

**Towards a Socioeconomic Research Agenda for Organic and Sustainable
Agriculture and Food Systems: Preliminary Assessment of Topics**

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I. Introduction

In 2007 the Organic Farming Research Foundation published the *National Organic Research Agenda*. Its goal is to “inspire research that will help organic farmers and ranchers improve the agricultural, environmental, and economic performance of their production systems.” The Foundation explained in an introduction that by 1997 there had been very little progress on research recommendations put forth in the 1980 USDA *Report and Recommendations on Organic Farming* (USDA Study Team on Organic Farming), so they conducted meetings between 2000 and 2002 to gather research priorities related to organic production, as well as economics, marketing, and socioeconomic issues. The *2007 Research Agenda* volume compiled and synthesized the dialogue on research priorities for production-related topics (Soils, Past Management, Livestock Systems, and Genetics). Additional volumes are intended to cover other categories of research priorities.

In order to develop a publication on socio-economic research needs for organic agriculture, the Foundation contracted with Kate Clancy to provide an updated framework for priority research topics in the prospective volume. That product forms the basis of this document. In the meantime, in 2007 members of the Agriculture of the Middle research group (NE 1036) expressed interest in developing a research agenda on the topics of Agriculture of the Middle that would overlap in good part with the research ideas presented here. This report provides an excellent base and jumping off point for an expanded agenda that captures the social and economic research priorities of the larger NE 1036 group, as well as more specific short and long term policy research ideas that would help move forward both organic and sustainable agriculture.

II. Context

The development of an economics, marketing, and socioeconomic research agenda takes place in a rapidly changing environment. Literally, environmental issues such as climate change, fossil fuel use, water depletion, and environmental pollution of water, air, and soil are everyday news. Agriculture is one of the major sources of some of these problems -- and market demand for products produced in a sustainable way is very high. Despite consumer interest, the supply of organic and sustainably produced food is lagging -- especially food produced in the United States. Furthermore, alternative business structures and enterprises are emerging around the country to supply the demand for food produced with less water, energy, and harmful chemicals, and to improve the income of farmers, ranchers and fishers. However, many of these alternatives are new and untested, and participants across the value chain face multiple challenges to their success.

There has been some research on these issues over the last 20 years, but nowhere near enough. It's surprising how much basic needed economic research has not been done, even though many research questions have been identified by various bodies.

Unfortunately there is very limited funding for this research and too few researchers interested in doing it.

It's important to note that most commodity groups and corporations have their own economists or adequate consultant budgets to procure the information that they need for planning and for policy debates. Information from economics research is needed as soon as possible to help producers make better decisions and understand the larger system in which they are functioning; to improve the success rate of small businesses; to maintain demand for sustainably produced foods; and to develop better and more complete data to enhance policy makers' understanding of better practices and systems that can lead to better programs and more sustainable agriculture and food systems in the US.

III. Methods

My interest in conducting the present survey arose about 20 years ago when I and others were trying to find agricultural economists who were willing to answer questions on a variety of economic issues related to sustainable agriculture. We had a difficult time identifying a critical mass of such researchers -- many ag economists flatly told us that they weren't interested in the questions or in doing this type of research that is often multi-disciplinary. Although a few more express an interest at the present time it is hard to say that there is yet a critical mass.

The intention of my interviews was to gather information from experts on their top priority research needs regarding sustainable agriculture. I chose a convenience sample of agricultural economics experts who have been addressing economic and marketing issues through research for some time. These scholars know the agricultural economic research landscape, they know where the knowledge gaps are from their own and others' research, and they would be able to prioritize their issues so as not to end up with a laundry list of projects. I asked that they not give me more than four projects, but not surprisingly, I still have a long list because 1) each expert tended to list priorities from their own interests and biases so there wasn't much overlap; and 2) so much research is needed. I conducted interviews by phone (approximately 50 minutes in length) or in person with 15 people (see list in appendix 1). Almost all are trained in agricultural economics -- if they are not they incorporate economics questions and into their research and analyses. The responses are compiled into eight categories with some overlap between projects among the categories.

