Young Agrarians Project Proposal

Faculty of Land and Food Systems

University of British Columbia

Laura MacTaggart - #13762133 Jesline Rahardjo - #20685137 Hadas Haft - #22471130

February 5th, 2016

Introduction

The **aim** of our project is to apply our knowledge of food security to find successful and informative impact dashboards and present a package of environmental, social and economic indicators to Young Agrarians to help guide them in making their own dashboard. The main **objectives and sub-objectives** of our group in this project are as follows:

- 1. To create a list of professional, well studied and clear suggestions of components and indicators to include in an environmental dashboard for Young Agrarians and include resources they can use.
 - To outline important agricultural environmental sustainability indicators
 - To outline what sponsors are interested to see in an environmental impact dashboard- including the information that increases their willingness to sponsor a farmer.
- 2. To find other companies or organizations who have made successful environmental impact dashboards and learn from their success' and mistakes.
- 3. To identify gaps in existing knowledge around the environmental impact of agroecological industrial farming and farm environmental impact dashboards.
- 4. To learn and become comfortable with the process of undertaking a community project.

Based on the information above, our group has some **guiding questions and sub-questions** which will help us with further research and in our meetings with our community partner, Sara Dent:

- 1. What are the necessary components to include in an environmental dashboard?
 - What are the advantages and disadvantages to agroecological farming in an environmental, social and economic context?
 - What are the different agroecological zones in Canada and what is grown in each zone? Does the region and the crop type affect the environmental sustainability potential of a farm?
- 2. Are there other organizations which successfully use a dashboard to communicate their environmental impact? What did and didn't work for them?

Background and significance

Community Context

The Young Agrarians organization works with new agroecological farmers from across the country to provide learning opportunities and help them network with other farmers and possible sponsors. This organization aims to use an asset-based management approach to promote agroecological farming throughout B.C. and eventually Canada.

Agroecological farming was designed to assure food justice, food security and food sovereignty to all people and to transform the current food system which has caused an environmental, economic, political and financial crisis (Gliessman, S., 2014). This farming method uses social equity, participation and justice as the pillars to create a social change where to food system involves a more direct relationship between farm and table and environmentally damaging resources are reduced (Gliessman, S., 2016). In British Columbia, the government has identified soil, air and water quality as well as extensive pesticide use as the key environmental issues associated with agriculture and they have funded a research and development corporation to study and manage these issues (British Columbia Agriculture Council, 2014). Agriculture in B.C. has recently felt the effects of climate change through hot dry summers and it is becoming more apparent that new farming techniques such as agroecology are necessary.

Research Methods:

We will approach our research in two ways: assessing the different environmental dashboards that were developed by other farming organizations and conducting a literature research on the three pillars of sustainability: environment, social and economic

Environmental Dashboard Research Criteria

First, we will choose three environmental dashboards that best represent organization with similar goals to Young Agrarians' goals. These dashboards will be chosen based on their clarity and effectiveness at communicating information. After we have chosen the 3 environmental dashboards that are most appropriate, we will analyze their environmental, social and economic indicators and collect further research on why they include some information and not other. We will then connect with our community partner, Sara, to ensure that our research aligns with her goals of the project. With each monthly blog post, group self-reflection will be uploaded to monitor our progress and learning objectives and ensure that our individual goals are met by the end of the month.

Literature Review

Listed below are the environmental, social and economic indicators which we will study in depth during our literature review (Cauwenbergh *et al.*, 2007). We are expecting to identify several gaps in the social indicator (Altieri *et al.*, 2009). These are subject to change after we analyze other environmental dashboards.

1. Environment:

- Land
- Air
- Water

2. Social:

- Community's perspective of agro-ecological farming.
- Interaction of farmers on their community.

3. Economic:

• Long-run and short-run financial aspects.

Ethics Considerations

While doing our research, there are 3 ethical considerations. First, with regards to analyzing the research data, as a group we need to be aware and wary if the information gathered is from a biased source and note why that may be. Moreover, we have to be mindful and consider our group members' capabilities and time commitments. Lastly, we have to be respectful of Sara's time commitments and to keep the information she provided confidential and anonymous.

Success factors

As we work to create a package of indicators for Young Agrarians to use in an environmental impact dashboard, we will measure our success by our ability to find the most common 5 indicators from currently existing dashboards and effectively apply them to provincial settings and conditions

that could be used to create an environmental dashboard specifically for Young Agrarians. We realize that we might not be able to find suitable indicators, however in this case, we might come to a conclusion that an environmental impact dashboard is not the best strategy for Young Agrarians to use as communications tool. Furthermore, we hope that our failure to create such a package could also be used as a recommendation to Young Agrarians to pursue other possible media for communication.

Individually, we each hope to gain valuable experience in collaborating with community leaders in a professional manner. We strive to professionally communicate with our Sara, by responding to her emails within 24 hours of receipt, and being prepared for our scheduled Skype meetings on time with a list of questions and subjects to discuss with, so that we do not waste her time. We feel that our ability to contribute effectively to Young Agrarians through our recommendations for the dashboard creation, will also be a good indication of our professionalism.

Another common personal goal that all team members share is the wish to learn more about agroecological farming as an alternative to conventional farming. We will use our group blog to reflect on our learning and will be able to evaluate the learning process through retrospective reading of the blog posts throughout the term.

References

- Altieri, M. A. (2009). Agroecology, Small Farms, and Food Sovereignty. *Monthly Review Mon. Rev.*, 61(3), 102.
- British Columbia Agriculture Council. (2014). *Agriculture Environment Initiatives*. Retrieved from https://www.bcac.bc.ca/ardcorp/program/agriculture-environment-initiatives
- Cauwenbergh, N. V., Biala, K., Bielders, C., Brouckaert, V., Franchois, L., Cidad, V. G., Peeters, A. (2007). SAFE—A hierarchical framework for assessing the sustainability of agricultural systems. *Agriculture, Ecosystems & Environment, 120*(2-4), 229-242.
- Gliessman, S. (2014). Agroecology and Social Transformation. *Agroecology and Sustainable Food Systems*, *38*(10). Retrieved from http://www-tandfonline-com.ezproxy.library.ubc.ca/doi/full/10.1080/21683565.2014.951904
- Gliessman, S. (2016). Transforming food systems with agroecology. *Agroecology and Sustainable Food Systems*, 40(3). Retrieved from http://www-tandfonline-com.ezproxy.library.ubc.ca/doi/full/10.1080/21683565.2015.1130765