

Justice Studies 310 – Food, Hunger and Social Justice

Problem-Based Learning Case #2

Submitted by students:

Erica Focht, Ronald Larter and Taylor Norman

Submitted to

Dr. Gloria DeSantis, PhD, Dept. of Justice Studies, University of Regina

and Anna Dipple, RPIRG Executive Director and

Leonel Elias, RPIRG Green Patch Co-ordinator

Submitted November 2016

PBL Case - “We know that we grow a lot of vegetables at The Green Patch that feeds a lot of people, but we don’t know how many kilograms of fresh produce can be converted into numbers of meals and thus, how many people we likely feed in a given year. We know that the Health Canada Food Guide would be helpful to us as we try to figure this out though as there is a need to create an info-graphic and accompanying mini-report for marketing purposes” (This assignment was co-created by Gloria, Anna and Leonel during the summer of 2016.)

Please feel free to use material contained in this document for educational purposes, but please also give full credit by citing the students who researched and wrote this document and whose names appear above.

Introduction:

In this paper, we will discuss the Green Patch as it relates to food sovereignty. By looking at the products grown, we were able to find the number of servings and meals that can be made. We will discuss the Green Patch's advantages including enhancing the school community, increasing self-sufficiency, decreasing food waste, and furthering the new food regime. Along with the advantages, we will consider the disadvantages which are the lack of certain nutrients, its contribution to the neoliberal society, the lack of education and awareness. We came up with suggestions to raise awareness about the green patch, help people get involved, educate people about growing their own vegetables and finding ideas to expand the green patch. The Green Patch benefits the movement towards food sovereignty.

The Green Patch:

The Green patch is a 5400 square foot community garden at the University of Regina. It is organized by the Regina Public Interest Research Group (RPIRG) and run by volunteers. There is a variety of fruits and vegetables grown that will be discussed further in this paper. 75 percent of the produce is donated to Carmichael Outreach, which is an organization to support people in poverty in Regina. The rest of the produce is given to volunteers and other people around the university. The goals of the Green Patch are to, educate people on horticulture and healthy eating habits, produce high quality vegetables at a low cost, enhance the look of the campus, teach value of environmental sustainability and diversity, and engage students and staff in a project with positive social impacts (RPIRG, 2016). These goals show the Green Patch's strides towards food sovereignty.

The Green Patch has many aspects that support food sovereignty. Food sovereignty is defined as, “The right of nations and peoples to control their own food systems, including their own markets, production modes, food cultures and environments” (Wiebe and Wipf, 2011, p. 4). Gardens allow people to control the system, market, production, environment and culture of the food they grow in it. Planting your own garden gives you complete control and this shows food sovereignty, therefore, as a garden, the Green Patch is a step toward food sovereignty. Food sovereignty “focuses on food for people, putting people’s need for food at the centre of policies and insisting that food is more than just a commodity” (Kneen, 2011, p. 92). The Green Patch does this by giving those in poverty a chance of a healthy balanced diet; they focus their attention on Carmichael Outreach.

Method:

To find the number of servings for the pounds of produce, we used the resources within our bibliography. First we took the amount of produce in pounds given by Regina Public Interest Research Group (RPIRG) and the green patch for 2016 and then using the resources (cited in the bibliography), we found roughly how many cups or ounces were in one pound of each produce. Knowing how many cups were in one pound of produce, we were able to find out how many cups of food the green patch grew for every one of their products. Knowing the cup measurement allowed us to use the Health Canada website (see appendix A-2) to find out how many servings were in one cup. This gave us our final tallies for each product from pounds to servings. See appendix A-1 for actual calculations. See appendix A-3 for general pound to servings chart.

Findings:

The Green Patch harvested 2,002 lbs of fruits and vegetables in 2016. We converted these findings into the amount of servings and found that:

Lettuce: 24.2 lbs = 121 servings

Corn: 55 lbs = 153 servings

Radishes: 30.8 lbs = 140 servings

Eggplant: 88 lbs = 70 servings

Basil: 19.8lbs = 127 servings

Pumpkin: 165 lbs = 660 servings

Chives:4.4lbs = 9 servings

Onion: 26.4 lbs = 53 servings

Leek:15.4 lbs = 85 servings

Peppers: 33 lbs = 66 servings

Raspberries: 44lbs = 323 servings

Cucumbers: 121 lbs = 242 servings

Tomatoes: 297 lbs = 713 servings

Potatoes: 187 lbs = 468 servings

Zucchini: 363 lbs = 1008 servings

Beets: 30.8 lbs = 154 servings

Squash: 536.8lbs = 4,294 servings

These findings translated into 8,907 servings in total. Taking these findings we figured out the number of meals that can be made. We excluded basil (126), chives (9), and onions (53) due to the fact that these are not usually served alone during meals. Therefore, with 8,718 servings we can make 4,359 meals. This is assuming that there is two servings of fruits and/or vegetables in each meal. We found that this can feed either 4,359 people one meal or almost 4 people 3 meals a day for an entire year. Therefore, the Green Patch shows us the benefits of a garden and their impact on sustainability.

