

The Economics of Organic Vegetables

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Overview

- Trends: Farms, Food, Fuel and the Future
- Profitability: Organic versus Conventional
 - What does Research Show?
 - How to Interpret?
- Making a Living?: Tales from the Field
- "People Get Ready" –Skills for the Transition
- Concluding Thoughts
- Resources

Trends: Farms and Farmland

What are the Trends in Organic? (USDA data)

Item	% change, 1997-2002
All farms	-3.92
All acres	-1.73
All vegetable acres	-5.33
All cert. organic acres	+43.00
All cert. org. veg. acres	+44.91

Trends: Food

According to the Organic Trade Association:

- 39% of all US consumers buy organic
 - ✓ 37% weekly
 - ✓ 39% daily
- Since 1997, organic food sales have increased 17-21% each year: 2% of total
- In 2003, 44% of sales were in grocery stores, 47% in health food stores

Trends: Food

People are re-connecting with food!

- Growth in Farmers Markets (USDA AMS)
 - 1,755 in 1994
 - 3,706 in 2004
- Growth in Direct Market \$ by 37% ('97-'02)
- Perceptions of health, concern about pesticides and environment
- "Food with a Story": relationships between consumer and farmer

Trends: Fuel

Fuel costs and availability uncertain

Fertilizers and pesticides use fossil fuels


- Organic corn/soybean farming use 1/3 less energy than conventional (Pimentel, Cornell University)

Caveats:

- Equivalent for vegetables?
- Pimentel's work not universally accepted

Profitability

Cut to the chase...




Does it make money?

Profitability

Economics 001:
 $P=R-C$
 Profit Equals Revenue Minus Costs


Does it cost more to produce?
 Will it bring a premium



Profitability Comparisons: Organic versus Conventional

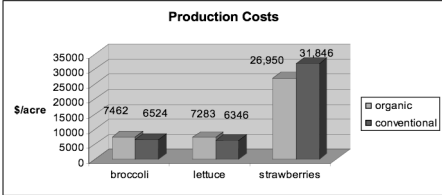
First, I'll tell you what's out there...

Then, I'll tell you why to be suspicious!



Cost Comparisons

http://www.agecon.ucdavis.edu/outreach/cost_and_return.php



Crop	Organic	Conventional
broccoli	7462	6524
lettuce	7283	6346
strawberries	26,950	31,846

Revenue Comparisons

Results from Canada, 15 vegetables
 Organic Yield was always smaller, Price was always higher

- 6 cases, organic revenue was higher
- 8 cases, conventional was higher
- 1 case tie

<http://dsp-psd.pwgsc.gc.ca/Collection/Statcan/21-004-X/21-004-XIE2002109.pdf>

Caveats, (and there are many!)

Are growing conditions in CA like here?
 Are market conditions in Canada like here?

There is no standard methodology for budgets:
 beware comparing one study with another.

More Caveats



Apples and Oranges
Two Paradigms of Organic Agriculture
➤ Input Substitution
➤ Agro-Ecological
Beware of Research Plot Studies!

Cash Flow during Transition Years

More on Apples and Oranges

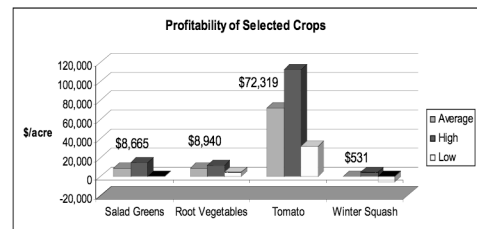
The economics of organic vegetable production is difficult to assess fairly, since the value of certain indirect benefits, such as an improvement in soil structure, or a reduction in risks associated with pesticide use, are hard to quantify and are never reflected in enterprise budgets.
-Vern Grubinger, U. Vermont

Are People Making a Living?

YES, according to results from the Northeast Organic Network Enterprise Budgets on 12 vegetable crops on 6 "exemplary" organic farms

NorthEast Organic Network  Shining the Light on Organic
NEON
www.neon.cornell.edu

Profits Earned by Various Crop Types



Lessons Learned from NEON work

- "Your results may vary"
- Need for diversity
 - Products offered
 - Labor timing
 - Biological factors
- Even high cost farmers can succeed if they create value for their products

People Get Ready

Entrepreneurship:
What is your new market?
What is your competitive strategy?

- Low Cost
- Differentiated Product
- Unique Service

Agro-ecology and Systems Thinking:
"Weed Management" to "Crop Competition"
"Pest and Disease Management" to "Crop Health"

Concluding Thoughts

- Organic Research is Needed (once <0.1%)
- New Partnerships b/w Land Grants and Organic Community
- Know your Costs, Know your Markets

Resources

ATTRA

<http://www.attra.org/>

SARE

www.sare.org

<http://www.sare.org/publications/organic/organic.pdf>

Thank You!

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