

KANSAS RURAL CENTER'S SPECIALTY CROPS WORKSHOPS

Definition of "Specialty Crop"

- Fruits, vegetables, tree nuts, dried fruits, horticulture, and nursery crops (including floriculture).
- The purpose of the Specialty Crop Block Grant Program (SCBGP) is to solely enhance the competitiveness of specialty crops.

Welcome

- ☐ Kansas Rural Center
 - Emphasizes a number of things
 - KS Specialty Crops education for last 30 years
- ☐ Kansas Department of Agriculture's Specialty Crop Development Grant

Eligible Crops

- Fruit and Tree Nuts such as almond, apple, banana, peach, and walnut
- Vegetables such as peas, beans, cultivated mushrooms, melons, lettuce, and tomato
- Culinary Herbs and Spices such as cloves, dill, parsley, and cilantro
- Medicinal Herbs such as foxglove, ginseng, lavender, and stevia
- Horticulture such as honey, turfgrass, and hops
- Annual Bedding Plants such as begonia, impatiens, and petunia

Historical Funding Amounts - KS

<ul style="list-style-type: none"> • 2006- \$102,197.15 / 7 Project • 2007- \$102,197.15 / 6 Projects • 2008- \$104,504.80 / 5 Projects • 2009- \$214,055.68 / 8 Projects • 2010- \$282,828.14 / 5 Projects • 2011- \$273,998.65 / 4 Projects • 2012- \$258,514.27 / 7 Projects • 2013- \$239,566.58 / 7 Projects • 2014- \$314,370.38 / 8 Projects • 2015- \$319,419.76 / 7 Projects • 2016- \$283,597.28 / 6 Projects • 2017- \$296,405.62 / 5 Projects 	<p>Total Funding of \$2,791,655.47</p> <p>75 Total Projects</p>
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Special

Eligible Crops, continued

- Potted Flowering Plants such as azalea, hydrangea, and rose
- Potted Herbaceous Perennials such as delphinium, hosta, ivy, and vinca
- Cut Flowers such as iris, orchid, tulip, and rose
- Foliage Plants such as cacti, ficus, palm, fern, and ivy
- Christmas Trees such as Balsam Fir, Douglas Fir, and White Pine
- Deciduous Flowering Trees, Broadleaf Evergreens, Deciduous Shade Trees, Landscape Conifers, and Deciduous Shrubs such as crabapple, dogwood, boxwood, ash, elm, oak, pine, spruce, barberry, and spirea

Ineligible Crops

Special

- Alfalfa
- Barley
- Canola
- Clover
- Cotton
- Field Corn
- Fish
- Flax
- Hay
- Hemp
- Millet
- Oats
- Peanuts
- Quinoa
- Rice
- Rye
- Sorghum
- Sugar beets
- Sugarcane
- Tobacco
- Triticale
- Wheat
- Rice
- Oils (canola, cottonseed, peanut, soybean, sunflower, etc.)
- Many, many others

Questions

- ❑ Did you travel over 40 miles today?
- ❑ How many years have you been producing and marketing vegetables and fruits?
- ❑ Is this something you enjoy?
- ❑ Is there enough variety in the production and marketing to keep this interesting?
- ❑ What are the specific, measurable and attainable goals to accomplish?
 - 2018, 2023, 2028

What's Special About Specialty Crops?

Kansas Rural Center
Specialty Crops Workshops
March 2018

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Growing Experience

Agenda

Agenda

- ❑ Welcome, Questions
- ❑ Specialty Crops Growing Experience
- ❑ Kansas Vegetable Production
- ❑ Marketing
- ❑ Business Development
- ❑ Enterprise Budgets