Advantages:

The Green Patch gives students and volunteers an improved sense of community. The garden allows people to both socialize and be educated about producing food. As with all

community gardens, the Green Patch gives people “a sense of wanting to be self-reliant and the national pride that goes with that” (Beingessner, 2011, p. 53). The school community receives a sense of pride with the contribution to food sovereignty. The need to work together helps to strengthen the school community. The green patch project teaches students and staff members the benefits of gardening and the knowledge to do it. By participating in the program, they help the community grow. Having more people involved increases the amount of awareness. The more awareness about the garden the more educated people will be and “[a] strength of community nutrition is its ability to educate the public about issues related to nutrition and health” (Engler-Stringer, 2011, p. 140). The more we educate the public about nutrition and health the healthier the community will become.

Educating people about gardening allows them to have the ability to create their own garden. Gardens are a huge step towards self-sufficiency. By growing your own food, you do not have to rely on other markets. The Green Patch supports this by staying local and helping people to be independent from commercial markets. Qualman says that, “Food sovereignty is not a system that makes citizens ever more dependent on food supplied further and further from their homes” (2011, p. 20-21). Keeping the garden local provides the opportunity for community independence and involvement. Involving people and teaching independence helps people to learn how to be self-sufficient.

One of the biggest issues we face as a country is food waste. Traditional agriculture and commercial organizations are responsible for the majority of food loss and waste. Unlike traditional agriculture the food produced in the Green Patch does not go through processing or commercial distribution resulting in less food waste (Food and agriculture organization of the

United Nations, 2011, p. 2). This is better for not only community members but also the environment. The Green Patch shows how gardening can improve food wastage in Canada.

This idea of community involvement and independence was first thought of at the beginning of the postwar food regime and in the new food regime. The 1950's were the beginning of the postwar food regime where the right to food and freedom from hunger was essential (Desmarais, Wiebe, and Wittman, 2010, p. 29). This idea of community members having the right to be free from hunger and have access to healthy food was looked over during the next food regime. We are currently striving for the new food regime where food sovereignty and security are essential rights. The Green Patch accomplishes this by combating poverty through donations and education.

Disadvantages:

While the Green Patch has many advantages, there are still several disadvantages. Although the produce from the Green Patch provides people with certain nutrients, people cannot live off fruits and vegetables alone; they require nutrients that are provided by other food groups. Dairy, meat and grains provide important proteins, carbohydrates and fats. Often, these nutrients are not found in gardens. This is a problem people face when trying to rely solely on produce from their garden.

Due to the lack of nutrients supplied by gardens, people are forced to contribute to the capitalist economy. Although gardens help to decrease ones dependence on markets, they are unable to create full sustainability. As noted in the Kurzer and Cooper article and in the Roff article, limiting ones consumption of store bought food is still continuing the neoliberalism and capitalism of our current market (2007). Gardening is a step away from capitalism, but we are far

from combatting the system as a whole. Therefore, the Green Patch contributes to the fight against a capitalist society.

Although gardening can be very beneficial is not frequently used in urban settings. This can be due to lack of education or awareness. Many people do not know how to garden nor do they know of community gardens. Sometimes people are unable to have gardens of their own and need community gardens. The Green Patch lacks in advertisement and community awareness. This results in less people participating in gardening as a whole which goes against the goals of the green patch.

Suggestions:

The first suggestion we came up with was to advertise the produce in servings instead of pounds. The idea behind this is that servings is a more understandable unit of measurement. By advertising servings we can relate to more people, therefore, encouraging more people to garden. Our second suggestion is to grow yams in the Green Patch. Yams are not grown locally in Regina due to their short growing season. Since the Green Patch does not aim to make a profit off of the produce, growing yams does not hinder them. Offering locally grown yams can be a selling point of the Green Patch. The third suggestion we came up with is for the Green Patch to provide an accessible community kitchen on campus. This kitchen could teach proper storage, preparation, cooking techniques, and the benefits of nutritious eating. With these suggestion the Green Patch will become more popular and help spread gardening as a whole.

Conclusion:

This paper reflected on the Green Patch's relationship with food sovereignty and security. Our finding from the Green Patch's produce provided us with an understanding of how many

meals can be created in a year. The advantages of improving school community, allowing self-sufficiency, lowering food waste, and continuing the new food regime support the goals of the green patch. The disadvantages of a non-balanced diet, supporting the capitalist economy, and the ignorance towards gardening show that the Green patch needs work. We made suggestions to combat these disadvantages. In conclusion, the Green Patch is valuable to the food sovereignty movement.

Bibliography:

Alkon, A., & T. Mares (2012). Food sovereignty in US food movements: Radical visions and neoliberal constraints. *Agriculture and Human Values*, 29, 347-359.

Anne, M (2014), *How Many Ounces Are in Serving of Vegetables*, Retrieved from:
<http://www.livestrong.com/article/458243-how-many-ounces-are-in-serving-of-vegetables/>

Beingessner, N. (2011). Getting to food Sovereignty: Grassroots Perspectives from the National Farmers Union. In H. Wittman, A. Desmarais, & N. Wiebe, *Food Sovereignty in Canada: Creating Just and Sustainable Food Systems*, 43-58.

