INVESTING IN ORGANIC PRODUCTION

Tanya Murray, Organic Education Specialist, Oregon Tilth

Noah Enelow, PhD, Senior Economist, Ecotrust

WWW.TILTH.ORG

Agenda

- What do we know about the economics of the transition period?
- What strategies are being used to help farmers cover the costs of transition and invest in organic?
- Opportunities to continue the conversation.

What do we know about the economics of transition?

- B.C. Ministry of Agriculture, Food, & Fisheries
  - Income less direct expenses exceeds conventional baseline by 1st year of organic.

- O.S.U. & Oregon Processed Vegetable Commission
  - Positive NPV for transition crop rotations over 3 years.
  - Positive NPV for each rotation + each organic crop.

- University of Minnesota Staff Paper
  - Income performance measures decline during transition, rebound above pre-transitional conventional.
  - Profitability performance measures decline during transition, rebound (less).

What do we know about the economics of transition?

- Farmer Perspective: Harn Soper
  - NOI declines during transition, still positive.
  - NOI average with organic certification = 3x conventional.

Crop System	Rotation	Year	NOI	2-Year NOI	Change
Organic	Oats-Alfalfa/Corn	2015	*$411.43	$476.34	+263%
Organic	Corn/Oats-Alfalfa	2014	$541.25		
Organic	Oats-Alfalfa/Corn	2013	$250.36	$575.83	+318%
Organic	Corn	2012	$901.29		
Transition	Oats-Alfalfa	2011	$165.98	$133.97	-26%
Transition	Oats-Alfalfa/Corn	2010	$101.96		
Conventional	Corn/Soyeans	2009	$190.88	$180.85	Base Line $180.85
Conventional	Corn/Soyeans	2008	$170.82		

*Estimate due to crop carry-over into 2016

Sustainable Farm Partners graph | Credit: Sustainable Farm Partners

Organic Transition: Budgeting, Financing, and Planning

Noah Enelow – Ecotrust

Aims of Study

1. Develop simple economic model of plausible organic transition scenarios

2. Identify key outcome variables for farmers during transition

3. Explore plausible options to pay for transition

Key Model Assumptions: Broccoli for Processing

	Conventional	Transition	Organic
Yield (T/ac)	5	4	4.5
Price ($/T)	$500	$500	$600

- ✧ Based on OSU enterprise budgets
- ✧ Broccoli production for the *processing* market

Key Model Assumptions: Per Acre Without Financing (cont.)

	Conventional	Transition	Organic
Field Preparations & Planting Costs	$874.84	$1,263.92	$1,263.92
Harvest and Postharvest Costs	$1,010.00	$542.76	$542.76
Total Variable Costs	$1,884.84	$1,806.68	$1,806.68
Fixed Cash Costs	$260.00	$270.98	$280.52
Total Cash Costs (no financing)	**$2,144.84**	**$2,076.68**	**$2,076.68**
Total Revenue / Acre	$2,500.00	$2,000.00	$2,700.00
Cash Returns/Acre (including financing costs)	**$355.16**	**($76.68)**	**$612.80**

Options for Transition

- **How can the farmer cover the costs of transition to ensure positive cash flows?**
- **Three options:**
  1. Financing
  2. Transitional Price Premiums
  3. Gradual Transition

Financing Assumptions

Acreage in Transition	50
Total Annual Cash Flow Needs (years 1-3)	$3,882.93
Loan Amount	$12,000.00
Annual Interest Rate	5.0%
Compound Period	Monthly
Term (years)	5
Interest-Only Period (years)	3

Key Model Results: Per Acre With Financing

	Conventional	Transition (Years 1-3)	Organic (Years 4-5)	Organic (Years 6+)
Total Cash Costs/Acre (with financing)	**$2,144.84**	**$2,077.66**	**$2,087.20**	**$2,076.68**
Total Revenue/Acre	$2,500.00	$2,000.00	$2,700.00	$2,700.00
Cash Returns/Acre (including financing costs)	**$355.16**	**($88.41)**	**$497.11**	**$623.32**

