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University of British Columbia

LFS 350

December 11, 2013

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SEEDS Program – Sustainable Food Procurement for 2014 Special Olympic Games

Group 15:

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Executive Summary

In collaboration with the UBC SEEDS program, our team sought to engineer a sustainable food procurement plan to implement at the 2014 Special Olympic Games, of which UBC will be the primary host venue. As such, our community partners encompassed members of the Special Olympics Initiatives committee, UBC Food Services, and our SEEDS associates. Efforts to promote appropriate food sourcing and distribution lead us to our initial research question: how could we devise a system to filter through competing vendors, and rank them based on sustainability? This initial objective was complicated by the ambiguity surrounding our individual impressions of what sustainable food procurement entailed. Realization that sustainability was a hypothetical construct that comprised the dynamic end product of a multifaceted endeavor allowed us to revise our original research question; how could we first identify what constitutes a sustainable food product, and then rank vendors accordingly?

Discussions with our community partners provided insight into their project goals, and introduced us to the practices already in place to optimize environmental preservation. Together we concluded that a practical strategy to define sustainability involved integrating a combination of pre-existing certification standards with the location of production. We made the assumptions that locally produced foods reaching a higher degree of certification would be more sustainable than international products below those same standards. Thorough literature review would thus comprise the majority of our research methodology. We divided food into eight separate categories, then proceeded to identify the various certifications, as well as a few nutritional recommendations associated with each ingredient.

The physical product we developed was a set of food procurement guidelines, dividing each category into three distinct columns of sustainability. The central level parallels the pre-existing standards of UBC Food Services, while the lowest level includes all the foods below. Locally-produced foods reaching top levels of certification populate the highest ranking in the guidelines, serving as the target for vendors to strive for. While our classifications cover a broad range of ingredients, the diversity of the global food system as well as the uncertainty of specific distributors complicated our ranking system. Though we may not have universally accounted for all potential foods, we hope that our general guidelines may still identify vendors with sustainable products for the upcoming games and future events, and provide a template for investigations into further raising the standards of campus sustainability.

Introduction:

With the 2014 Special Olympic Games drawing near, our CBEL team was assigned a project focusing on sustainable food procurement at the UBC campus. Our group consisting of Shaoran Li, Meng Xin, Seb Zackowski, Li Tong, Ke Liao, Yuan Shi, Wenbo Liang, and Yuanxi Wang managed to make substantial progress towards a common goal. The project allowed collaborations with members of the Special Olympics Initiatives committee, UBC Food Services, and our SEEDS program associate. The current campus food system encompasses both UBC Food Services and the UBC Farm, as the food court within the Student Union Building and the weekly Farmers' Market represent two prominent examples. Although UBC has already taken several steps towards attaining food system sustainability, improvements in procurement are always possible. Therefore, in order to solve this issue, we generated a research question closely related to this concern. How could we first identify what constitutes a sustainable food, and then devise a system to filter through competing vendors, and rank them based on our classification? The following depicts several courses of action taken throughout our CBEL project to achieve these goals.

Research Methods:

Recurrent face-to-face interviews with our community partners primarily fueled the developing project. Amidst email communications, engaging with the SEEDS program director, 2014 Special Olympic organization representatives, and UBC Food Services manager helped prioritize project goals, while directing focus to the final method of food classification. Resources such as the proposed menu for the Athletes' Village, food and vendor guidelines from the 2010 Olympic Games, as well as the works of previous LFS teams identified the foundation that our team sought to expand upon. Consultations with the Special Olympic organizers provided insight into the magnitude of the event, suggesting that the proposed procurement plan was required to satisfy the approximate 16, 000 athletes, coaches, and spectators present during the peak events. Extensive discussions between all community partners identified that a standardized set of guidelines would be the principle focus of the CBEL project. These guidelines would separate foods into specific ingredients and divide each category into three degrees of sustainability. The first step was to establish a baseline measurement of food sustainability, which was based off of the current practices carried out at UBC. Interviews with the UBC Food Services director provided the universally high standards already met by campus distributors. This baseline information allowed our devised guidelines to push towards even higher markers of sustainability, while simultaneously providing realistic standards to encourage applications from external vendors. Discussions with community partners continued throughout the project, as our team shared progress reports, identified additional areas of pursuit, and removed non-essential project components.

