

**Veggie Compass: Whole Farm Planning for Enhanced Profitability of Midwestern
Organic Vegetable Growers**

The Ceres Trust Organic Research Initiative Final Research Report

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Abstract

We requested funding to create a whole-farm farm business management tool (named Veggie Compass) designed for diversified organic vegetable growers through the collection of yield and labor data and documentation of current grower practices and limitations. Our long term goal was to improve the profitability of organic vegetable growers by helping them better understand their costs of production, thus improving their decision making and whole farm planning capability. We undertook a strong outreach plan for the Midwest region, including the development of ongoing, supportive communities of practice as well as grower workshops, presentations at organic farming conferences, and webinars on the eOrganic website. The project has evolved and had impact beyond our expectations, with program reach extending beyond the upper Midwest, upon which the Ceres Funding was focused.

Introduction

Veggie Compass was designed to be comprised of several tools that assist organic growers with farm management, particularly related to crop and market choices that ensure profitable businesses: 1) labor data tracking systems; 2) a computer-based tool that allows growers to track their costs of production by crop and profits by market; 3) baseline yield and labor data that can be used as default values in the computer tool; and 4) educational materials which accompany the data tracking systems and computer tool.

Project Results:

Objective 1: Collect and analyze whole farm planning attitudes and practices of Midwestern organic vegetable growers to improve outreach and to document changes after our project.

This objective was completed and resulted in a peer-review publication:

Silva, E.M., F. Dong, P.D. Mitchell, and J. Hendrickson. 2014. Impact of marketing channels on perceptions of quality of life and profitability of Wisconsin's organic vegetable farmers. Renewable Agriculture and Food Systems. Firstview 1-11.

More details of the methods related to this objective are described in the publication. The following is the abstract from this paper:

A recent increase in programs supporting the entry of organic farmers into direct market channels such as Farmers' markets and community supported agriculture has occurred in the United States. In order to better implement these programs and to design better outreach and educational support activities for direct market farmers, understanding farmers' perceptions of success in these marketing channels is valuable. To this goal, Wisconsin certified organic vegetable farmers were surveyed in order to investigate the relationships between farm characteristics, marketing strategies, and farmer's perceptions of their profitability and quality of life. The data collected from this survey indicates that farmers selling into farmers markets and through CSA's tend to be more likely to be dissatisfied with their profitability. Conversely, however, the survey data indicated that farmers selling into other markets, particularly wholesale markets and restaurants/institutions are significantly more likely to be dissatisfied with their quality of life. Thus, it appears that farmers are making trade-offs with respect to entering markets that allow for greater financial rewards but may lead to a lower quality of life. These results point to the potential benefit of outreach efforts to assist farmers to increase their profitability in market channels that also provide a higher quality of life.

Objective 2: Collect and analyze data on crop-specific labor use and yields for Midwestern organic vegetable growers to use as initial baseline values in whole farm planning tools.

This objective was completed in two parts. The first strategy, collecting data regarding labor hours required for harvest and pack of all crops on twelve different organic farms across the upper Midwestern US, was published in *Renewable Agriculture and Food Systems*:

Silva, E.M., J. Hendrickson, P.D. Mitchell, and E. Bietila. 2016. From the Field: A Participatory Approach to Assess Labor Inputs on Organic Diversified Vegetable Farms in the Upper Midwestern United States. *Renewable Agriculture and Food Systems*. In Press.

The abstract from this paper summarizes the results:

Consumer interest in locally grown produce continues to increase in the United States (U.S.), demonstrated through the growth in direct market outlets for these products. Small, diversified farms, including those managed organically, have remained a cornerstone of local food systems. Questions remain, however, regarding the profitability of specific crops on these farms, in part due to the variability in labor inputs associated with diversified farming strategies. This study used a participatory approach to investigate labor hours required for the production of nine vegetable crops on twelve organic farms in the upper Midwestern U.S. Overall, labor inputs varied widely. High coefficients of variation existed for all values, indicating high farm-to-farm variability in labor required for seasonal activities. Farmers reported both challenges with data collection, as well as successes in using data analysis to guide management decisions. This ongoing work highlights the value of collecting farm-specific data for use in cost-of-production determinations.