My Experience

- ❑ Over 20 years produced and marketed vegetables in SE Kansas with up to 60 acres
- ❑ 1994: Put up a High Tunnel
 - Wow! This is great!
- ❑ 1999: Masters in Ag Economics
 - Thesis included: "What is necessary for Kansas to produce more vegetables?"
- ❑ 2001-2003: Part of 4 state Land grant University team that led to website: www.hightunnels.org
 - Developed enterprise budgets (tomatoes, melons, strawberries)
- 2015 -2016: Appointed by Gov. Brownback to Task Force on Local Foods
- ❑ 2015 -2017: SCCC Agriculture Instructor and Specialty Crops Development (2 Greenhouses, 4 High Tunnels, 4-acre outside plots)

March 24, 2012, Family Planting Day



- ☐ Potatoes
- ☐ Onions
- ☐ Black Plastic
 - Cabbage
 - Broccoli
 - Cauliflower
 - Lettuce

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May 18, 2014

- ☐ Lettuce harvested
- ☐ Tomatoes



Special

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April 1, 2012



Special

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Prime Pickins

- ☐ May through Nov.
- ☐ Weekly educational and pick your own produce
- ☐ 2015: 24 weeks with 3000 people participating
- ☐ 2016: Similar
- ☐ 2017: Pick Your Own and Farmers Market



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Multiple Crops: April 18, 2012

- ☐ Intensive production
- ☐ Walkways



Special

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My Thoughts

- ☐ 45 Years
- ☐ Farming: Late night, lonely work - wondered why Kansas does not produce more vegetables and fruits
- ☐ Farmers Markets observations (consumers wanted access to local food)
- ☐ MS Literature Research and Surveys: 8 Warehouse Buyers, 275 Grocery Produce Managers
- ☐ Present Situation: Colorado, California, Ogallala Aquifer, KS Agriculture, Commodity Agriculture, Governor's Task Force on Local Food
- ☐ NOW IS THE TIME!!

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Present Kansas Vegetable Production

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SE KS Amish Production

- ☐ Produce Auction @ Dennis, April through October
 - 6 Years, close to \$400,000 in 2017
- ☐ 30+ Producers
 - Specializing in different mixtures of crops
 - Most grow tomatoes
- ☐ Bedding plants, vegetables, pumpkins & mums
- ☐ Auctioneer: John Nichols
- ☐ Customers range from individuals to small grocery chains

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State Vegetable Acre Data: NASS

State (Acres)	2012	1982	1954	1920
Potatoes				
Sweet Potatoes				
Vegetables				
Total Vegetables				
Vegetables - Potatoes				

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Kansas And Neighbors: 2012

	Kansas	Colorado	Missouri	Nebraska	Oklahoma
Potatoes	5178	59,281	9056	22,803	4890
Sweet Potatoes	23	2		4	
All Other Vegetables		83,256	20,213		10,255
Total Vegetables	7118	142,539	29,269	26,001	15,145
Vegetables - Potatoes	1940	83,258	20,213	3198	10,255

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Kansas Vegetable Acres

State (Acres)	2012	1982	1954	1920
Potatoes	5178	827	1267	47,246
Sweet Potatoes	23	122	931	4,366
Vegetables		4808	5330	11,173
Total Vegetables	7118	5757	7528	62,785
Vegetables - Potatoes	1940	4930	6261	15,539

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Past Production

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Kansas Production as Top 5 State

- ❑ Apples: 1910's and 1920's
- ❑ Grapes: 1910's and 1920's
- ❑ Sweet Potatoes: 1950's
- ❑ Spinach: 1980's

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Nebraska Vegetable Acres

State (Acres)	2012	1982	1954	1920
Potatoes	22,803	10,547	19,078	94,247
Sweet Potatoes	4	0	51	274
Vegetables		786	2901	7009
Total Vegetables	26,001	11,333	22,030	101,530
Vegetables - Potatoes	3198	786	2952	7283

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Colorado Vegetable Acres

State (Acres)	2012	1982	1954	1920
Potatoes	59,281	54,950	51,181	77,337
Sweet Potatoes	2			
Vegetables	83,256	28,375	29,640	17,711
Total Vegetables	142,539	83,325	80,821	95,048
Vegetables - Potatoes	83,258	28,375	29,640	17,711

