

**Sustainable Food Systems: Not in the Plan The Incorporation of Food Systems into
Campus Planning at UBC**

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Sustainable Food Systems: Not in the Plan

The Incorporation of Food Systems into Campus Planning at UBC

AGSC 450 Food Systems Project 2005 – Scenario 4

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Abstract

Sustainable systems such as the food system need to be considered in campus planning. The importance of a sustainable food system at UBC has been acknowledged. However, as of yet, no concrete plan exists to integrate food systems into campus planning at the university. Before food systems can be included in campus planning, a clear outline of the university's vision of a sustainable food system is necessary. We propose a set of objectives as our vision. These objectives are not identical to those decided by previous colleagues in AGSC 450 and the differences are discussed. This paper outlines the reasons and importance for integrating food systems into campus planning and provides recommendations in two key forms: 1) Mechanisms of addressing food systems in the Main Campus Plan (MCP) – the plan for institutional development at UBC, and 2) The development of a Supplementary Food System Plan. The goals and purpose of the MCP display inherent limitations to the extent that food systems can be included at this level. The MCP is intended to be a more general plan, which provides ultimate objectives but no specific mechanisms for achieving these goals. However, as these specific mechanisms are fundamental components of fulfilling objectives for a sustainable campus food system, we propose a supplementary plan for food systems. This plan would be supplementary to the MCP and can provide specific actions needed en route to a sustainable food system. Even though we provide a list of ways to attain sustainability in food systems at UBC, there are evidently missing pieces and a need for further detail and development of this plan. Consequently, we conclude with several recommendations for campus leaders of sustainability and for future AGSC 450 students. ██████████

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Introduction

Problem Statement

Civilization has recently been faced with the crude awakening that there are limits to resource consumption and that natural systems are in rapid decline. The importance of a change in attitude towards more sustainable uses of our land and resources is now apparent.

Sustainability refers to the physical development and institutional operating practices that meet the needs of present users without compromising the ability of future generations to meet their own needs, particularly with regard to use and waste of natural resources. Sustainable practices support ecological, human and economic health and viability. Sustainability presumes that resources are finite, and should be used conservatively and wisely with a view to long-term priorities and consequences of the ways in which resources are used (UCSC, 2004).

The challenges accompanying this change in outlook come with opportunities for much needed leadership and positive change. Universities worldwide have started to take initiative and have become leaders in the support of an equitable and sustainable future for all life forms (UCSC, 2004). The University of British Columbia (UBC) has indicated its devotion to environmental leadership and a sustainable future (UBC, 1992).

An aspect of sustainability that is gaining attention is the importance of food systems to the sustainability of a community. Food systems encompass the social, ecological and economic aspects of the production, consumption and disposal of food products. Further, campus food systems have been targeted as a means to improve the sustainability of the community through improved awareness and access to ecologically and socially-just food. “Campus food systems focus on sustainable food acquisition and distribution that benefits the local economy,” and are therefore an integral part of campus sustainability (UCSC, 2004). Although the importance of campus food systems is gaining recognition, its exact integration into campus development has not yet materialized. We feel that the most effective way to incorporate food systems into development at UBC is through their inclusion in campus planning. Specifically, the Main

Campus Plan (MCP), which provides a guide for institutional development on campus, can be used to secure the importance of campus food systems in planning at UBC. The MCP is due for revision in the next few years and this provides a window of opportunity for the food system to be included in campus planning. Through the integration of key food system principles at a high level of planning, the path can be enabled for specific objectives of a sustainable food system to be addressed and implemented on campus.

The Purpose and Goals of the Main Campus Plan (MCP)

The UBC Main Campus Plan of 1992 is a set of forty planning strategies for managing the university's growth of institutional infrastructure. In this strategy framework, the university mission is contextualized through a discussion of the campus' physical image, its past, present and future (UBC, 1992, p. 32).

The MCP stresses flexibility and comprehensiveness, and addresses functional, aesthetic and contextual issues (UBC, 1992, p. 4). For example, it plans to limit campus sprawl and to enhance the spirit of the place (using the term *genius loci*) (UBC, 1992, p. 38-40). It plans for mixing land uses (institutional, residential, retail commercial, etc.) and encouraging alternative modes of transportation like cycling and public transit (UBC, 1992, p. 69, 77-93).