Thorough literature review comprised another essential data collection method over the course of the CBEL project, both for the sustainability and nutritional aspects of the procurement guidelines. Initial research, exploring similar events exposed potential strategies to provide sustainable food options without sacrificing cost-effectiveness. The provided 2010 Olympic Games food guidelines gave information regarding food sources for large-scale events, as well as concession regulations. Additional documents from the Vancouver Olympic Committee identified the pre-established dietary, allergy and cultural requirements for foods provided, as

well as a comprehensive plan for the use of locally grown and sustainable food produce, all of which was incorporated into the new guidelines. Moreover, food procurement guidelines proposed by a previous LFS project, though somewhat out of date were useful in developing the template upon which our modern version was based on.

Lastly, consultation with a registered dietitian on campus verified the nutritional recommendations derived from complimentary academic courses. Her insight confirmed the appropriateness of existing information, and identified additional areas of concern with each ingredient, particularly regarding food safety with large-scale events. The guidelines were amended to incorporate her suggestions, which were summarized in the notes section following the sustainability criteria.

Results:

The research question proposed for this project required our team to first describe what a sustainable food product was, then filter through competing vendors and rank them based on sustainability. In order to solve this question, our group expanded on one of the current definitions of sustainability accepted at UBC: “economic and social progress that protects and improves the natural environment, supports positive social and cultural outcomes, and enhances economic prosperity” (UBC, 2012). Insight attained from community partners and nutrition professionals coagulated with data provided from additional literature review, resulting in the creation of an updated set of food procurement guidelines for the 2014 Summer Special Olympic Games (see appendix for full guidelines).

Many new aspects of the project arose throughout the data collecting process. While attempting to define sustainable food products, a seemingly non-complicated goal accomplished through simple literature review snowballed into a much more daunting endeavor. Overall sustainability represents a dynamic hypothetical construct rather than a standardized principle, a quality that hindered the development of our proposed rating scheme. To overcome this dilemma, and classify sustainability according to strict cut-off points, our group collaborated with community partners, and decided to use pre-established rating tools in food labeling, as well as quantitative measures such as place of production. Third Party Certifications use a wide variety of standards that food products must meet in order to achieve certification, while serving as easily traceable markers, visible on vendors' receipts. The rating system makes use of those requirements to separate foods based on degree of certification, and therefore degrees of sustainability. Rather than using descriptive details to define sustainability, these pre-existing standards yield uncomplicated and obvious levels that distributors can measure their own products according to.

Target, acceptable, and avoid describe the three distinct columns that separate food according to sustainability. The vendors applying for the games will be rated based on the column their products align with. As such, while the guidelines do not provide an academic definition of sustainability, they do provide means to filter through vendors, and accept those adhering to a higher degree of sustainable distribution, as defined by a variety of Third Party Certifications. In addition to providing a goal for vendors to strive for, the guidelines may be used to identify definitive cut-off points for applications based on a numerical scale. Vendors with products meeting the target column may receive a score of +1, while the acceptable column and avoid column yielding zero and -1 respectively. Event organizers may set a required point value for applicants, therefore disqualifying those who fail to reach the minimum standards.

Discussion:

Though the guidelines resulting from this project do not provide an academic definition of sustainability, foods that meet higher standards of certification are in many ways related to the previously discussed definition at UBC. Expanding the term “sustainable” to incorporate more than environmentally-friendly practices is not unique to UBC, however. Research papers have identified the diverse extent to which true sustainability encompasses environmental, social, economic, and cultural aspects (Godfray *et al.*, 2010). As such, the certifications included in the target column of the guidelines, as well as many in the acceptable column have a direct relationship with each of these criteria of sustainability.