IV. High Priority Research Projects

A. Consumer demand

1. The goal is to better understand demand, how to change consumer purchases, to better predict size of markets, and attract more farmers to sustainable production methods

2. Research

Conduct basic price and income elasticity studies of sustainably-produced foods and compare to both conventionally produced and different forms of sustainably produced foods (e. g. Organic, IPM)
Survey consumers to determine the trade-offs that are made among different product attributes (organic, fair trade, humane, etc.)
Analyze whether multiple eco-labels on foods confuse or clarify food choices
Conduct more in-depth research on the role that consumer values play in food choices
Refine contingent evaluation methodologies to more accurately predict consumer behavior regarding cost differences
Begin research on how new knowledge about food production, food content and quality, tracing technologies, etc. will affect food markets
Develop more and better communication tools that are shown to positively affect consumer behaviors regarding purchase of sustainably produced foods

B. Costs

1. The goal is to determine the cost savings or increases related to sustainably-produced food

2. Research

Study the effects of the internal and external costs of sustainable production and processing compared to conventional on:
-- the environment (including life cycle analysis)
-- consumers (including low income)
-- infrastructure development
-- the incorporation of new elements into sustainability standards (e.g. living wage, social justice), and on new uses (e.g. bioenergy crops)

Study the relationship of external costs to cleanup costs
Calculate local and regional government costs
Measure transaction costs and figure out how to lower them
Examine what legal or institutional structures could be used to internalize costs
Calculate the effects of using discounted costs and more ecological economic methods

C. Definitions/standards

1. The goal is to improve and understand the definitions and standards that apply to agriculture and sustainably produced food
2. Research

Complete analysis that defines what a farm is; change the definition of farm (same since 1974)
Study the role of the different state standards utilized by "Grown in X State" programs
Determine how local/regional should be defined for different parts of the country to capture optimal economic and environmental benefits

D. Impacts of sustainable production

1. The goal is to understand more clearly the effects of sustainable agriculture production on a variety of major elements
2. Research

Initiate systems studies of the long-term effects of sustainable production on food systems economics, and the environment (e.g. soil change over long periods of time)
Measure the multiple benefits of different agricultural production systems, including more lifecycle analyses
Analyze the economic impact of local food production, including examining supply and demand at the local level
Examine the shortfalls of using food miles as an indicator of energy use
Look at the relationship between food supply mechanisms and national food security
Look at the relationship between sustainable food production and national food security
Analyze the effects of underproduction of food (for example due to lost farmland or drought) on the use of sustainable production methods and the food supply
Examine how to increase community investment beyond direct markets

E. Incentives

1. The goal is to determine more precisely the cost savings of production and marketing of sustainably produced foods to increase interest and craft incentives for farmers

2. Research

Calculate the eco-footprint of local and organic production versus conventional production in marketing of many crops from many locales

Design and evaluate incentive (packages) programs that reward farmers to build up capitals (for example soil, water, community)

Explore through literature and surveys what economic data have the most effect on decisions businesses use to distribute or sell sustainably produced food

Create relevant business models for sustainable food businesses and food systems

F. Research

1. The goal is to improve our ability to explain farms and value chains systems in order to replicate them

2. Research

Develop better economic models of farm and food systems as complex adaptive systems

Examine the economics of research funding and develop new mechanisms that maximize funding for sustainable agriculture and food systems

G. Scale

1. The goal is to better understand what farm size is best suited environmentally and economically to the production of organic/sustainable foods in different parts of the country

2. Research

What are the effects of farm size (small, medium and large) on:

- a) energy use
- b) product demand
- c) farm income
- d) types of crops grown in different regions
- e) provision of ecosystem services
- f) biomass production
- g) sustainable technology decline -- at what point does mechanization make sense?

Who is going to own farmland? How will it be farmed?

H. Value chains

1. The goal is to greatly increase our understanding of whole foods systems

Research

Conduct many more case studies/evaluations of how new marketing systems are working (elements, challenges, recommendations) including:

- a) what kinds of systems are there doing wholesale and retail sourcing
- b) mark up at each point in the value chain
- c) those with short value chains
- d) margins for distributors handling many small producers
- e) viable models for meat processing

Develop new methods to capture market robustness and distribution impacts of alternative systems

Analyze what happens when demand for crop/product is exceeded in a particular area

Compile research on how to train/nurture people to manage complex systems

Develop guides/materials/policy ideas and how to set up transparent markets

Measure the effect of global trade on sustainable agriculture markets and propose new global frameworks and rules to govern this trade

Appendix 1

Survey Respondents

Sandra Batie -- Michigan State University

Tom Dobbs -- South Dakota State University

Mike Duffy -- Iowa State University

Dave Ervin -- Portland State University

Chris Feise -- Washington State University

Hal Hamilton -- Sustainability Institute

Mike Hamm -- Michigan State University

Dick Harwood -- Michigan State University

Rob King -- University of Minnesota

Larry Lev -- Oregon State University

Rich Pirog -- Leopold Center

Darryl Ray -- University of Tennessee

Stew Smith -- University of Maine

Dawn Thilmany -- Colorado State University

Paul Thompson -- Michigan State University