Another theme of the plan is that the whole campus is greater than the sum of its parts (UBC, 1992, p. 2). Strategies like creating a sense of place, improving building signage, promoting campus culture and enhancing pedestrian circulation collectively aim to increase synergetic interactions between campus users and add vitality to the built landscape (UBC, 1992, p. 38, 64-66).

Finally, the MCP prioritizes environmental responsibility and leadership and the need to create a more permanent sense of community (UBC, 1992, p. 31-34). The former shall be

enacted by constructing green buildings and reducing reliance upon automobiles. The latter highlights the need for mixed land uses, increased building density, and improved separation of transportation modes (like walking, cycling, bussing, and driving) (UBC, 1992, p. 69-70, 77-93). It must be noted that the last priority implies the need for a university “Town Centre” (a commercial zone along University Boulevard) as a means of facilitating a place for community (UBC, 1992, p. 108-9). (This point serves as a departure to other UBC plans like the Official Community Plan, Comprehensive Community Plan and more specific Neighbourhood Plans which approach non-institutional development on university lands.)

The MCP’s intent is to define an end, but not the means. That is to say, it ascribes mid- and long-term university planning goals (ten and twenty year horizons, respectively) without offering specificity on how to achieve these goals (UBC, 1992, p. 4-5). This means that the plan aims to avoid constraint by maximizing planning options.

Rationale for the Inclusion of Food Systems in Campus Planning

The food system plays a central role in any community. Each member of a community participates in the food system through the consumption of food products. Air, water, food and shelter are the essentials of life and should not be discarded in planning. Planners have been involved for thousands of years in improving our shelter and more recently our air and water, but most plans still lack a consideration for food. Planners need to realize the connection between the food system and other community systems (Pothukuchi and Kaufman, 2000).

In many communities a large percent of residents work directly or indirectly in the food sector. These jobs include restaurant, supermarket and tavern workers, as well as wholesalers, packagers and farmers. The income of these residents depends on the food system. Therefore, planners neglect large portions of a community if they do not plan for a food system. Ten to forty

percent of household income is spent on food (Pothukuchi and Kaufman, 2000); the need for food is recognized by households and should also be recognized by planners. A large portion of household waste comes from food products; plans need to account for the assimilation of waste products in order to meet the need of many households. The proximity of food outlets to individuals of a community should also be included in food system planning. There is a need for the food system to be incorporated into planning because the food system affects everybody in the community.

Our Reflections on the 7 Guiding Principles

The 7 guiding principles (vision statement) were developed by previous AGSC 450 colleagues and the teaching team [REDACTED]

[REDACTED]. Before looking at the 7 guiding principles, our group agreed on a set of objectives to formulate our own vision. Although our objectives are not identical to the 7 guiding principles, they are congruent and display key components of the long-term vision already set forth. Overall, our group found that the vision of the 7 guiding principles is difficult to integrate and implement in institutional planning. In contrast, we felt that our set of objectives could be more easily and appropriately integrated into campus planning – our vision principles are more planning oriented.

Our Vision of a Sustainable UBC Food System

Our vision for UBC is a community that fosters the educational needs of the institution while addressing the economic, environmental and social issues of the food system. A

sustainable food system is one that encompasses these three pillars by ensuring, at each stage of the food system (from production to disposal), practices that are economically viable, ecologically sound and socially acceptable (Kloppenburger et al., 2000). A sustainable food system must also meet present food needs while not compromising the needs of future generations. Currently the proposed development for institutional buildings at UBC, as outlined by the Main Campus Plan (MCP), does not adequately incorporate the food system. Our vision is to have the food system sufficiently integrated into the MCP and other aspects of campus planning so that future development at UBC can operate more sustainably. Our objectives for the food system, adapted from the Southeast False Creek Urban Agriculture Plan (Holland Barrs Planning Group, 2002) include the following:

1. Increase the physical capacity of the UBC campus to support the growing of food

Growing food on campus will help close the food cycle by returning food, in the form of waste, back to the land where it was produced. We currently count with composting facilities; however, the food consumed is brought onto campus instead of being grown on the premises. This has led to a system that heavily relies on transportation, which has increased UBC's ecological footprint.

The Board of Governors and other stakeholders will be in charge of determining what steps the UBC campus is to take in order to be a leader in closing the food cycle. They are to analyze the different opportunities in the creation of new areas that can be devoted to the growing of food, as well as the improvement and expansion of already existing spaces, such as the UBC Farm on South Campus.

