



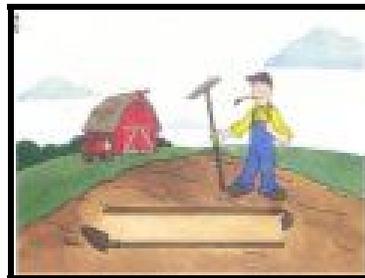
CPA Info #147



January 2008

Farmer Fred's Value-Added Beef

(For educational purposes only)



This example scenario was developed for use at the 2008 Tennessee Cattlemen's Association Convention. It is intended for educational purposes only and is not intended to replace individual enterprise profit-loss analysis. It is intended only as a guide as to what costs may be incurred when beginning a new retail beef business. There are many factors that can vary from business to business and region to region. Each entrepreneur who is considering a value-added beef enterprise should carefully evaluate the strengths, weaknesses and defining characteristics of their enterprise.

The *Center for Profitable Agriculture* is available to help producers who wish to evaluate and consider a value-added enterprise in detail. More information about the Center and value-added agriculture is available on the internet at <http://cpa.utk.edu>.

EXAMPLE: FARMER FRED'S VALUE-ADDED BEEF

Farmer Fred owns a 100 head cow-calf operation and retains ownership through weaning, back-grounding, and finishing. He estimates that he will be able to retail 40 head. Fred finished his calves to approximately 1,100 lbs. Current market prices for fed cattle are approximately \$92.14 cwt (12/7/07). If Fred sold the finished steers locally at this price, he would receive approximately \$1,013.54 per head sold.

Farmer Fred is considering a *value-added* beef enterprise at his farm. When the steers reach 1,100 lbs, he will deliver them to Harry's Harvest House, a USDA-inspected slaughter facility, to be slaughtered, processed and packaged. Harry's Harvest House is located 60 miles north of Fred's farm. Fred will pick up the frozen, packaged beef and take it back to the farm to be stored in a specific storage area until distributed to customers through on-farm retail or farmers market sales. The on-farm storage area that is intended for the meat to be sold at retail is inspected by the Tennessee Department of Agriculture (TDA).

Farmer Fred will have frozen beef available for purchase from his on-farm retail store and area farmer's market(s). The local farmers market operates every Saturday throughout the year and is located in a neighboring town, 30 miles from Fred's farm. TDA will inspect on-farm retail store, storage area and transport equipment. Some or all of these can be licenses under the Retail permit issued by TDA. Farmers market will likely require proof of the TDA retail permit and may or may not require permits specific to that particular market.

Using a "coffee shop napkin analysis", what costs can Farmer Fred likely expect when implementing his value-added beef enterprise?

Fred expects to have approximately 500 lbs of salable meat from each steer slaughtered. He estimates the cut breakdown to be 132 lbs steak (20% of rail weight), 165 lbs roast (25% of rail weight), and 198 lbs ground products (30% of rail weight).

From research that Fred has done he has decided to estimate an average price of \$16.29/lb for steak, \$6.62/lb for roast, and \$5.26/lb for ground products. He also realizes that a steer is not all steak and expects problems selling all meat at these prices. Therefore, he estimates total revenue based on selling 80% of total pounds available to account for discounting prices and selling lower-valued cuts.

What revenue and net return might Fred expect from his new value-added business? Based on his "coffee shop napkin analysis" how many steers must he retail in order to break-even on his venture?

EXAMPLE: FARMER FRED'S VALUE-ADDED BEEF

(based on 40 head)

Expense	Description	Amount	Unit	Example (per year)	<i>Your estimate</i>
START-UP COSTS					
ON-FARM RETAIL STORE					
Building	30'x18' = 540 sq.ft.	30.00- 100.00	sq ft.	\$37,800.00	_____
Store Furnishings	Cash register, counter, shelves, computer, lighting, curtains etc.	5,000.00	total	\$2,500.00	_____
Office supplies	Pens, paper, calculator, desk, chair, cash register tape, customer order forms	1,500.00	total	\$750.00	_____
Freezer	Walk-in 12'x8'x8'6" 816 CU FT	5,000.00-20,000.00	unit	\$12,500.00	_____
Freezer	3 solid door reach in 78" W. 72 CU FT	3,500.00-4,500.00	unit	\$4,000.00	_____
Freezer	3 glass door reach in 78" W. 72 CU FT	6,000.00- 8,000.00	unit	\$7,000.00	_____
Signs	Promotion/directions	500.00- 3,000.00	total	\$1,750.00	_____
Local building permit	county, city	200.00- 500.00	total	\$350.00	_____
Permits/licenses	TDA permit & inspection, county business license	50.00- 300.00	total	\$175.00	_____
<i>Total On-farm Retail Store Start-up Costs</i>				\$66,825.00	_____