Chef Menus, Retrieved from: <http://www.chef-menus.com/food-quantity-chart.html>

Desmarais, & N. Wiebe, *Food Sovereignty in Canada: Creating Just and Sustainable Food Systems*, 1-19.

Food and Agriculture Organization of the United Nations (2011). Global food losses and food waste – Extent, causes and prevention. Rome. Available at http://www.fao.org/fileadmin/user_upload/sustainability/pdf/Global_Food_Losses_and_Food_Waste.pdf

Health Canada (2007), Retrieved from: <http://www.hc-sc.gc.ca/fn-an/food-guide-aliment/basics-base/serving-portion-eng.php>

Health Canada (2007), Retrieved from: <http://www.hc-sc.gc.ca/fn-an/food-guide-aliment/basics-base/quantit-eng.php>

How much Swiss Chard Ribs or Leaves is in a Pound? (2010), Retrieved from: http://www.howmuchisin.com/produce_converters/swiss-chard

Kurzer, P. and A. Cooper (2007). Consumer Activism, EU Institutions and Global Markets: The Struggle over Biotech Foods. *Journal of Public Policy*, 27(2), 103-128.

Qualman, D. (2011). Advancing Agriculture by Destroying Farms? The State of Agriculture in Canada. In H. Wittman, A. Desmarais, & N. Wiebe, *Food Sovereignty in Canada: Creating Just and Sustainable Food Systems*, 20-40.

Roff, R. J. (2007). Shopping for change? Neoliberalizing activism and the limits to eating non-GMO. *Agriculture and Human Values*, 24, 511-522.

Rosset, P. (2003). Food Sovereignty Global Rallying Cry of Farmer Movements. *Food First*, 9(4), 1-3. Available at http://foodfirst.org/wp-content/uploads/2013/12/BK9_4-Fall-2003-Vol-9-4-Food-Sovereignty.pdf

The Old Farmer's Almanac (2016), Retrieved from: <http://www.almanac.com/content/measuring-vegetables-recipes>

Traditional Oven (2016), Retrieved from: <http://www.traditionaloven.com/foods/exchange/cup/lb-pound/raspberries-raw.html>

Use These Tomato Recipe Equivalents in Cooking (2016), Retrieved from:

<http://www.tomatodirt.com/tomato-recipe-equivalents.html>

Wiebe, N. & K. Wipf (2011). Nurturing Food Sovereignty in Canada. In H. Wittman, A.

Wittman, H., A. Desmarais, and N. Wiebe (2011). Food Sovereignty in

Canada: Creating Just and Sustainable Food Systems. Winnipeg:

Fernwood.

Wood, E. (1998). The Agrarian Origins of Capitalism. *Monthly Review: An*

Independent Socialist Magazine, 50 (2). Available through UofR

Archer Library e-catalogue.

Appendix A

A-1: Mathematical Calculations

Chard

18 Kg/ 39.6 lbs

1 lbs = roughly 5.5 cups

$39.6 \text{ lbs} \times 5.5 = 217.8 \text{ lbs}$

1 cup leafy vegetables = 1 servings

Therefore : $39.6\text{lbs} = 217.8 \text{ servings}$

(data collected from: http://www.howmuchisin.com/produce_converters/swiss-chard and <http://www.hc-sc.gc.ca/fn-an/food-guide-aliment/basics-base/serving-portion-eng.php>)

Squash

244 Kg/ 363 lbs

1 lbs = 4 cups

$363 \text{ lbs} \times 4 \text{ cups} = 2,147 \text{ cups}$

½ cup vegetables (not leafy green) = one servings

$2,147 \times 2 \text{ (servings per cup)} = 4,294 \text{ servings}$

Therefore: $363 \text{ lbs} = 4,294 \text{ servings}$

(data collected from: <http://www.almanac.com/content/measuring-vegetables-recipes> and <http://www.hc-sc.gc.ca/fn-an/food-guide-aliment/basics-base/serving-portion-eng.php>)

A-2: Canada's Food Guide Suggestions

Canada's food guide suggestions for cups to servings of fruits and vegetables:

“Vegetables and Fruit

125 mL (½ cup) fresh, frozen or canned

vegetable or fruit or 100% juice

250 mL (1 cup) leafy raw vegetables or
salad

1 piece of fruit”

(Canada’s Food Guide (2007), Retrieved from: <http://www.hc-sc.gc.ca/fn-an/food-guide-aliment/basics-base/serving-portion-eng.php>)

A-3: Servings per pound

Lettuce - 5 servings

Radishes - 4.5 servings

Basil - 6.4 servings

Chives - 2 servings

Chard - 5.5 servings

Leek - 5.5 servings

Raspberries - 7.4 servings

Tomatoes - 2.4 servings

Squash - 8 servings

Peppers - 2 servings

Cucumbers - 2 servings

Potatoes - 2.5 servings

Beets - 5 servings

Corn - 2.8

Eggplant - 8 servings

Zucchini - 2.8 servings