2. Increase the amount of food consumed at UBC that is produced both organically and locally

One of UBC's goals is to become a world leader in the implementation of new sustainability strategies. UBC imports its food since it lacks the physical space to cultivate its own. However, this fact should not impede the university from locally and organically producing a portion of the food it consumes [REDACTED]

[REDACTED] Fulfilling this objective shall encourage the campus to reduce its ecological footprint, namely by minimizing food miles. Other benefits of relocalizing food production include (1) supporting local employment and a local economy, (2) promoting the consumption of seasonally available produce, and (3) fostering a compassionate connection between consumers, producers and the food-producing physical environment.

3. Encourage Practices for managing waste flows in a more sustainable manner

Waste is present at every stage within the food system. Food production, processing, transportation, preparation, and consuming all contribute to large amounts of waste in the UBC food system. Approximately 35% of all waste on UBC campus is food waste (UBC Waste Management, 2005b). Disposal of this organic waste into landfills results in the emission of methane and contributes to other greenhouse gas emissions (UBC Waste Management, 2005b). Rather than dumping food waste into landfills, it is important that this waste be converted into a useful product – compost – which can then return valuable nutrients to the soil (UCSC, 2005). Food product packaging, including paper, wrappers, containers, glass bottles, cans, and bottle caps also contributes substantially to campus waste (UBC Waste Management, 2005a). These materials can be found littered throughout the Student Union Building, bus loop, and campus parking lots, and they have a negative impact on the UBC campus environment (UBC Waste Management, 2005a). Littered food containers and packages take a very long time to decompose,

reduce the aesthetic appeal of UBC campus, and can be hazardous to animals and humans (UBC Waste Management, 2005a). UBC Waste Management spends just under \$200,000 annually cleaning up this litter, which in many cases could have been recycled (UBC Waste Management, 2005a). UBC Waste Management has had success with composting, recycling and litter reduction initiatives. However, as campus development continues at an accelerated rate, the expansion of these initiatives is necessary. The success of such an effort will require the integration of waste management practices into campus planning and collaboration throughout the UBC community.

4. Encourage the celebration of food and the local food system at UBC

Considering the importance of food in our daily lives and the cultural, social, and nutritious implications it has, the food system remains largely invisible to the UBC community. Social attitudes among community members must be redirected in order for UBC campus to meet its goal of a sustainable food system. The UBC food system must be made more visible to existing members of the campus community, and expansion of programs and initiatives are needed to respond to the growing campus population. People must realize that the food they eat is part of an integrated system. They must learn to respect this system, value it, and celebrate it as contributing to a campus that is healthier, happier, and more fulfilling for humans and all life forms on campus. Community members, as individuals and as groups, can have a substantial impact on the security and sustainability of the UBC food system and efforts must be made through campus planning and development to facilitate these actions.

5. Encourage food consumed at UBC that is produced in other regions or countries to be produced through ethical and environmentally sustainable practices

While offering local products whenever possible should be a key goal of the UBC food system, it is often desirable, and unavoidable, to purchase products that cannot be produced locally. Many exotic products – coffee being a particularly notable one – are in high demand and, therefore, food service managers must look to non-local or international providers to supply these products. In this case, UBC policy makers should advocate for the procurement of international products from suppliers that promote both environmentally sound *and* socially sustainable business practices. “Sustainability – the process of ensuring what is done today does not compromise the meeting of the needs of future generations – refers to a lot more than protecting the environment and natural resources. It also refers to preserving cultures and peoples so that they too can meet their own needs and those of their children...” (Environmental Coordination Office of Students, 2003). The UBC food system has made steps toward social sustainability, with the recent creation of the *AMS Ethical Purchasing Policy*. Other universities across Canada and the USA have implemented similar policies for their food systems. The University of Alberta’s Student’s Union has a campus-wide policy in place to promote business relationships with suppliers that engage in environmentally conscious, socially equitable and ethical conduct (The Student’s Union of the University of Alberta, 2003). More specifically, this policy mandates for the purchase of fairly traded, recycled, organically produced and minimally packaged food products whenever the option is available. Such a policy at UBC would improve the sustainability of its food system.

