

Sustainability DeBETAbility: Is the Beta House Ecologically Sustainable?

Ada Cheung, Candy Cheung, Sapna Dilgir, Dallas Parsons, Jessica Robertson, Joyce

Wong

University of British Columbia

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Group 3
Ada Cheung
Candy Cheung
Sapna Dilgir
Dallas Parsons
Jessica Robertson
Joyce Wong

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Abstract

Within the context of the UBC food system, we examined the ecological sustainability of the fraternity house, Beta Theta Pi House (Beta House). We began by defining the elements that an ecologically sustainable dining society must have, and based our research and recommendations on this definition. To gather data, an interview with the chef and the house manager was conducted at the Beta House on March 21, 2002. We found that the Beta House members do not compost, or recycle kitchen waste, and that the chef does not regularly buy organic or local food products. Our recommendations offer simple and economically efficient ways for the residents to improve the ecological sustainability of their residence. [REDACTED]

[REDACTED]



Introduction

With the conclusion of three years of study of Land, Food and Community, we have been given the task of evaluating the sustainability of an element of the UBC food system. Our group has combined our personal values and knowledge from past experiences, both in and out of class, in an attempt to gather information and provide useful recommendations. As members of the UBC community and larger, local, and global communities we have examined a small corner of our campus and hope to improve the equity, integrity and longevity of the food system at UBC.

Presently, there are two primary organizations that dominate the food system at UBC. UBC Food Services and the Alma Mater Society's (AMS) food outlets provide the majority of the food on campus. However, in addition to these groups, there are a number of dining societies that operate independently from Food Services and the AMS. Included in this group are St. John's College, Green College and the seven fraternity houses on campus. Although these residences provide food independently from other UBC food outlets, they are still inextricably linked to UBC's food system. First, they are geographically located on campus and second, they serve UBC students. Our project will focus on one of these independent dining societies, the Beta Theta Pi House.



The Beta House

The Beta Theta Pi House (Beta House) is located on the East side of the UBC campus and houses twenty fraternity brothers from September to May. The chef at Beta House purchases food and makes lunches and dinners for the residents five days a week. The goal of the Beta House's food system is not to make a profit, but to provide affordable and nutritious meals for residents and occasional guests who may purchase meals at the fraternity house.

We acknowledge that the Beta House comprises a relatively small part of the UBC food system, and that there are certainly many other issues on campus that need attention. But we also recognize the advantages of a narrow approach. First, it is often easiest to make changes on a small

scale, and if this project can change some of the practices of twenty fraternity brothers then we will have been successful. [REDACTED]

[REDACTED] [REDACTED] Second, the Beta House can act as a representative example of other fraternity houses at UBC, so perhaps recommendations can be applied beyond our case study. [REDACTED]

[REDACTED]

[REDACTED]



Value Assumptions

Before undertaking our external evaluation of the food system, our group conducted an internal evaluation to determine the paradigms through which we, as individuals, view the UBC food system. We began by establishing whether we took an anthropocentric, or ecocentric view of our system analysis. In his article, *Anthropocentrism: A Modern View*, W. H. Murdy states: “To be anthropocentric is to affirm that mankind is to be valued more highly than any other things in nature—by man (1993).” While we have based our project on a study of ecological sustainability, we agree that it is inherent in all species to strive for the survival of one’s own species. It is impossible for us as humans to be completely ecocentric, however, this does not mean that caring for the environment is without reason. Making the link between the well being of ourselves and our surroundings forces us to recognize that perpetuating ecological sustainability will benefit humanity.

In addition, we concluded that housing residences represent their own community structure. A sustainable dining society must take into account the needs of individuals, but cannot ignore its role as a hub for community interaction. Residences must consider individuals with allergies, preferences or beliefs that necessitate special diets. A food system must also recognize the role of food to, “offer chances for neighbors to build stronger bonds of loyalty, a more intimate sense or

each other and greater capacity to trust (Meter et al. 2001)....” Based on this, a sustainable food system must promote both individual and community health. [REDACTED]



Problem Statement

Although a sustainable food system embodies three imperatives (environmental, social and economical longevity), ecological health is the basis of all the indicators of sustainability (Kloppenburg et al. 2000). Food, a part of our daily life, and food production are “inextricably tied to our ecological systems and survival in the future (Welsh et al. 1998).” As a result, our main problem statement involves defining the key traits that an ecologically sustainable food system at UBC must have.