The second strategy, collection of baseline values using a data pulse strategy, was part of the graduate work of Rachel Weil. This work has been submitted to the Journal of Agriculture, Food Systems, and Development, and is undergoing revision. However, Rachel's thesis has been attached as a reference.

The Veggie Compass Tool:

Although not officially funded by this grant, the work that was accomplished through Ceres Trust funding supported an online tool, available at www.veggiecompass.com. From the time that Google Analytics have begun on the site in July 2015, 7,036 users have visited the site, including at least one visit from every state in the US., including 559 users from Wisconsin. The website also receives international visits. More detail metrics have begun to be gathered on the site, which indicates that the tool has a particularly strong impact on beginning farmers (see attached metric summary).

Outreach Activities:

Meetings

Below is a summary of the Veggie Compass-related meetings at which Dr. Silva was a presenter.

This does not includes presentations by other co-PIs or Veggie Compass advocates.

2016			
January 22	Speaker	Amery Organic Vegetable Workshop,	Labor Efficiencies on Organic Vegetable Farms
January 25	Speaker	Wisconsin Fresh Fruit and Vegetable Conference, Wisconsin Dells	Labor Efficiencies on Organic Vegetable Farms
March 8	Organizer	Fairshare Grower Gathering	Labor Efficiencies on Organic Vegetable Farms
2014			
April 15	Speaker	Stateline Vegetable Workshop	Veggie Compass: Whole-Farm Profit Management
2009			
March 24	Speaker	Organic Valley Produce Pool Meeting, La Farge, WI	Veggie Compass

Additionally, the following invited talks were given:

“Veggie Compass: Whole Farm Management for Profitability”. Mid-Atlantic Fruit and Vegetable Conference, Hershey, PA. January 29, 2013.

“Veggie Compass: Whole-Farm Management for Profitability”. Organic Farming Conference, La Crosse, WI. February 24, 2012.

“Veggie Compass: A Tool For Whole Farm Management “, Poster, Organic Farming Conference, La Crosse, WI, February, 2009.

Summary results of the three year project will be presented at professional meetings and prepared for use in extension meetings in 2015.

Website:

The web-page developed during this round of funding and is maintained by the University of Wisconsin Center for Integrated Agricultural Systems: www.veggiecompass.com

Farmer Involvement:

Many organic vegetable farmers were involved throughout this project. Over the course of data collection efforts, approximately 30 farmers were engaged in on-farm research. These same farmers served as advisors throughout the course of the project, prioritizes research data and interpreting results.

Publications:

In addition to the thesis of Rachel Weil (attached), the following publications resulted from this project:

- Silva, E.M.,** J. Hendrickson, P.D. Mitchell, and E. Bietila. 2016. From the Field: A Participatory Approach to Assess Labor Inputs on Organic Diversified Vegetable Farms in the Upper Midwestern United States. Renewable Agriculture and Food Systems. In Press.
- Silva, E.M.,** R. Claypool, J. Munsch, J. Hendrickson, P. Mitchell, and J. Mills. 2014. Veggie Compass: A spreadsheet-based tool to calculate cost-of-production for diversified organic vegetable farmers. HortTechnology 24:394-402.
- Silva, E.M.,** F. Dong, P.D. Mitchell, and J. Hendrickson. 2014. Impact of marketing channels on perceptions of quality of life and profitability of Wisconsin's organic vegetable farmers. Renewable Agriculture and Food Systems. Firstview 1-11.

Additionally, the following farmer-focused publication was generated:

Veggie Compass Helps Growers Make Data-Driven Decisions (CIAS Research Brief #97)

<http://www.cias.wisc.edu/veggie-compass-helps-growers-make-data-driven-decisions-cias-research-brief-97/>