6. Increase the capacity of UBC to provide or support basic food security initiatives for the local community

Food security is an important aspect of any sustainable food system. Food security can be defined by “environmentally, socially, and economically sustainable food systems that produce

culturally acceptable and nutritionally adequate food for all persons to lead healthy productive lives” (Cornell University, 2000). Three key components of a secure food system are affordability, availability and accessibility – Is food priced reasonably for the population in the community? Are culturally appropriate and desired foods available within the community? Do members of the community have a means of acquiring the foods available in the community? All of these questions are necessary to ask when assessing the security of the UBC Food System. Low income and socio-economic status are common causes of food insecurity; while most of the campus population would not be considered below the poverty line, there are subsets of the UBC community – particularly students – that may experience financial difficulties in acquiring food. In terms of availability and accessibility, there is currently one produce market and few convenience type stores; the nearest grocery outlet is a Safeway store, which is a five-minute bus ride from UBC. For those unable to travel, food security may become an issue. Cultural appropriateness is also a consideration for the UBC community. With such a diverse mix of ethnicities at UBC, an assessment must be done to evaluate the cultural appropriateness of the UBC food system. Food security is a current and focal issue. Many communities, government sectors and academic institutions are engaged in the issue of local food security. Other communities throughout B.C. have taken steps to address food security; for example, the Downtown Eastside community has been a target for intervention for decades. At Cornell University, a project entitled *Growing Food Security in NY Communities* strives to improve food security through the development of innovative strategies and partnerships with existing, local initiatives (Cornell University, 2000).

7. Ensure that there is an adequate distribution of food service facilities on campus

Food is one of the primary needs of the UBC community. Being a large campus, UBC needs to ensure that all areas of the campus have access to food that is consistent with the population in any given area. In providing sufficient food, UBC will encourage economic development and increased revenue, as well as decrease the need to travel off-campus in order to access these goods.

These seven objectives form the core of our vision for a more sustainable food system at UBC. They act as general planning principles that are broad enough to incorporate a variety of detailed plans generated now and in the future. Our vision is to incorporate these seven objectives into the Main Campus Plan as well as provide a more focused Supplementary Food System Plan. This supplement would provide strategic actions that would help achieve our objectives and our vision for a sustainable UBC food system.



Evaluation of the MCP in relation to our Vision

The Main Campus Plan fails to adequately consider our objectives outlined in the vision for a sustainable UBC food system. This is primarily because the food system falls beyond the scope of the MCP. That is to say, the MCP focuses on planning for institutional infrastructure and not the food system. Also, in 1992, no university planning literature even regarded the concept of a food system, or sustainability for that matter. The MCP exemplifies how traditional urban planning is primarily concerned with the land use relationships between built forms and the physical environment. With this in mind, it is difficult to evaluate the MCP from a food system perspective.

However, the MCP makes five subtle acknowledgements to the system. First, it references the university's agricultural roots, which could once again be revived through more proactive campus integration with UBC Farm (UBC, 1992, p. 12-13). Second, it charges the university to be an environmental role model for the city, province and nation, which lays foundations for current sustainability initiatives and perhaps future ones that promote the transition to a sustainable campus food system (UBC, 1992, p. 34). Third, it stresses the importance of valuing and facilitating community, through considering open pedestrian circulation patterns and public spaces that would foster interactions, as well as places for celebrating the local food system (UBC, 1992, p. 98, 101). Fourth, the MCP recognizes relationships between planning components – academic, financial, physical and community – that are surely relevant to food system planning in a university setting since enhancing the comprehensiveness of the food system at UBC would involve: (1) reserving physical spaces for cultivation, distribution and consumption; (2) establishing community partnerships to sustainably meet labour requirements; (3) budgeting for the food system's shift to more sustainable protocols, and (4) integrating interdisciplinary curricula that espouse a sustainable food system ethos (UBC, 1992, p. 2). Fifth, the plan understands the need for even distribution of and access to food services on campus, which in fact reflects accessibility as a food security indicator (UBC, 1992, p. 105).

Most promising for enhancing the UBC food system is the plan's drive for the university to become an environmental role model, a pledge that offers hope for incorporating sustainability into planning.

In spite of these acknowledgements, the vast majority of the MCP fails to address the food system by not contributing comprehensive strategies for system sustainability. While we

realize this failure is a consequence of the plan's flexible, yet limited context, there remains a critical vacuum in university planning in which the UBC food system ought to be incorporated.

