

Take the Guesswork Out of Product Pricing

Mariane Kiraly

Senior Resource Educator

Cornell Cooperative Extension of Delaware County

How do I determine a fair price for my product?

3 factors in setting price

- What it costs to produce
- What customers expect
- What is my margin of profit



Let's take a simple example like a dozen eggs

- 50 chickens lay 4 dozen eggs/day
- \$1.00 worth of feed is fed each day
- It takes 1/4 hour to care for the chickens each day
- It takes 1/2 hour to clean and pack 4 dozen eggs/day
- Egg boxes and labels are \$.25/ea



What are the total “cash” costs?

- The 50 chickens cost \$10 each and will last 1 year so their total cost/day is \$1.37/day ($\$500/365$ days)
- The feed is \$1/day
- Caretaking is quarter hour/day @ \$15/hr or \$3.75/day
- Cleaning/packing eggs is 1/2 hour/day or \$7.50/day
- The boxes and labels are \$.25 or \$1/day
- Total cash costs for sale at the farm for the 4 dozen eggs are \$14.62 or \$3.65/dozen



The Pricing Process

- It costs \$3.65 in cash costs to produce a dozen of eggs
- If I charge \$4.00/dozen, I am making 10% profit and am paying myself \$15/hour to tend this enterprise
- What if I have losses such as predators or disease?
- What about fixed overhead costs(utilities, taxes, etc)
- I need more profit to make it worth my time and to cover overhead and unanticipated losses

Product Differentiation May Make MY Eggs Worth More IF.....

I can make my eggs “special” to the consumer

- What can I do to market my eggs as better, healthier or more environmentally friendly than “store” eggs
- What about the fact that I pasture my chickens?
- What about the fact that I have a variety of colorful eggs that please the eye?
- What about the fact that I use eco-friendly boxes instead of plastic or Styrofoam?
- With these attributes, I should be able to fetch **\$6/dozen** because my customers **value** these things.



Your Profit Strategy Will Vary by Your Market



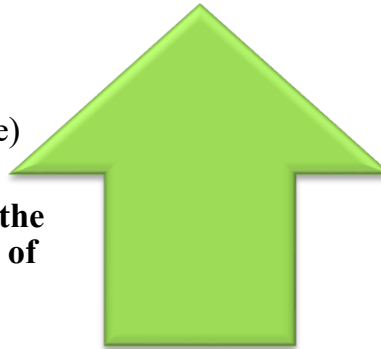
Commodity market (no perceived difference in products or lots of close substitutes)

You get a market price: based on industry costs of production and barriers to entry, your profit is made by controlling costs or by factors that limit competition to keep market prices higher.



Differentiated market (real or perceived difference)

You can set price/profit: constrained by the customer's willingness to pay, which is based on the value they place on the product and the number of substitutes for your product.



**What
market are
YOU
operating
in?**

What is the profit margin at \$6/dozen for eggs?

- $\$6.00 - \$3.65 = \$2.35/\text{dozen}$ or 39%
- Losses can be covered and can be reinvested in new chickens after year 1 with more cash flow
- 1 year old pullets can be sold for \$3.00/each
- The fee to be at the Farmers' Market can be paid or an egg washer can be purchased!
- Expansion of the profitable enterprise would be feasible.



The lesson here is to know your costs and choose your market!

Cost-based differentiated

What mark-up over costs will give us a good return on our investment?

Less Competitive Markets

- Use product differentiation
- Know what trends shoppers are looking for
- Promote those attributes

Market-based commodity

What is the market price?
What is the consumer demand? What is the current supply?

Competitive Markets

- Be the value producer
- Find the market
- Be a low-cost producer

Pricing Strategies

If you have a new product, you are likely to know what it is costing you to produce that product

Do not start out low and raise your price since that will disillusion loyal customers

It's best to lock in your profit in the beginning to keep a strong customer base that is expecting to pay same price every time

Consider the latest iPhones-they start out with a high price tag and gradually get cheaper as the “newness” fades.

(differentiated)

Consider a gallon of milk at your grocery store-it tends to always be around the same price regardless of what actual markets are doing.

(commodity)



What Kind of Market are you selling in?

Consider a Thanksgiving Turkey

Are all Thanksgiving turkeys sold for the same price? Local turkeys are usually around \$4/lb whereas commercial “store” turkeys can be as low as \$.59/lb in a commodity market

Are all turkeys the same?

