

Pricing for Profit



Making sense out of the
mayhem...

Craig Chase, Field Specialist
Farm & Ag Business Management

Plan for Today

- Discuss pricing, margins, markups, marketing outlets, and whatever else you want to (this is your program).
- Be casual and informal – ask questions when you have them.
- Go through a pricing exercise in a later session today.
- Summarize and answer any follow-up questions.

Initial Questions to Think About

- I want to grow tomatoes and I notice the local grocery store is selling California tomatoes for \$1.50 per lb., at what price should I sell my tomatoes?
- I ask potential consumers what they would be willing to pay and they say 10 – 20% above grocery store prices, at what price should I sell my tomatoes?

Initial Questions to Think About

- If I produce 750 lbs of tomatoes in a 4x100 ft bed was I successful? (why or why not?)
- If my highest price for selling tomatoes was \$2.50 per lb last year was I successful? (why or why not?)
- What do you think (profitable, successful)?

Initial Questions to Think About

- So what is the key to achieving profitability and running a successful business?
- My view: Understanding Profit Margins and Price Mark-ups and Pricing Accordingly.

Profit Margins

- So what are profit margins?
- Profit margins are the difference between what you sell a product for and what the total cost of the product was to produce and market that product.

Profit Margin

- So if I sell my tomatoes for \$1.50 per lb. and I don't have any idea what they cost to produce and market, how did I come out?
- How many tomatoes do I want to sell?
- What should I do?
- I need to figure out those costs...I am going to start with an enterprise budget.

What is an Enterprise Budget?

- Estimate of costs and returns to produce a product.
- For producers who grow a large number of different products.
 - Develop budgets for those products that contribute the most to business goals.
- The process is the same for all scale of farming operations.

CARROTS: 100' x 4' bed - IOWA				
	Quantity	Unit	\$/Unit	Total
<u>RECEIPTS</u>				
Carrot sales	170	lbs	0.80	<u>\$136.00</u>
TOTAL RECEIPTS				\$136.00
<u>PLANTING YEAR</u>				
Supplies				
Seed - cover crop	0.75	lbs	0.60	0.45
Seed	3	packet	1.50	4.50
Burlap	3	bags	1.80	5.40
Fertilization	10	lbs	0.15	1.50
Labor				
Cover crop	0.05	hrs	10.00	0.50
Bed preparation	0.20	hrs	10.00	2.00
Fertilizer spreading	0.10	hrs	10.00	1.00
Planting, laying burlap	0.20	hrs	10.00	2.00
Irrigation set up	0.25	hrs	10.00	2.50
Weeding	0.75	hrs	10.00	7.50
Interest on Preplant Costs	27.35	dollars	0.035	<u>0.96</u>
TOTAL PREHARVEST COSTS				\$28.31
<u>HARVEST & DELIVERY</u>				
Bags (1 lb)	170	bags	0.03	5.10
Labor				
Harvest labor	3.50	hrs	10.00	35.00
Packaging	0.30	hrs	10.00	<u>3.00</u>
TOTAL HARVEST & DELIVERY COSTS				\$43.10
<u>TOTAL VARIABLE COSTS</u>				
per crop year				\$71.41
per lb				0.42
<u>OWNERSHIP COSTS (ANNUAL)</u>				
Irrigation system				1.14
Machinery				7.14
Land				<u>2.29</u>
TOTAL OWNERSHIP COSTS				\$10.57
<u>TOTAL COSTS (ANNUAL)</u>				
per crop year				\$81.98
per lb				0.48
RETURNS OVER VARIABLE COSTS, ANNUAL				
				\$64.59
RETURNS OVER TOTAL COSTS, ANNUAL				
				\$54.02

Types of Decisions

- Now that you developed an enterprise budget, what do you do with it?
- I can use it for pricing, but I can also use it to make changes to my:
 - Production practices
 - Product mix

Changing Production Practices

- Enterprise budgets are used to track expenses and revenues for a particular enterprise.
- Use the budgets to calculate break-even prices and yields.
 - For example, cost per lb. of carrots sold was \$0.48.
 - Compare this number to other producers or industry standards to determine where costs are different and why.

Changing Production Practices

- A second reason – track key costs.
 - Carrot example, \$54.46 (or 66%) of the total production cost is labor.
 - Question - can labor be lowered without reducing yields (i.e., can labor be more efficient)?
 - Supplies is a small percentage (14%) of total production costs, a 10% reduction in costs won't affect total production costs significantly. Don't spend time on small items...

Product Mix

- Enterprise budgets allow for a comparison of profitability and labor usage among the various crops grown.
- For example, carrot returns over total costs was \$54.02. Labor usage was 5.35 hrs. Returns over total cost per hour was \$10.10.

Product Mix

	Returns over Total Costs	Hours of Labor	Returns over Total/Hr
Asparagus	\$ 35.47	2.95	\$ 12.02
Basil	\$ 164.19	6.90	\$ 23.80
Carrots	\$ 54.02	5.35	\$ 10.10
Cherry Tomatoes	\$ 181.11	11.20	\$ 16.17
Eggplant	\$ 85.02	6.45	\$ 13.18
Specialty Green Beans	\$ 140.27	18.25	\$ 7.69
Garlic	\$ 43.89	7.15	\$ 6.13
Greens	\$ 102.90	2.80	\$ 36.75
Heirloom Tomatoes	\$ 547.21	11.20	\$ 48.86
Potatoes	\$ 61.65	5.10	\$ 12.09
Red Raspberries	\$ 131.50	6.15	\$ 21.38
Snow Peas	\$ 58.45	7.65	\$ 7.64
Strawberries	\$ 55.46	1.55	\$ 35.78

Comparing Budgets

- A quick comparison of the crops in the previous slide indicates annual returns over total costs ranged from \$35.47 to \$547.21.
- Labor usage ranged from 1.55 to 18.25 hours.
- Returns over total costs per hour ranged from \$6.13 - \$48.86.