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Oklahoma Vegetable Acres

State (Acres)	2012	1982	1954	1920
Potatoes	4890	0	1871	25,633
Sweet Potatoes	0	0	1581	16,735
Vegetables	10,255	13,987	25,239	11,815
Total Vegetables	15,145	13,987	28,691	54,183
Vegetables - Potatoes	10,255	13,987	26,820	28,550

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Missouri Vegetable Acres

State (Acres)	2012	1982	1954	1920
Potatoes	9056	1469	2923	65,051
Sweet Potatoes		111	850	11,165
Vegetables	20,213	13,797	12,831	28,448
Total Vegetables	29,269	15,377	16,604	104,664
Vegetables - Potatoes	20,213	13,908	13,681	39,613

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Kansas and Neighbors: Vegetables - Potatoes

Acres	2012	1982	1954	1920
Kansas	1940	4930	6261	15,539
Colorado	83,258	28,375	29,640	17,711
Missouri	20,213	13,908	13,681	39,613
Nebraska	3198	786	2952	7283
Oklahoma	10,255	13,987	26,820	28,550

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Marketing

Before you plan production, know where it will be marketed!

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- ### SCCC Marketing Specialty Crops
- ❑ Farmers Markets
 - ❑ Roadside Stand
 - ❑ Farm Stand (honor)
 - ❑ Pick Your Own
 - ❑ Wholesale
 - ❑ Broker (100-50-16)
 - ❑ Institutions
 - ❑ Restaurants
 - ❑ CSA
 - ❑ On line
 - ❑ Produce Auction
 - ❑ Food Hub
 - ❑ Cooperative
 - ❑ Value Added
 - ❑ Processing
 - ❑ Food Pantry
- Special
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Marketing

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- # Marketing
- ❑ Equally important as production
 - ❑ Producers learn all they can about production, but sometimes do not place enough emphasis on marketing
 - ❑ The most profitable producers realize marketing is the key for the highest net profit
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Why Marketing Is Important

- ❑ Key for highest profits
- ❑ Marketing portion of food expenditures continues to increase
- ❑ Net Profit raises by focusing on consumers' desires
- ❑ Look for niche markets

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Commodity or Niche?

- ❑ Some niche markets are commodity markets in the making
- ❑ Niche market is any marketing system that targets a certain group or promotes a unique product
- ❑ Don't focus on mass market competition, but in a mass market of niches.

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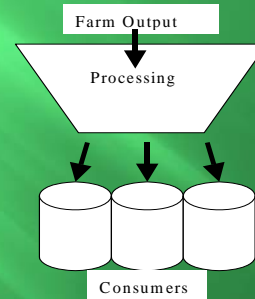


Selling customers what they want to buy is easier and more profitable than selling what you want to grow!

Special

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Traditional Marketing



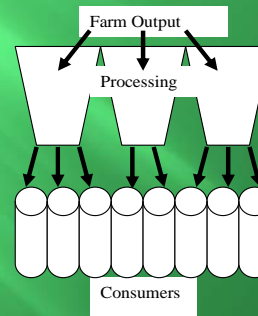
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Agricultural Marketing

- ❑ Commodity marketing
 - You are a price taker
 - Low-cost producer wins
 - Economies of scale; volume
- ❑ Direct marketing
 - Product differentiation
 - Customer segmentation
 - Pricing is under your control (somewhat)

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Niche Food Marketing



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Good Marketing

Produce WHAT the customer wants!

Special

WHEN the Customer wants it!

HOW they want it!

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Business Planning Roadmap

- ▣ Determine where you are
- ▣ Determine where you want to be
- ▣ Figure out how to get there
- ▣ Perhaps the best thing about a detailed plan is it causes you to think in detail about what you are doing

