - Recyclable
        - # of boxes
        - Paper
        - Etc.
    - Non-recyclable
        - Plastics
        - Etc
    - Compost
        - Vegetables
        - Fruit
        - Etc.
    - Other

2. How much of each is being produced on a weekly basis?
    - Weight
    - Volume
    - Number/Amount

3. How much of the identified recyclable and compostable waste is being recycled and composted?
    - Recyclable
        - # of boxes
        - Paper
        - Et cetera

    - Compost
        - Vegetables
        - Fruit
        - Etc.

4. Who will measure and record the aforementioned data?

    - Food Coop Executives
    - Volunteers (from the Faculty of Agricultural Sciences or the Food Co-op)
    - Agricultural Sciences Undergraduate Society
    - AGSC 450 students

Appendix # 3

Survey to Access the Accessibility of the Food Co-op (Social Indicator)

Question 1: Please check off the time when you usually buy and eat foods in UBC campus: (you can check off if many as possible)

_____ 8am-9am
_____ 9am-10am
_____ 11am-12pm
_____ 12pm-1pm
_____ 1pm-2pm
_____ 2pm-3pm
_____ 3pm-4pm
_____ 4pm-5pm
_____ 5pm-6pm
_____ 6pm-7pm
_____ 7pm-8pm
_____ Never

Question 2: Do you usually buy and eat **breakfast** on the UBC campus? ___ Yes ___ No

Question 3: Do you usually buy and eat **lunch** on the UBC campus? ___ Yes ___ No

Question 4: Do you usually buy and eat **dinner** on the UBC campus? ___ Yes ___ No

Question 5: Do you usually purchase and eat snacks on the UBC campus? ___ Yes ___ No

Question 6: What days you usually buy and eat foods in UBC campus? (You can check off if many as possible)

_____ Monday
_____ Tuesday
_____ Wednesday
_____ Thursday
_____ Friday
_____ Saturday
_____ Sunday
_____ Never

Question 7: Do you live in UBC Campus? ___ Yes ___ No

Question 8: Would you (more) buy and eat foods in UBC campus if the stores open later/earlier than currently they are? ___ Yes ___ No

Thank you for participating in our survey.

Appendix # 4

Survey to Evaluate the Community Awareness of Organic and Fair-Trade Foods, Local Production, and Food Systems (Social-Ecological Indicator)

1. Have you heard about Organic food before?
   Yes ☐☐ No ☐☐
2. Do you know the difference between Organic food and conventional Non-Organic food?
   Yes ☐☐ No ☐☐
3. Have you heard about Fair-Trade goods?
   Yes ☐☐ No ☐☐
4. Do you know what a Fair-Trade good is?
   Yes ☐☐ No ☐☐
5. Do you know the difference between Fair-Trade and Non-Fair-Trade goods?
   Yes ☐☐ No ☐☐
6. Do you know the benefits of supporting local production?
   Yes ☐☐ No ☐☐
7. Could you list at least two social, two ecological and two economic benefits from local production?
   Yes ☐☐ No ☐
8. Have you heard of a systems approach before?
   Yes ☐☐ No ☐☐
9. Do you know what a systems approach is?
   Yes ☐☐ No ☐
10. Have you heard of a food system before?
    Yes ☐☐ No ☐
11. Do you know what a food system is?
    Yes ☐☐ No ☐
12. Have you heard the term Foodshed before?
    Yes ☐☐ No ☐
13. Do you know what it means?
    Yes ☐☐ No ☐

Appendix # 5

Chart for evaluating the prices of foods at various grocery outlets (Socioeconomic Indicator)

Food Item	CO-OP Price	Caper's Price	Choice's Price
Apples	$0.65		
Bananas	$1.00/lb		
Quinoa	$2.75/lb		
Popcorn	$1.05/lb		
Sugar (454g)	$2.60		
Quick Oats	$1.05/lb		
Olive oil (500ml)	$7.50		
Green Tea	$2.35		
Dark Roast coffee	$10.00 /400g		
Milk chocolate bar	$2.60/100g		

Appendix # 6

Chart for collecting information regarding the source of the Food Co-op's food (Ecological-Economic Indicator)

Food Item	Source (Lower Mainland, BC and Washington, North America, International.)
Apple juice	
Apples	
Bananas	
Pears	
Coffee	
Tea	
Black beans	
Quinoa	
Chocolate	
Granola	
Quick Oats	
Raisins	
Olive oil	
Lentils	
Cane Sugar	
Brown Rice	
Chick peas	
Millet	

.

Appendix # 7

Research Proposal for Documenting the Lessons Learnt from other Student-run Food Co-ops and Community–run Co-ops

1. Perform Internet-based research of other co-op operations to find out information and gain a list of contact people at other operations using:
    - Links offered by the AMS website
    - Listings of non-university food co-operatives

2. Questions to consider when completing the preliminary review of student-run websites and written publications:
    - What type is the University?
        Agricultural Faculty Involvement?
        Population Size/Consumer Base

    - What is the main source of food for the co-op?
        On-campus Farm?
        Local Producers?
        Imported Goods?

    - What types of food are sold at the co-op?
        Organic?
        Fair-trade?
        Variety?

    - How does the enterprise manage its waste?
        Composting?
        Recycling Program?

    - What are the details of the operation of the co-op?
        Student/Faculty Staff?
        Volunteer/Employment
        Location
        Accessibility (days/hours of operation)

    - What are the economic parameters of the co-op?
        Profit Margins
        Donations?
        Sponsors?
        Fund Raising?
        Membership Fees?
        Cost of Products
            Competitiveness
            Affordability

- Is there any collaboration between stakeholders?
  - Consumer/Producer
  - Producer/Distributor
  - Among Stakeholders
  - Co-op/Community

- What kind of marketing or promotion tools do they use?
  - Tactics of Informing the Public
  - What Works vs. What Doesn't?

- What are some of the barriers or problems they encountered?
  - Common links
  - Solutions/Resolutions
  - Proposals

- Are there any success stories we can learn from?

3. Contact executive members at other universities for information that can not be accessed through he web-based search
   - E-Mail
   - Telephone

4. Investigate/research other local, non-university co-op using the same set of questions recommended above
   - Contact
   - In-person Interview:
     - Economics
     - Suppliers
     - Advice/Strategies for Success
     - Collaboration