Does everyone want the same kind of turkey?

How would you price YOUR turkey that you raised on your farm? What kind of attributes could you use to get a decent price considering your inputs to raise that turkey? This is a cost-based differentiated market.



Market-Based (Commodity) Pricing Strategy

Start with a target price based on the market. Target price is based on market price and

- Your costs. How do they compare to your competitor's costs? Can you be consistently under-bid?
- Your market advantages that provide a barrier to entry to other competitors (reputation, location, infrastructure) might allow you to keep your prices higher.
- Commodities like small square bales generally fit into market-based pricing...

Market-Based Pricing

Let's consider small square bales of hay that weigh 40 lbs and are 90% dry matter baled in June

- Generally, that bale sells for around \$4.00 depending....
- Production costs for a stored bale of hay are around \$2.50/bale
- What is the hay value? At least \$1.50 when good hay is \$200/ton
- What added value can you offer so that you can get closer to a \$4.50 price? Assistance loading, no mold, guarantee of quality? Organic?
- Sometimes supply and demand have a big effect on price of that commodity
- Who is my competition? Was it a dry year? Wet year?



What about a beef example?

Let's examine selling beef by the cut/quarter/half or beef on the hoof.

- Assume that total cost is \$1,000 to raise a beef animal from start to finish on a typical farm for a 2-year old finished steer weighing 1300 lbs.
- That steer can be sold at auction for \$1.00/lb on a “good day” and the gross amount is \$1,300. Subtract commission and trucking of \$65 and \$40 and the net is \$1,195. Profit is \$195.
- The only way to make money is marketing by volume and even then, the risk of sending a beef animal to an auction is huge given that the buyers may be fickle or may discount animals for small defects.



Sell the same animal to “discriminating” customers...

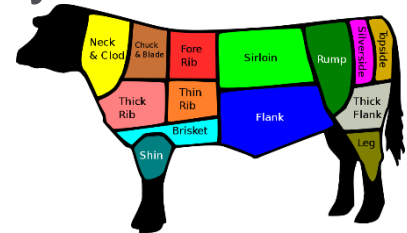
Cost of Production + Markup (profit)

What about asking \$1,500 for that beef animal on the hoof and allowing the customer to send the animal to the processor and they pay the custom cut cost for a top-quality beef product?

- Can you market this animal privately and net \$500 instead of \$195?
- Can you send the animal yourself to be processed and then charge by the cut/quarter/half to make a decent profit?
- How price sensitive are your customers?
- Do they see value in having an animal cut to their specifications?

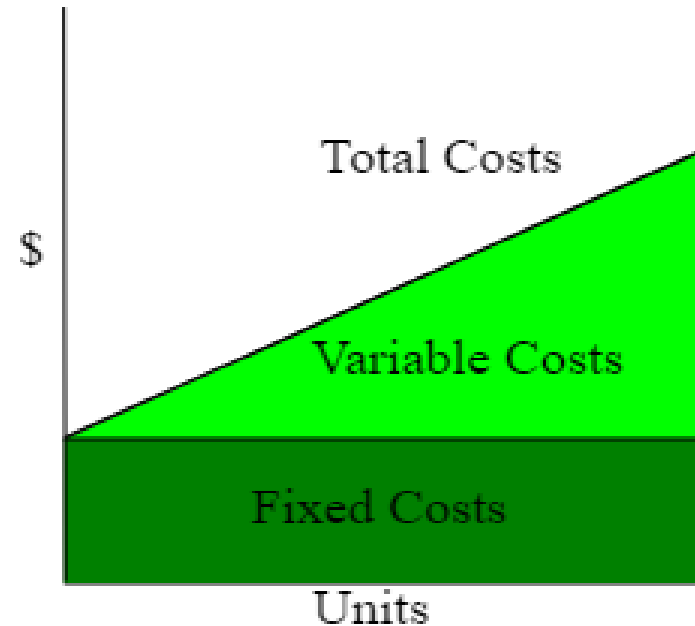
Beef in halves/quarters/cuts

- Consider that the beef animal cost \$700 to process
- Now, the total cost is \$1,700
- Halves could be sold for \$1250 each or \$2,500 total
- Quarters could be sold for \$675 each or \$2,700 total
- Cuts could be sold for \$6/lb x 500 lbs or \$3,000
 - This requires more time but ensures a larger profit by choosing differentiated rather than commodity markets



Fixed and Variable Costs

- Using the beef example, the fixed costs for raising one beef animal are \$100 and the variable costs are \$900.
- On large beef farms, raising more animals reduces the fixed costs over a larger number of animals. Variable costs may go down as well given volume purchases for inputs.



