

COMM 486M – sec 203 Group Project, 2016.

An organizational challenge will provide the focus for the group project; these will include a combination of conventional pure for profit businesses and also non-profit organizations such as First Nation Bands, Municipal Sustainability or Social initiatives and Health Care. Clients will supply initial problem and ambition statements. All teams will be allocated to the same client. Teams will have an initial discovery meeting with the client (in class) and will then frame the scope of work and formally submit a proposal. The teams will operate in a competitive environment, as if they were competing consulting firms, with a final report and presentation.

The group project will be briefed in detail in class 5, and supporting documentation will be posted to this page.

Increasing food security in northern communities in Canada:

Food security is a complex and globally important issue, and northern communities in Canada face particular challenges in this regard, as a result of the relatively harsh climate, short growing seasons, and high import rates and shipping costs.

Food security refers the three pillars of availability, access and use, relating to a nutritious diet. <http://www.who.int/trade/glossary/story028/en/>

The scale of the challenge varies geographically within Canada, with greater issues in the northern territories. <http://www.statcan.gc.ca/pub/82-624-x/2015001/article/14138-eng.htm> The category is documented in detail. <http://www.statcan.gc.ca/pub/16-201-x/2009000/part-partie1-eng.htm> Pricing premiums in Nunavut are illustrated in this article: <http://www.theglobeandmail.com/news/national/the-north/why-is-food-so-expensive-in-nunavut-shop-for-yourself-and-find-out/article15915054/>

Considerable efforts go into lobbying and advocacy. <http://foodsecurecanada.org/>

Recent technological advances may substantially improve food security in the Canadian north by making it practical to grow food locally. These technologies will make it possible in the near future to grow food in energy-efficient, highly insulated

enclosed growth chambers. The introduction of these closed growth chambers will make it cost-effective to grow food locally, and therefore will substantially reduce the cost (and energy) currently expended shipping food into these communities, while also increasing the nutritional content of the available food . Many researchers, including several research groups here at UBC, are working on new technologies that will make this practical and economically feasible.

This project focuses on the possibility of improving food security in these northern communities by significantly increasing the amount of food that is produced locally. Local food production could result in considerable potential benefits (economic, social and environmental) and your analysis should cover all of these dimensions.

For the purpose of this project, you should assume that it is technologically possible to reliably and affordably produce food (for example, fruits and vegetables) that today cannot be readily obtained year-round or stored for long periods of time. In other words, do not focus your analysis on potential technological challenges related to northern food production, but rather focus on the potential non-technical barriers such as those associated with social well-being, community engagement, and cultural practices. You can also assume that it will be economically feasible to continue to ship some easily stored foods (such as grains) and that the majority of protein requirements can be met through traditional hunting and fishing practices.

Your task: Should the Government of Canada invest in a food security strategy that relies on a significant increase in local food production? If yes, what would you recommend as an implementation strategy, focusing on the primary barriers that proponents should expect to face, and the key activities that they could use to overcome these barriers? How will the Government know if its strategy has succeeded? If no, is there another approach that you would recommend for improving northern food security?

An effective analysis will clearly identify the decision-making criteria and provide appropriate quantitative justification for the conclusion and any suggested implementation plans.

Your analysis may include addressing some of the following questions:

- What are the most significant benefits of local food production, and can you quantify the value of these benefits to the community?
- What are the most significant barriers that are likely to be faced?

- Who are the key stakeholders and influencers? Are they likely to support or oppose the initiative? How can they be engaged?
- What makes northern communities unique and might these factors influence a food production strategy?
- What is the demographic and cultural make-up of these communities, and how might that influence the strategy?
- Are there any successful (or unsuccessful) government initiatives in Canada that we could draw on as an example, and what is the relevance of these examples to the food security challenge? How were decisions made in those examples?
- What are the potential risks or pitfalls that could impede progress?
- Is Canada facing a unique challenge in this regard? Have other northern countries taken steps to increase local food production, and if so is there any knowledge that can be translated to Canada from other initiatives?

You can base your analysis on the following numbers:

- Canada currently spends approximately \$35M per year shipping perishable (or substitutes for perishable) food to northern communities.
- The population of northern Canada is approximately 110,000.
- In general, the population of individual communities ranges from 300-2,000.
- A 250 m² enclosed growth chamber will provide locally-grown food for 50 people.
- The crop yield of an enclosed growth chamber is 25 kg per m².
- It will cost \$1,000 per m² to build an energy-efficient enclosed growth chamber.
- It will cost \$50 per m² to operate the enclosed growth chamber, not including labour.
- Labour expenses for the enclosed growth chamber will be \$125 per m² per year.

In class 6 you will get to meet a client representative for this initiative, part of a research group at UBC focused on addressing food security via advanced enclosed growing environments. You will have the opportunity to ask questions.

There are 3 deliverables:

- proposal and plan of work (5%) – due Feb 4th @2pm via Connect.
 - [Capstone strategy plan Statement of Work \(SOW\)](#) – you should customize this for your proposal.
 - A workflow doc is important for the team. You should customize this doc and include the draft in your proposal submission: [comm486M project workplan template v2](#).
- final document (20%) – due March 27th– SUNDAY at 10 pm (via Connect)-
 - a format guide and sample final report from a similar course is posted below this section.
- final presentation (10%) – per schedule. Slides due in Connect 10pm, March 27th.
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Guidance on slide format for the group project. Your document should be submitted as a pdf, in “speaker note” mode. That is, with the top half of the page as the slide, and the bottom half as “reader notes.” Do not run over beyond the bottom of the page – so preview font size and layout carefully. Use this space as a formal part of your work and submission to provide the detail on research and analysis that you cannot reasonably put into an effective slide.

Examples from 2015 project for Musqueam Economic Development Corporation have been posted under class 5 prep.

Peer evaluations will be conducted in the course, both at the mid-point to provide formative feedback, and at the end, to assist the Instructors in any possible grade adjustments. In this upper level and Capstone course, it is expected that each student will interact with their peers in a professional and conscientious manner. You should be open in communication, do what you say that you will do, and take pride in the quality of your work. Teams should do their best to work through any team issues themselves, but they may ask for help. All students should keep a record of their own work. If you come to our attention for lack of reliability or contribution then we will ask you for evidence of what you have done before making a final decision. We would hope not to have to make any grade adjustments – being able to work well in a team is a key test of “fitness for graduation.” However, if we do have to make adjustments then expect them to be major in scale.