An ecologically sustainable food system must address environmental degradation and thus must take into account “issues such as soil quality and soil micro-organisms as well as human health (Welsh et al. 1998).” As such, because organic farmers engage in less pesticide use and produce a product that is healthier to consumers and the environment, a food system that purchases organic foods is more ecologically sustainable than one that purchases cheaper, conventional products (Read 2001). [REDACTED]

[REDACTED]

In addition to considering the source of inputs, we must also examine the destination of outputs. The presence, and extensiveness of recycling and composting systems are simple and efficient ways to measure a system’s ability to manage waste products. An ideal system would manage nutrients by returning waste to the soil through composting, and then complete the cycle by growing useful produce from that enriched soil. Recycling of non-compostable material reduces both the need for the production of new disposable products and the amount of product that ends up

in landfills. For example, a UBC food outlet that provides reusable dishes is more ecologically responsible than one that provides disposable paper or Styrofoam products.

An ecologically viable food system is also one that maximizes local resources and minimizes imports (Kloppenburger et al. 1996). [REDACTED]

[REDACTED] The result is less energy being wasted on extended produce transportation and storage (Kloppenburger et al. 1996). Thus, instead of buying apples grown in California, a UBC dining society would instead purchase ones that are BC grown, perhaps even UBC campus grown. In addition, this necessitates tailoring menus to seasonal vegetables and fruits (Feenstra 1997). So, a sustainable system would serve fresh BC broccoli only during summer when it is in season and preserve produce for the rest of the year instead of purchasing Californian broccoli.

While our focus centers upon ecological sustainability, an eco-friendly food system cannot escape from its ties to economical practicalities and social responsibilities (Kloppenburger 2000). *Yes!* Consequently, in order for the Beta House to provide food security for students purchased food must be affordable, of good quality and nutritional value and be culturally sensitive (Feenstra 1997). A sustainable food system involves the participation of all affected community members (Feenstra 1997). Accordingly, not only should the food service workers engage in activities like waste disposal, students consuming the food would also have the responsibility of keeping the outlets litter free. [REDACTED]



Organic

The Certified Organic Association of B.C. (COABC) defines organic agriculture as “an ecological production management system that promotes and enhances biodiversity...it is based on minimal use of off-farm inputs and on management practices that restore, maintain and enhance

ecological harmony (COABC 2001)". The members at Beta House do not buy organically grown food products because they think that they are too expensive and not readily available (Wilson, 2002). [REDACTED]

Some of the benefits of organically produced foods include that they are produced without genetically modified organisms (GMOs) and minimal chemical treatments (COABC 2001). In addition, organic agricultural methods rely less upon non-renewable resources and emphasize the importance of animal welfare (COABC 2001). Conversely, conventional food production also uses high energy inputs, generates extensive amounts of waste and is harmful to biodiversity (The Compost Resource Page 2001). [REDACTED]

Based on this information, we recommend that the members of Beta House purchase organic food products. Perhaps, by increasing the members' awareness of the benefits of organic food production and the harmful aspects of conventional farming, the members of Beta House will be more inclined to purchase organic products. It may also be helpful to inform the members of the locations of local stores that sell affordable organic food. [REDACTED]



Composting

Composting is a form of recycling that occurs continuously in nature. By definition, composting is the transformation of organic food waste into soil-like material by decomposition, which is facilitated by insects, worms and fungi (The Compost Resource Page 2001). The Beta House does not have a compost because they do not have anyone to build one, nor to maintain it (Wilson, 2002).

Composting reduces the amount of organic matter transported and processed at a distant landfill site. Composting is an economical and environmentally friendly method of waste removal that can be easily established and maintained. Furthermore, adding compost to gardens improves soil structure and water retention, as well as decreases soil erosion (The Compost Resource Page).

We recommend that the members of Beta House be informed of the benefits of composting and taught how to set up a compost. By increasing their knowledge, they may be more motivated to build a compost and to take on composting duties. Ideally, the Beta House members can reduce their waste and pollution, decrease their energy consumption and have a healthier yard. [REDACTED]



Recycling

Recycling encompasses the practice of converting waste to reusable basic materials. It is referred to as the “collection and separation of materials from waste and subsequent processing to produce marketable products” (The Recycling Directory 2001). Although the members of Beta House recycle beer cans, they do not recycle in the kitchen (Wilson, 2002). Further, they [REDACTED] [REDACTED] stated that they use extensive amounts of paper towel for cleaning the kitchen (Wilson, 2002).