Variable and Fixed Costs

- In the beef example, \$1,000 covered variable and fixed costs
- Variable costs increase with the number of animals produced
 - Examples: feed, vet, labor, trucking, marketing, etc.
- Fixed (overhead) costs stay the same with the number of animals produced such as property taxes, insurance, and other “overhead” fixed expenses
- Be sure to include overhead expenses when you are calculating your cost to produce a product

How to determine overhead if you have several enterprises?

- Think about a diversified poultry producer who has chickens for eggs, chickens for meat and pullets for sale
- Overhead should be divided between the enterprises using percentages to determine costs and returns
- Estimate utilities, marketing, taxes, feed percentages for each enterprise
- If you also sell hay, only allocate haymaking expenses to that enterprise
- It is valuable to calculate profit/loss on each enterprise annually using enterprise budgets

Enterprise Budgets

- Simple charts can be used to track your costs
- The percentages don't have to be perfect but reasonable
- Push the pencil to reveal costs of various enterprises
- Sometimes, you will learn that one enterprise may be “carrying” another
- Enterprise budgets help you make informed decisions

Example of an Enterprise Budget for Carrots

Quantity	Your Quantity	\$/Unit	Your \$/Unit	Total	Your Total
Receipts					
Carrot sales	170	lbs	0.80	<u>\$136.00</u>	
Total Receipts	\$136.00				
Planting Year					
Supplies					
Seed - cover crop	0.75	lbs	0.60	\$0.45	
Seed	3 packets	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 pre-harvest costs		\$27.35	0.035	<u>0.96</u>	
Total Pre-Harvest Costs		\$28.31			
Harvest					
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 Costs		\$43.10			
Total Variable Costs					
Per bed	\$71.41				
Per lb	0.42				
Ownership Costs (Annual)					
Irrigation system	\$1.14				
Machinery	7.14				
Land	<u>2.29</u>				
Total Ownership Costs		\$10.57			
Total Costs (Annual)					
Per bed	\$81.98				
Per lb	0.48				
Annual Returns Over Variable Costs		\$64.59			
Annual Returns Over Total Costs		\$54.02			

There are enterprise budgets templates available for most commodities from Extension to use

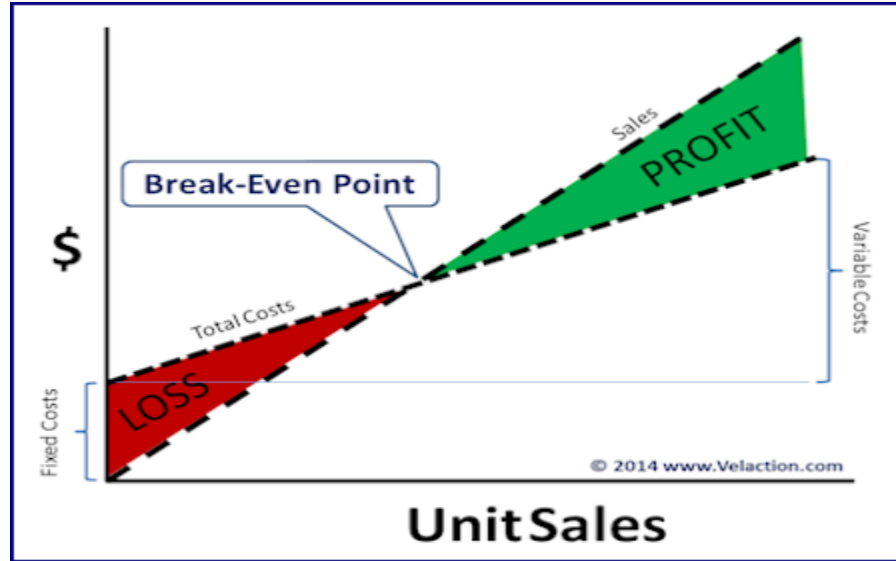
In my work with farmers, they generally under-price their products more often than they over-price their products...

If they push the pencil to calculate their FULL production and overhead costs they usually end up raising their prices...

One cannot be profitable if the prices are always below the total costs of production. In the short run, you can make some cash flow but in the long run you will lose money for every unit produced.