Key Model Results: 50 Acres With Financing

Total Monthly Payments (Years 1-3)	$48.89
Total Monthly Payments (Years 4-5)	$525.86
Annual Cash Returns (Transitional, Years 1-3)	($4,420.72)
Annual Cash Returns (Organic, Years 4-5)	$24,855.63
Annual Cash Returns (Organic, Years 6+)	$31,165.95
Comparison Annual Cash Returns (Conventional)	$17,758.09
Difference (Transitional - Conventional)	($22,178.81)
Difference (Organic – Conventional, Year 4)	**$7,097.54**
Difference (Organic - Conventional, Year 6+)	$13,407.86

Price Premiums and Cash Flows: Without Financing

Transition Price + Premium ($/T)	% Premium	Annual Cash Returns	Annual Cash Flow Needs
$500	0%	($3,834)	($3,834)
$510	2%	($1,834)	($1,834)
$520	**4%**	**$166**	**$0**
$530	6%	$2,166	$0
$540	8%	$4,166	$0

Transition Acreage and Cash Flows: Without Financing

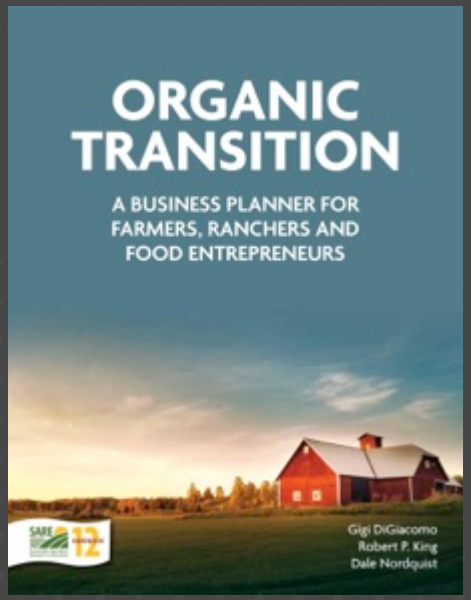
Acreage In Transition (Year 1)	Annual Cash Returns (50 acres, Year 1)	Annual Cash Flow Needs (Year 1)
50	($3,834.05)	$3,834.05
45	($1,674.83)	$1,674.83
40	**$484.38**	**$0.00**
35	$2,643.60	$0.00

Caveats and Extensions

1. Budgeting
2. Financing
3. Multiple Crops; Crop Rotation
4. Multi-Year Transitions

Thank you!

What do we know about the economics of transition?



IOWA STATE UNIVERSITY
Extension and Outreach

Ag Decision Maker

WWW.TILTH.ORG

OREGON TILTH

Strategies for Covering the Cost of Transition

- Transitional Premiums
- "Certified Transitional"

Strategies for Covering the Cost of Transition

- ✧ Incentive Payments
- ✧ Long-Term Contracts

WWW.TILTH.ORG

Strategies for Covering the Cost of Transition

- ✧Loans
- ✧Grants
- ✧State & Federal Programs

NRCS Organic EQIP Payments for Organic Practices

Practice	Approximate Payment
Compost Facility	$2/CuFt
Field Border - Pollinator Habitat	$749/Acre
Conservation Cover for Pollinators	$940/Acre
Cover Crops	$133/Acre
Herbaceous Weed Control	$74/Acre
Nutrient Management	$413/Farm/Acre

Practice costs identified in this table may vary. Contact your local NRCS office to inquire on actual practice costs.

Opportunities

ORGANICOLOGY
The Study of a Sustainable Food Future

February 2nd, 2017

❖

Transition and Growth in the Organic Sector

Transition to Organic Network

http://goo.gl/formsiTPJTpeiSa?

WWW.TILTH.ORG

OREGON TILTH