The target category includes food that have earned the highest third party certifications, and/or were produced locally. The general standards that fall into this column include foods certified organic, fair trade, ocean wise, and produced locally. Specifically, eggs should be free ranged and have BC SPCA certification (society for prevention of cruelty to animals), and both fresh and frozen seafood should adhere to ocean wise standards. For oils, unsaturated organic vegetable oils such as canola, olive, and sunflower may be the best choice. There are also some additional standards for other categories, such as meat, grains, drinks and sweeteners. Foods with lower certifications, though still meeting the existing standards of UBC Food Services were placed into acceptable column. Included for example, were cage-free eggs, produced in BC. For meat, the acceptable column includes products that have undergone the standard processing required for campus distribution. Food without any third party certifications and/or produced from other countries was placed in the avoid column, comprising the lowest ranking and discouraging vendors from selling these products. For example, eggs imported into Canada or products of conventional-caged chickens should not be considered. Meat produced in other countries or on factory-scaled farms is also less sustainable for our purposes. The use of saturated oils should be minimized and the use of trans fats should be prohibited.

In addition to the general assumption that foods reaching high standards are more sustainable than others, one can identify specific measures of environmental, social, cultural, and economic benefits of each certification. Certified organic foods have been demonstrated to reduce dependency on non-renewable resources during production and ensure soil preservation, while protecting the public from the potential hazards of synthetic chemicals and GMOs (Government of Canada, 2011). Ocean wise products meanwhile, ensure long-term species stability by including only abundant marine species resilient to fishing pressures, while ensuring harvesting measures that limit damage to both habitats and non-target species (Vancouver Aquarium, 2012). Foods meeting the fair trade certification support a wide variety of projects throughout the world, with perhaps the most important aspect being that the communities producing the products determine how the proceeds are spent. A few examples of the social benefits of these products include ensuring fair wages and updating technology for local producers, providing women with the services necessary to excel in their communities, and providing funding for building schools and maintaining enrolment (Fair Trade USA, 2010). These three certifications compose an integral part of the target and acceptable columns defined in the procurement guidelines, and therefore serve as the product of the initial research question, in which our team devised a measure to classify foods based on their specific qualities of sustainability.

Limitations were also present in our findings. Certified, locally produced foods are typically the most expensive. Considering this, all consumers may not have the sufficient funds to purchase foods meeting such high standards and some vendors may not see adequate payoff.

This represents the reasoning behind the flexibility within the guidelines. While universally sustainable foods would be ideal, setting guidelines to deter applications from marketers failing to reach minimum standards may be an important step. Another limitation is simply due to the diversity of the global food system, as it may not be possible to accurately account for every food product. Despite this setback, a standardized set of general guidelines may still serve as a useful indicator, hopefully providing a universal tool to identify food distributors operating sustainably.

Recommendations:

The proposed guidelines, though capable of ranking foods into varying degrees of sustainability, are not perfect. The standards were set higher than the norm to promote a stronger sense of sustainability. The guidelines may be modified to fit new situations, perhaps further divided into additional groups to acknowledge more specific aspects of the food system. As such, the current guidelines may serve as a template for complimentary LFS projects, providing a reference for future community food security studies.

Despite the current affluent state of the UBC Food System, advancements are always possible. The guidelines specifically focused on improving the already high standards of UBC Food Services towards even further standards of sustainability. As the central column parallels the pre-existing Food Services criteria, the target column remains to define the realm of the possible. With food procurement guidelines in hand, both the upcoming games as well as future UBC events may base their distributor selection policies on definitive standards of sustainability, and further expand campus food security.

A fixed timeline and a wide spectrum of opportunities may present a daunting task for future LFS students. Communication with community partners is therefore crucial to prioritize the work schedule, and incorporate students' creativity into terms of realistic development. Projects such as these require a team of organizers and long-term planning, so while some areas may be flexible, alterations concerning pre-determined concrete operations may not be as practical.

It is essential to consider costs prior to initiating action, as finances remain an obvious determinant of reasonability. As such, open-mindedness and creativity may circumvent assumptions, and reveal cost-effective strategies. For example, one assumption during the construction of these guidelines was that locally produced foods were the most sustainable. In reality however, a number of products produced in California, while still meeting high certification standards, were much less expensive than those produced in Vancouver. This identifies yet another criteria of sustainability, while not associated with additional environmental health, reduced costs increase the longevity of future utilization, and enhance the potential capacity for adhering to a long-term sustainable food procurement plan.

Conclusion:

In response to the defined research question, our team was able to devise a simple system to classify foods into three levels of sustainability, acknowledging the environmental, social, cultural, and economic aspects of the term, while providing nutritional recommendations for an audience interested in athletics. The proposed guidelines are designed to both identify potential vendors adhering to superior or inadequate standards of sustainability, as well as to push the UBC distributors to even further heights. They may serve as a template to complimentary LFS projects, as well as a food procurement criteria for future campus events.