Stay in the “green” when pricing products

- Breakeven amount sold is the amount that covers variable and fixed costs. Anything above that is profit.



Price Setters vs Price Takers



- In general, direct-to-customer retail sales of farm products can be offered in a price-setting kind of environment
- Dairy farmers are generally price takers selling wholesale, generic milk to a volume buyer
- The key for either of these producers is to know your costs and make changes when the cost to produce a product is more than the revenue received.
- Niche/organic/grassfed market dairy producers are offered a set price for a year that they can either accept or reject so they are a hybrid of price setter and price taker

CSA Pricing Example



What price should I set for CSA shares?

1. Market for CSAs
2. Customers for CSAs
3. Cost Structure

CSA example from Elizabeth Higgins, Eastern NY Veg Team

CSA Markets



What is the Market? (Market Research)

Look at other CSA shares (prices, mixture of products, location, amenities) and develop options for your business. Talk to CSA customers.

CSA Market – 3 Options



1. **Value CSA** – low price/ delivery to worksites, small bag, focus on crop staples. \$500/share.
2. **Farm Market CSA** – declining balance card paid at start of season, good for produce at farmer's market. \$300/share.
3. **Gourmet CSA** – home delivery, fancier packing, customer selection options, unusual product mix (flowers, herbs, unusual crops) \$1,500/share.

CSA Customers



Who are the Customers?

Value CSA and Market CSA – More potential customers (easier to replace). Customers are price sensitive (more turnover).

Gourmet CSA – Fewer customers (harder to replace). Less price sensitive (more quality/service sensitive) customers (less turnover?).

If the profit margin is high enough, there will be competition.

CSA Example – to earn a profit of \$35,000

1. Market CSA – \$300 - cost per share = \$150, **profit = \$150.**
Estimate: sell 233 shares for a profit of \$34,950.
2. Value CSA –\$500-cost per share = \$210. **profit = \$290 per share.**
Estimate: sell 121 shares for a profit of \$35,090.
3. Gourmet CSA –\$1,500 cost per share is \$615. **Profit per share is \$885. Estimate: sell 40 shares for a profit of \$35,400.**



Pricing should not be a “once and done” activity



Evaluate various market options for your product

- We have looked at different “marketing channels” such as direct markets and wholesale markets
- You may be able to offer your product in several kinds of markets depending on time and costs for each marketing channel
- For instance, you know that your product will sell for a higher amount at a Farmers’ Market but the time involved is beyond what you can contribute so you may be willing to wholesale your product to other outlets

What is your time worth?

- Think about your time as an “opportunity cost” of doing business OR “what else could I be doing with time spent marketing my product?”
- Be sure to apply a reasonable cost to your time spent so you are being realistic when pricing products
- To get an idea of time/cost, think about how much you would have to pay someone else to do that work...
- Time is money!



Other things to evaluate and research:

Price is not the only consideration

- The volume that can be sold through a given channel has an impact on profitability.
- The more perishable a product, the more important it is to have a channel that can absorb the volume harvested as quickly as possible.
- This is why most dairy producers are generally price taker/wholesale sellers

Consider multiple channels

- Optimizing sales of perishable crops requires the flexibility of combining different channels capable of absorbing unpredictable volumes. In general, wholesale distributors and retailers can be counted on to buy large quantities at once.
- Some cheese producers make fresh and aged cheeses to be able to store some cheese when necessary rather than be price takers with only a fresh product



Price and profit in different marketing channels:

Consider this example:



	Sale Price / Pt	Pints Sold	Total Gross Sales
Farmers Market	\$4.00	36	\$144.00
Grocery Store	\$1.50	300	\$450.00

And what about profit?

@ \$1.00/pt to produce

Farmers Market Sales = \$108

Grocery Store Sales = \$150

But at @ \$1.25/pt

Farmers Market = \$99

Grocery Store = \$75



Push the pencil when it comes to pricing!

- Analyze what it costs to produce your product
- Do market research to find out information regarding:
 - Competition
 - Market saturation
 - Product differentiation
- Consider your time contributions in various market channels
- Make the marketing channel work for you or change the way you market the product to reflect the price you charge



Price for Profit

- Be sure that you are pricing your product:
 - according to your costs
 - with respect to your market
 - not just once, but regularlyin order to make a profit!



Thank You!

mk129@cornell.edu