Expense	Description	Amount	Unit	Example (per year)	<i>Your estimate</i>
FARMERS MARKET					
Trailer	6x12 closed cargo trailer	0.00-5,000.00	unit	\$2,500.00	_____
Refrigerated truck	Freezer delivery truck	10,000.00-30,000.00	unit	\$0.00	_____
Freezer	Solid chest 19 CU FT	750.00- 1,000.00	unit	\$875.00	_____
Freezer	Glass top display 9.5 CU FT	1,000.00- 1,700.00	unit	\$1,350.00	_____
Signs	Promotion, directional, auto	500.00- 3,000.00	total	\$1,750.00	_____
<i>Total Farmers' Market Start-up Costs</i>				<i>\$6,475.00</i>	_____
OTHER					
Graphic artist	Logo design, label design	500.00- 1,750.00	total	\$1,125.00	_____
<i>Total Other Start-up Costs</i>				<i>\$1,125.00</i>	_____
Total Start-up Costs				\$74,425.00	_____

ANNUAL OPERATING COSTS

ANIMAL

Animal	all production, including weaning, preconditioning, backgrounding, finishing <i>from TN Beef Budgets finished on whole shelled corn & protien supplement sell at #1,100</i>	1,052.00	head	\$42,080.00	_____
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Expense	Description	Amount	Unit	Example (per year)	<i>Your estimate</i>
Delivery	To/from processing facility	60 mi @ \$0.50/mi = \$30.00/hd	head	\$1,200.00	_____
Slaughtering, processing and packaging	Removing head, blood, hide and inedible parts of animal. Cutting carcass into ready-to-cook portions and packaging <i>\$/lb rail weight (#660)</i>	0.48-0.55/lb carcass weight * 660lbs = \$343.00/hd calculated using \$0.52/lb	head	\$13,720.00	_____
<i>Total Animal Operating Costs</i>				\$57,000.00	_____
<i>Per Head Animal Operating Costs</i>				\$1,425.00	_____

FARMERS MARKET

Vehicle	Pick-up	0.50	mile	\$1,500.00	_____
Vendor permit	Permit to display and sell products, flat fee, monthly, yearly, % of sales	15.00-250.00	year	\$132.50	_____
Total Farmers Market Operating Costs				\$1,632.50	_____

OTHER

Payment on Start-up Costs	annualized over 7 years @ 8% interest		year	\$14,270.98	_____
Marketing/Promotional Materials	Brochures, business cards, news release, samples	5%-10% of sales	year	\$13,000.00	_____

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Expense	Description	Amount	Unit	Example (per year)	<i>Your estimate</i>
Label	Printing 1 color for 5,000-10,000	500.00-600.00	5k-10k	\$550.00	_____
Labor	retail, farmers market, delivery	30,000- 50,000	year	\$40,000.00	_____
Accountant	Advising, taxes, business structure	300.00- 1,000.00	year	\$650.00	_____
Lawyer	Advising, protection from claims, business structure	300.00- 1,000.00	year	\$650.00	_____
Insurance	General liability, product liability	3,000.00- 7,000.00	year	\$5,000.00	_____
<i>Total Other Operating Costs</i>				<i>\$74,120.98</i>	_____
Total Annual Operating Costs				\$132,753.48	_____
Per Head Annual Operating Costs				\$3,318.84	_____

EXAMPLE: FARMER FRED'S VALUE-ADDED BEEF

REVENUE-MID PRICE				
	Average Price (\$/Lb)	Lb; per head	80% of Lb; per head	Revenue
Steak	\$16.29	132	105.6	\$1,720.22
Roast	\$6.62	165	132	\$873.84
Ground	\$5.26	198	158.4	\$833.18
Total Revenue per head				\$3,427.25
Total Revenue (30 hd per y ear)				\$102,817.44
Total Revenue (40 hd per year)				\$137,089.92

BREAK-EVEN CALCULATION

Break-even (hd) = fixed cost/ (unit price - unit variable cost)

	Fixed cost	Unit price	Unit variable cost	Steers
Break-even	\$75,753.48	\$3,427.25	\$1,425.00	37.83

EXAMPLE: FARMER FRED'S VALUE-ADDED BEEF

REVENUE- LOW PRICE

	Average Price (\$/Lb)	Lb; per head	80% of Lb; per head	Revenue
Steak	\$11.03	132	105.6	\$1,164.77
Roast	\$4.72	165	132	\$623.04
Ground	\$3.06	198	158.4	\$484.70
Total Revenue per head				\$2,272.51
Total Revenue (30 hd per year)				\$68,175.36
Total Revenue (40 hd per year)				\$90,900.48

BREAK-EVEN CALCULATION

Break-even (hd) = fixed cost/ (unit price - unit variable cost)

	Fixed cost	Unit price	Unit variable cost	Steers
Break-even	\$75,753.48	\$2,272.51	\$1,425.00	89.38