Appendices:

Finalized Food Procurement Guidelines

Categories	Target (+1)	Acceptable (0)	Avoid (-1)
Grains	- Certified Organic Grown/Processed in BC	- Grown/Processed in Canada	- Grown/Processed Internationally
	- GMO Free - Fieldstone Organics		- Containing GMO's
Eggs	- Certified Organic - Produced from UBC farm	- Produced from BC	- Produced internationally
	- Free-range - BC SPCA Certification	- Cage-Free	-Conventional-Caged
Meat	- Certified Organic - Ocean wise for both fresh and frozen seafood	- Ocean wise for fresh seafood	- Does not meet ocean wise standards
	- Processed in BC - GMO free/hormone free/drug free/ chemical free diet	- Processed in Canada - Family scale farm	- Produced internationally - Factory scale farm
Dairy	-Produced in BC -Certified Organic -Organic Pasture Raised milk -Plain Yogurt	-Produced in Canada -Small Conventional -Organic Grass-fed milk	-Produced internationally -Large Conventional -GMOs and commercial pesticides -Growth hormones such as rBST or routine antibiotics
	- Certified Organic - GMO free - MPS-Fruit & Vegetables certificate - Fair Trade Certified fruits and vegetables	- CanadaGAP - BC certifications: NOOA (North Okanagan), BDSBC (Biodynamic, BC Wide), SOOPA (South Okanagan), LEOGA (South Okanagan / Kootenays), KOGS (Kootenays), BOPA (Kootenays), IOPA (Vancouver Island and Gulf Islands) and STOPA (South Thompson / Fraser Canyon)	- GMO produce - Processed - Internationally

Drinks	<ul style="list-style-type: none"> - Certified fair trade - Certified Organic - GMO free - No sugar added (except Coffee/Cold Drinks) - Processed in BC - Fortified with other nutrients - plant bottle (Juice & Cold Drinks if applicable) 	Tea/Coffee/Hot Drinks: <ul style="list-style-type: none"> - Certified fair trade only Cold Drinks: <ul style="list-style-type: none"> - Low-caloric 	<ul style="list-style-type: none"> - Processed Internationally - GMO - High-caloric - Container size larger than 500ml
	Producers: The Juice Box, Kiju Organic	Juice: <ul style="list-style-type: none"> - Artificial sugar added - Processed in Canada 	
Sweeteners	<ul style="list-style-type: none"> -Certified Organic -Fair trade -GMO free -non-caloric -Natural -Producers: Cocoa Camino, Discovery Organics 	<ul style="list-style-type: none"> - Organic only - Fair trade only -low-caloric -Artificial -Producers: Horizon Distributors,Rogers Organic 	<ul style="list-style-type: none"> -Conventional -GMO -high-caloric -Producers: Lantic Inc. (Rogers), Redpath Sugar Ltd.
Oils	<ul style="list-style-type: none"> - organic unsaturated vegetable oils - such as canola, corn, flaxseed, olive, peanut, soybean, and sunflower - produced in BC extra virgin olive oils 	<ul style="list-style-type: none"> - non-organic unsaturated vegetable oils - produced in Canada or in other countries 	<ul style="list-style-type: none"> - saturated fats, such as animal fats, butter, whole milk, cheese, and palm or coconut oils - trans fats

Notes:

Grains: Include whole-wheat options

Include gluten free options

Consider wraps/pitas as opposed to submarine-style sandwiches

Meats: Consider alternatives to red meat (turkey burgers/bacon)

Dairy: Include non-fat dairy products as an option in cold and hot drinks

Fruits/Vegetables: Include more than one vegetarian option

Include a variety of season crops

Ensure that fresh produce is available as a side order for meals

Drinks: Include drinks with lower sugar content in place of soda

Include a variety of sizes to limit consumption

Reflections:

Though less structured than typical classroom activities, I appreciate the holistic value of LFS community integration, and understand the unique skill-set attained through dynamic pedagogy. While at times frustrated with the process of allocating meeting times to correspond with individual schedules, the discontinuous nature of the class ensured that, despite such a large group, we had sufficient time to prioritize group efforts.