Product Mix Summary

- Labor should be considered a scarce resource - limited number of hours for any farming operation.
- Analyze not only returns over total costs, but also returns over total costs per hour.
- Some products with lower returns over total costs may have higher returns over total costs per hour because of low labor requirements.

Back to Profit Margins

- So if I sell tomatoes for \$1.50 per lb. that cost me \$0.38 per lb. to produce, what was my production margin?
- \$1.12 per lb.
- How many tomatoes do I want to grow and sell at that margin?
- Am I forgetting anything (hint: any costs missing)?

Transaction or Marketing Costs

- Transaction costs are those costs associated with the marketing and delivery of the product from the farm to the customer.
- Transaction costs include post-harvest handling, packaging, and storage, as well as the time to sell, invoice, and deliver the product.

Example: Farmers Market Costs

- What are they?
 - Labor
 - Transportation/vehicle
 - Supplies
 - Others?

Example

- Two markets per week for 20 weeks.
- Labor – 2 people, 6 hrs per market per person, \$10 per hour.
- Vehicle – 80 mile roundtrip @ \$.25/mile.
- Supplies and misc - \$20 per week.
- 800 lbs of tomatoes taken to market; 95% sold (760 lbs).

Example

Vehicle expenses @ \$.25/mi, 3,200 miles	\$ 800
Labor - 2 people @ 12hr/wk, 20wks, @\$10/hr	\$4,800
Supplies (bags, other supplies, misc.) @ \$20/wk	\$ <u>400</u>
Total transaction costs for the season	\$6,000
Total transaction costs allocated to tomatoes (percent of total sales) – 20%	\$1,200
Total transaction costs/lb sold (760 lbs sold)	\$1.58

Total Cost

Production cost per pound	\$ 0.38
Transaction cost per pound	\$ <u>1.58</u>
Total cost per pound	\$ 1.96

Back to Margins

- So what was the price of the tomatoes?
 - What margin or mark-up would I get?
 - What should I do?
-
- **NOTE:** This procedure should be repeated for each marketing outlet used.

Back to Profit Margins

- So if I sell my tomatoes for \$1.50 per lb. and they cost me \$1.96 per lb. to produce and market, what was my profit margin?
- -\$0.46 per lb.
- How many tomatoes do I want to grow and sell at that margin?
- Am I forgetting anything?

Back to Profit Margins

- Can I change my production practices?
 - Is it possible to lower costs of production without affecting yields or increase yields without increasing costs?
- Can I change my product mix?
 - Is it possible to focus on higher margin products ?
- Can I change my marketing outlets?
 - Is it possible to find a higher margin outlet?
- Can I raise my price?

Can I Change My Price?

- To better understand setting a price, let's look at:
- Price mark-ups
- Gross margins

Price Mark-Ups

- Price mark-up is the desired percent of return to be added to the break-even cost of the product.
- Example – if you want a 75% mark-up and the product costs \$2 per pound, your price would be \$3.50 per pound ($\$2 * 1.75$).
- Wholesalers general mark-up products 50% and retailers 100%.

Price Mark-Up Example

- So if the grocery store is selling tomatoes for \$2.00 per lb. and they usually get a 100% markup for their produce, what price would they pay me for my product?
- $\$2.00 / (1 + 1.00) = \1.00 per lb.

Gross Margins

- Gross Margin is the percent of profit desired to be included in the product price.
- Example – You want a 35% margin and the break-even price is \$2 per lb. You would sell the product for \$3.08 ($\$2/.65$).
- Margins are used throughout the food industry – natural food stores benchmark is about a 35% margin (produce is lower).

Gross Margin Example

- So if the natural food store is selling tomatoes for \$3.00 per lb. and they usually get a 30% margin for their produce, what price would they pay me for my product?
- $\$3.00 * .70 = \2.10 per lb.

Pricing for Profit

- Tomato total costs is about \$2.00 per lb.
- 75% mark-up price is \$3.50
- 30% margin price is about \$3.10

- What does the market tell you prices can be?
What is your competition doing, what are your customers (or prospective customers) telling you they are willing to pay, what are your costs?

Summary

- Although pricing needs to take into consideration competition and customers' willingness to pay...
- Profit margin can be consistently obtained only if production and transaction costs are known.

Summary

- In addition to pricing, budgets can help in evaluating production practices, product mix, and evaluate marketing outlets.
- Understanding mark-ups and margins can help in understanding how retailers price products.

Resources

- Wisconsin Local Food Marketing Guide.
http://www.datcp.state.wi.us/mktg/business/business_resources/pdf/MarketingGuide/CompleteBook.pdf
- The following from me...
 - Iowa Vegetable Production Budgets
 - Developing Enterprise Budgets
 - Using Enterprise Budgets to Make Decisions
 - Pricing for Profit

Resources

- Determining Prices for CSA Share Boxes
- Choosing Among Alternatives
- All can be found at the Ag Decision Maker website:

<http://www.extension.iastate.edu/agdm>

- Look under Author or Specialist for details on publications and/or presentations.

Resources

- Building a Sustainable Business
<http://www.misa.umn.edu/vd/bizplan.html>
- ATTRA <http://www.attra.org/>
- Ag Marketing Resource Center
<http://www.agmrc.org/>
- And... someone that has gone through the process already

Questions.....

Any questions or comments?

Thank You for This Opportunity!

*Craig A. Chase
Farm Management Field Specialist
720 7th Avenue SW
Tripoli, IA 50676
(319) 882-4275
cchase@iastate.edu*

<http://www.extension.iastate.edu/agdm/fieldstaff/cchase.html>