Rationale for the Inclusion of the Food System in the UBC Main Campus Plan

The food system needs to be incorporated into the Main Campus Plan in order to reflect the vision, and the ecological and social values that UBC holds. UBC is more than the buildings and the greenways that exist on campus; it also consists of an entire community that works, lives and plays in and around the institutional core of the campus. Because food plays an integral part in everybody's life, it should also play a part in the MCP. Furthermore, the Main Campus Plan deals with the highest level of institutional development and without it mandating the need of a sustainable food system on campus, further plans will not follow suit.

By incorporating the food system into the MCP, a variety of different issues can be addressed. By planning for a sustainable food system, the long-term vision of sustainability on campus can be addressed. The long-term vision is formulated by recognizing the MCP holistically and that every part – even food – has its place within the broad plan.

As a leader of environmental sustainability, UBC can also be a model to many other communities by including food in a high-level plan such as the MCP. The UBC Campus Sustainability Office recognizes the need to reduce the ecological footprint on campus. By planning for a sustainable food system, many issues dealing with the production and delivery of food and assimilation of the waste it generates can be addressed. By planning for a sustainable food system in the MCP, UBC can also improve the biological and structural diversity of the campus environment.

The Integration of the Food System into Campus Planning

From our vision of a sustainable food system at UBC, it is evident that several key components of food systems need to be integrated into campus planning. However, it is also apparent that this is not a simple task. Food systems have never before been included in any campus planning; therefore, the language and approach to their inclusion needs to be intensely contemplated. Specifically, the format and intent of existing plans such as the MCP need to be taken into consideration. As a result of such considerations, we have concluded that the integration of food systems into the MCP is not sufficient to accomplish our aforementioned objectives and goals for food systems at UBC. Consequently, we propose the formulation of a plan supplementary to the MCP, in which specific objectives and strategies for their implementation can be discussed. This plan, along with the MCP can help to guide the campus into developing a sustainable food system.

Recommendations for the Inclusion of the Food system in the MCP

While we propose a supplementary document, the MCP still plays a pertinent role in the inclusion of food systems in campus planning. The MCP will act as an umbrella to enable the supplementary plan, and suggestions discussed there within, to be implemented. Therefore, the MCP must address key principles of the food system at a broad level. These include:

- Environmental sustainability/reducing UBC's ecological footprint
- Support of local industries such as the food industry
- Importance of community
- Connection of UBC to its agricultural roots
- Importance that the campus community values and understands their connection to food

These principles apply to other aspects of healthy campus life other than the food system and, as discussed earlier, some are already stated in the MCP. To reiterate, the principles that are

already adequately addressed in the MCP are the importance of community and the connection of UBC to its agricultural roots. In order to integrate the remaining principles, as well as the food system in general, the following recommendations have been made as addendums to the MCP:

ACADEMIC ENDEAVORS

(p. 28-29) Quality of Life Opinions – include the importance of maintaining access and availability of quality food to the campus community.

(p. 31) Facilities and Services – include food as a necessary component of both facilities and services.

GENERAL STRATEGIES

(p. 34) Environmental Responsibility – under this heading, add a value of supporting local products (e.g. food) to minimize social, economic and ecological costs of transportation (i.e. support the local economy). If certain local products are unavailable, take initiative as an environmental leader through purchasing Fair Trade products. (e.g. make Food System a subheading of Environmental Responsibility.)

(p. 64) Signage and Orientation – include food facilities as an example of improving signage for buildings and “their interior facilities.”

(p. 70) Respect for Land Value – include the importance of increasing building density on campus. Also, spaces in buildings and on land should be reserved for food so that access and availability of food can be maintained. This ties in with the value of community on campus.

(new) Food Waste Management – waste (organic and other) must be dealt with in a sustainable fashion. Waste is a key component of a food system and must, therefore, be addressed in the MCP. For example, the MCP could lay the foundation for composting all organic wastes on

campus.

LAND USE STRATEGIES

(p. 105) Locations for Food Services – include a mention of maintaining choice/variety of food available. Food available from food services should be of adequate nutritional quality.

(new) Locations for Green Space – include a description of the multifunctional role of green space on campus. Other than open space (e.g. a sports field), green space can also include urban forms of agriculture, such as rooftop gardens/greenhouses and community gardens. These areas of urban agriculture should be increased and improved, while buildings should be built with the infrastructure to enable the incorporation of such green spaces on campus.