Exploring the diverse meal options available during the games inspired me to become further involved with the Special Olympics. In conjunction with the SEEDS project, I have been leading workshops educating athletes about nutrition in high-level athletics. Weekly seminars focusing on dietary management among other topics, shopping trips, and cooking classes introduce nutritious food into daily routines. My goal is to inspire athletes to choose these options (many of which were recommended by our SEEDS group) more frequently, and hopefully increase their demand during the games this summer.

From my personal reflection, I think project can gain more experience beyond knowledge. We have joined a big sports event called Special Olympics. It gives me idea that how an event goes on and I really see the cafeteria menu to the athletes. The money they spend surprises me and the healthy menu brings me more idea about nutritional component for athletes. Consulting with organizer lets us to listen what they want and how they think in a big events; that may be another good resources for us to learn. Flexible learning also develops speaking skills in the presentation and leadership and collaborative skills in the group work. Therefore, flexible learning has made my learning experience more significant.

When I showed our guidelines to the dietician, Dr. Nooshin, she kept asking me “can UBC Food services really afford to buy them?” Indeed, all the foods in our guidelines are targeted to be organic, GMO free, fair-trade and locally produced. However, these foods are usually far more expensive than conventional foods. It reminds me that one of the barriers for general public to apply sustainable food practices is affordability. Although people know well that organic and locally produced foods are beneficial to both of their health and the environment, they cannot afford to buy them because of the high prices. For individuals, what we can do to make organic food affordable. As I recalled from one of our e-lectures, growing our own foods may be a good idea. In addition, giving up one restaurant meal and a frozen dinner to allow for more organic fresh food is also practical.

In my perspective, the e-lectures online and the meeting with our community partners have exerted a significant impact on our CBEL project. Since the content of the e-lectures are closely related to the goals of the CBEL projects in LFS 350, these inspiring videos have provided us with plenty of resources on defining sustainability for our project as well as skills for better communication with our community partners. In that the community partners’ expectations play an important role in how our project has been conducted, I sometimes find it difficult to balance between our team’s actions and our community partners’ expectations as we have limited time and resources. Despite all these constraints, I have enjoyed working with my team members and deem the project as a valuable opportunity for me to participate in this nationwide Special Olympic Games.

I really enjoy the LFS350 this term. For three e-lectures, they not only inspired me how to do well in the group project but also guided me how to contribute to sustainability in my daily

life. Now, I buy ugly fruits and vegetables when shopping at grocery stores in order to reduce food waste and I convince people around me to do this when they shopping. When doing the project, I have learned how to work with my group mates better and communicate with community partners to find out what they want. The only disappointing aspect of the CBEL project is the time limitation. We have only one term to do the project, and obviously for improving food procurement of Summer Special Olympics Game and food security in UBC campus, more time is required.

From this project, I learned what food sustainability really means and realized the importance of sustainability. I also noticed that there were many ways that we could make food more sustainable. One of them was mentioned in our first e-lecture. The main idea of the lecture was to encourage the audience to plant more trees. The practice of growing vegetables in the public area such as pathways or in the yards was an effective way of promoting sustainability. Not only the vegetables we grow are fresh, healthy, and organic, but also with their growth they can serve us for a long period of time.

When I did the egg classification for our food procurement guidelines, there was a BC SPCA classification which we put in our target column. I have learned that BC SPCA stands for British Columbia Society for the Prevention of Cruelty to Animals which is a non-profit charity. Their focus is on animal welfare. Not like other conventional farms that only care the production of eggs, BC SPCA cares animal health and emotion. This does affect my choice of eggs when I do my grocery shopping because I know BC SPCA certification guarantees better living conditions for those chickens and they must have a comfortable and happy life.

This project not only made me much more aware of food labeling, but also greatly impacted my everyday life. When I go grocery shopping every weekend, I now understand what made some food at the store more expensive. When we buy grocery with third party certificate, we are not just paying for the food itself, we are also paying to support a high standard of production that's is healthy, long-term orientated, and environmental. The price tag has always decided my choice of food at the store, but after all the research on third party certification, food labels has also become a major factor which influence my food choice.

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