Like composting, recycling is an effective way to reduce the amount of waste produced in the Beta House kitchen. We recommend that the Beta House establish a recycling system for food waste by setting up containers outside the kitchen door where there is extra space. In this way, the bins are easily accessible from the kitchen. Since members of the Beta House already have a system of alternating kitchen clean-up duties, they could simply include chores such as rinsing cans and emptying the recycling bins. Furthermore, they should minimize the use of paper towels by using rags to clean kitchen counters and spills. By making these simple changes, the Beta House food system will reduce waste and be more ecologically sound. [REDACTED]



Buy Local

When people buy locally grown products they are purchasing foods that have been grown in the same region in which they will be consumed. In other words, for people who live in B.C. buying local means that they need to buy foods grown in B.C. Currently, the Beta House members buy locally grown food when it is less expensive than other varieties (Wilson, 2002).

Purchasing local foods reduces the energy and pollution that would normally be required to package and transport foods for long distance travel. Furthermore, buying locally grown foods allows for improved nutrient cycling within the region as the food is not removed from the local system and extra waste from imported foods is lessened.

We recommend that the Beta House be made aware of the benefits of buying locally grown products and of locations where they may be purchased. Once the members have this information, they may be more inclined to purchase locally grown foods. In addition, members of the Beta House said that they would buy from the UBC farm if the products were easily accessible and less expensive than the grocer (Wilson, 2002). We believe that the UBC farm products should be promoted to the fraternity houses because this will expand the farm's market and create another link within the UBC food system.



Conclusion

It is evident from the topics discussed in this paper that the food system of the Beta House on UBC campus does not meet our definition of ecological sustainability. This was made even more apparent when we asked the members for their views on sustainability and they responded with “it implies doing something on your own” and “it means making it by yourself (Wilson, 2002).”

Therefore, prior to introducing any of our suggestions for the implementation of more ecologically sustainable practices at the Beta House, we recommend that the members be educated and involved in defining sustainability within the boundaries of their food system. [REDACTED]

[REDACTED] In order to engage in ecologically acceptable behavior, participants of the UBC food system must recognize the links between the farmer and the consumer, the pollution and social inequities associated with conventional food production, the existence of local produce (e.g. the UBC Farm), the availability of sustainability educational resources (e.g. UBC Campus Sustainability Office) and updated research. It is also important to recognize and appreciate that the Beta House members have made some attempts to live in a more environmentally friendly manner. As mentioned above, they recycle beer cans, avoid the use of disposable dishes, use minimal energy for heat and, waste very little food.

Although this paper is only a reflection of one fraternity house, we believe that our recommendations can be introduced to other fraternity houses on UBC campus. In order to successfully implement sustainable changes to the entire fraternity food system, future groups will have to accept the challenge to make small changes, which can be built upon to eventually make large changes. In addition, it must be recognized that the impacts of small changes have the potential to affect not only the local region in which they were made, but on the entire global system. We hope that future groups will build upon our recommendations and propose systems in which to sustain them. Although we have chosen to focus on ecological sustainability, future groups will uncover many opportunities to explore the channels of economic and social sustainability in all components of the UBC Food System. [REDACTED]

Appendix 1 - Interview Questions

Social

How would you define sustainability?

Do you think your food system is sustainable? Why or why not?

Do you have any suggestions about how it could be more sustainable?

Are you aware that there is a U.B.C. Sustainability Office on campus?

How many people do you serve in a typical day? How many meals?

Who has access to your food service?

How many people are involved in the management of your food system (purchasing/receiving, preparation, management)?

How do you accommodate individuals with relation to allergies and vegetarians?

How do you decide what foods to buy? Do the residents have any input? What is the goal of your food service (e.g. is it to provide affordable, nutritious food, or to make a profit?)

Economical

How much storage space do you have (fridge, freezer, pantry) and does this affect how often you purchase food?

How often do you purchase food?

Who are your food and supply distributors? Do you have contracts with them? Do you do bid contracting? Do you do group purchasing with other establishments in order to get lower prices?

Do you make an effort to buy local B.C. products, food from the UBC farm or organic food products? Why or why not?

Do you currently grow any of your food? Would you like to? If so, how would you suggest going about it?

How do the residents pay for the food (e.g. prepaid food plan)? Tell me about how the meal plan operates?

Do you make a profit, or is the money used simply to cover costs?

How many people work in the kitchen? What percentage of your staff are students?

Ecological

Do you have a waste management system in place i.e. Do you recycle or compost? Why or why not? Does the system work effectively?

Is there a lot of food wasted?

Are disposable dishes available to residents?

Additional

If you could, what would you change about the food system in which you operate?

Is there anything you would like to tell me about your food system, that I haven't asked?

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