Recommendations for Action: A Supplementary Food System Plan:

The creation of a more detailed plan to supplement the MCP further facilitates the inclusion of the UBC Food System into campus planning and development, by providing recommended avenues for action to incorporate sustainable practices. Similar supplementary plans have been devised in the non-institutional sector of campus development; for each of the new UBC neighbourhoods outlined in the Official Community Plan (OCP) and the Comprehensive Community Plan (CCP), a separate, more detailed Neighbourhood Plan has been devised (UBC University Town, 2005a). Our proposal for a supplementary food system plan follows this UBC Campus & Community Planning (C&CP) model.

The Supplementary Food System Plan should take elements from the non-institutional consultation processes to ensure that all stakeholders are involved. Currently, the development approval process for institutional land only requires an advisory design panel review and a technical review along with a public meeting (UBC University Town, 2005b). Then amendments

are made before it is sent to the Board of Governors for final approval. However, since the food system at UBC encompasses the whole university, it should receive a longer consultation process. For the neighbourhood planning process, both a technical advisory committee and an advisory planning committee (APC) – made up of stakeholders – are involved in the process multiple times (UBC University Town, 2005c). As well, numerous public meetings are held and the plan is revisited many times before reaching a draft for final consultation. The neighbourhood planning process ensures that public opinions are heard through the APC and public meeting. Although this process takes much longer, it ensures that a plan with as big of an impact as the food system will have input from all parties. Since the approval process is lengthy, it is important to devise a working draft as soon as possible so that the food system may be given adequate consideration in campus planning as soon as possible.

In this supplementary plan, each of the objectives expressed in our vision will be expanded to include specific actions to be taken at UBC, as well as recommendations to expand sustainability promoting practices already in place within the UBC Food System. These strategic actions suggested for inclusion in the Supplementary Food System Plan, are listed under each of our previously stated objectives:

1. Increase the physical capacity of the UBC campus to support the growing of food

Strategic actions to meet this objective may include:

- 1.1 Incorporate agricultural spaces into future campus development. Some examples are community gardens (around buildings, walkways and areas such as daycares and schools) and roof top gardens.
- 1.2 Improve existing infrastructure at UBC Farm to produce more food for consumption on campus.

- 1.3 Reserve land for urban agriculture projects that involve the public through educational programming (in settings such as greenhouses, aquaculture and bioponics).
- 1.4 Improve the connection that the UBC community has with the land through creating outings and activities around the Farm and through encouraging the sales and preparation of in-season foods on campus (Yale, 2005).

2. Increase the amount of food consumed at UBC that is produced both organically and locally

Strategic actions to meet this objective may include:

- 2.1 Increase involvement of the UBC Farm in campus food system planning.
- 2.2 Seek partnerships with local producers.
- 2.3 Support consumer education and awareness of sustainable ways of shopping and purchasing food.
- 2.4 Promote local, organic and in-season foods.
- 2.5 Seek partnerships with local producers such as dairy producers (Tonachel & Seeley, 2000) and vegetable farmers.

3. Encourage practices that manage waste flows in a more sustainable manner

Strategic actions to meet this objective may include:

- 3.1 Educate students about waste management and incorporate it into school curriculum.
- 3.2 Encourage and expand re-usable container and utensil use in cafeterias and food outlets.
- 3.3 Encourage UBC to make a commitment that reflects the values of ECOtrek by reducing energy and water in the food establishments (reducing their ecological footprint) as well as by expanding composting.

- 3.4 Educate different groups on campus about the importance of a sustainable food system and how waste management is a part of that. It is hoped that this will promote participation so that UBC Waste Management (who is actively looking for better ways to improve) can expand their services on campus. (Currently what is holding back UBC Waste Management is not lack of resources but lack of campus-wide participation [REDACTED])
- 3.5 Through education, develop further partnerships with UBC Waste Management; currently they have partnerships with UBC Farm, UBC Campus Sustainability Office, Faculty of Bio-Resource Engineering and Health, Safety and the Environment.
- 3.6 Expand UBC Waste Management's small scale and large scale composting as well as their recycling initiatives. [REDACTED]

4. Encourage the celebration of food and the local food system at UBC

Strategic actions to meet this objective may include:

- 4.1 Increase awareness and food system literacy – educate the campus community about the value of local food systems, including the origins of food and its disposal methods.
- 4.2 Promote the UBC sustainability pledge as a way of educating the campus community.
- 4.3 Incorporate food system research into all educational programs on campus, and not just Agricultural Sciences.
- 4.4 Products and services that cause least harm to the environment should be the least expensive.
- 4.5 Showcase foods from UBC and other local producers at a “farmer’s market” on campus, such as in the Student Union Building (SUB).
- 4.6 Organize activities and events to increase the awareness of food system sustainability

4.7 Introduce signs that indicate “food here” (similar to highway signs) and add these to the new building signs on campus. This will improve the awareness concerning which buildings on campus contain food facilities.

5. Encourage food consumed at UBC that is produced in other regions or countries to be produced under ethical and environmentally sustainable practices

Strategic actions to meet this objective may include:

- 5.1 Maintain current partnerships with ethical business partners.
- 5.2 Seek and develop more business relationships with ethical business partners.
- 5.3 Expand the *AMS Ethical Purchasing Policy* to include the entire UBC campus food system.
- 5.4 Increase the variety of Fair Trade food products sold at UBC.
- 5.5 Increase awareness of the UBC population about ethical food issues and environmental sustainability, in order to create consumer demand for sustainable products.

6. Increase the capacity of UBC to provide or support basic food security initiatives for the local community

Strategic actions to meet this objective may include:

- 6.1 Analyze the demographics of the UBC population to determine reasonable food prices.
- 6.2 Develop an on-line survey to assess the current level of satisfaction with the UBC food system’s ethnic diversity.
- 6.3 Use on-line survey data to evaluate the feasibility and demand for culturally appropriate food products at UBC.
- 6.4 Explore the feasibility of incorporating a local grocery outlet into future campus development.

- 6.5 Explore the feasibility and demand for a large-scale, on-line grocery delivery service, such as SPUDS, at UBC.

7. Ensure that there is adequate distribution of food facilities on campus

Strategic actions to meet this objective may include:

- 7.1 Analyze current development plans to ensure that adequate numbers of food facilities are included.
- 7.2 Analyze current distribution of food facilities of campus to determine areas of growth.
- 7.3 Implement planning policy guidelines, stipulating “x” number of food service facilities required within a certain land area on the UBC campus.
- 7.4 Develop primary research on food demands on campus in order to ensure all forms of sustainability, including economic.

These recommendations serve mostly as structural guidelines for the Supplementary Food System Plan, and we encourage C&CP to consider the strategies we have suggested, as well as incorporate other sustainability initiatives as seen fit.

Recommendations and Conclusion

Recommendations for AGSC 450 2006 Colleagues:

- Work with key sustainability leaders and stakeholders on campus, in drafting the Supplementary Food System Plan. This includes the UBC Campus Sustainability Office, UBC Food Services, AMS Food and Beverage Department, UBC Waste Management and UBC Farm. The aim of this plan should be (1) to reach concrete solutions to fulfill the

objectives (vision) proposed in this document, and (2) support the enhancement and integration of current sustainability initiatives on campus.

- Work together with other faculties, such as Engineering and the School of Community and Regional Planning, to increase the food sustainability on campus.
- Evaluate the feasibility of a more food-sustainable UBC campus. [REDACTED]
[REDACTED]
- Analyze our objectives and strategies for the Supplementary Food System Plan and look for areas that may need to be improved or more detailed. For example, the economic feasibility of implementing our objectives has not been extensively assessed and could benefit from further examination.

Conclusion

It is evident that sustainable food systems are desirable in order to improve the overall sustainability and ecological footprint of a community. It is also apparent that food systems ought to be included in campus planning as a result of their pertinent role in the functioning of a community. At UBC, it is important to integrate food systems into the MCP – the highest level of institutional planning on campus. While the MCP can address general principles of the food system, a supplementary plan is needed to explicate specific objectives and mechanisms for achieving a sustainable food system on campus. The implementation of our Supplementary Food System Plan will carry out an important step in the development of a sustainable food system at UBC. The execution of such a plan will also provide a framework for the inclusion of sustainability initiatives in the planning of other university campuses and communities. Finally, it is evident that these recommendations are only part of a preliminary report on the integration

of food systems into campus planning; therefore, it must be followed by a more detailed look at the subject.

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