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Business Development


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Business Questions

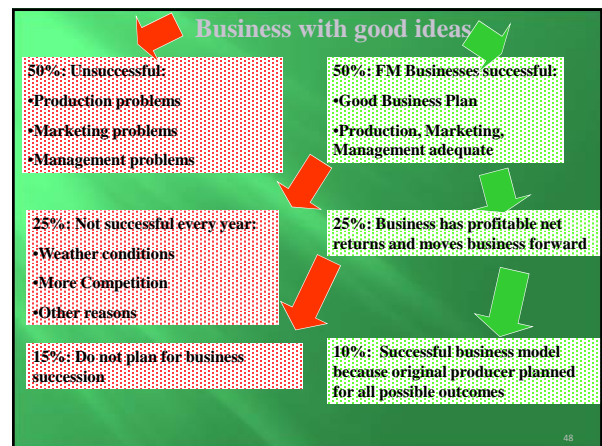
- ▣ Is your operation a hobby or business?
- ▣ Is this income important for your livelihood?
- ▣ Is this retirement income, or a second job?
- ▣ Tax planning and preparation?

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Develop a Business Plan or roadmap for your operation.



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Risk Management

- ☐ (Need a complete session. 2015 Horticulture Industries session: 96 slides)
- ☐ Check out RMA website
- ☐ Liability
 - Legal risks
 - Tort liability
 - No Partnerships!! (LLC or similar, easy to do)
- ☐ GAP (Good Agriculture Practices)
- ☐ 3 D's: Divorce, Death, Disability

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Farming Success

- ☐ What does it mean to be *successful* at farming?
 - Paying down debt
 - Continuing a family tradition
 - Farming full time (or some other %)
 - Taking time to rest and vacation
 - Working together with your family
- ☐ A profitable business is a sustainable business
- ☐ Using Enterprise Budgets is a tool to use for success
- ☐ Enterprise Budgets are a large part of Business Planning

USDA Assistance

- ☐ 2014 Farm Bill
 - Check with local FSA office
 - Noninsured Crop Disaster Assistance Program (NAP) reauthorized
 - This Farm Bill very encouraging
 - Crop insurance available
 - Better Coverage levels, Service fees, Premiums
 - REMEMBER to visit FSA office!

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ENTERPRISE BUDGETS

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Alternative Business Structures

- **Proprietorship**
- **Partnership**
 - **General, Limited, Limited Liability**
- **Limited Liability Company**

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What is a Farm Enterprise?

- ☐ Enterprise refers to each separate production item.
- ☐ Not the complete operation
- ☐ Examples:
 - Livestock: Cow/calf, stocker, feedlot, farrow to finish
 - Commodity Crops: Wheat, irrigated corn, dryland corn, soybeans
 - Specialty Crops: Each vegetable or fruit (asparagus to zucchini, apple to vineyard)

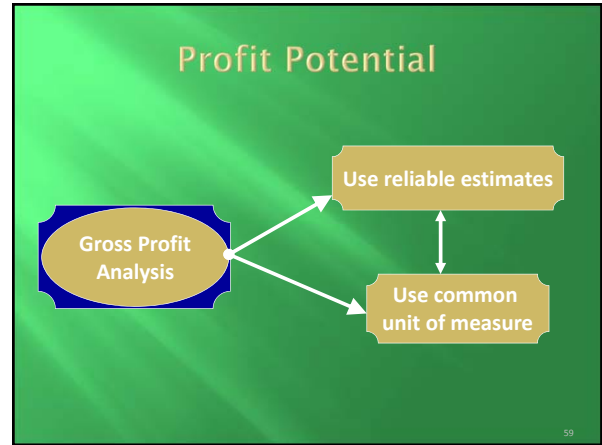
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Enterprise Examples

- ▣ Supplemental Income
 - Few Extra Dollars, Retirement
 - Low investment, experimentation
- ▣ Diversification Operation
 - Replacement of traditional enterprises
 - Profitable and accessible markets

Financial Planning Involves Enterprise Budgets

- ▣ What is the cost of production for each product?
- ▣ What will your customers pay for each product?
- ▣ Is the difference enough to make your operation a business?
- ▣ If not, then your operation is a hobby.



Why Should a Producer Care About Individual Enterprises?

- ▣ Big reason: Because your banker cares
- ▣ Every farmer should care, too
- ▣ No reason to continue unprofitable enterprises

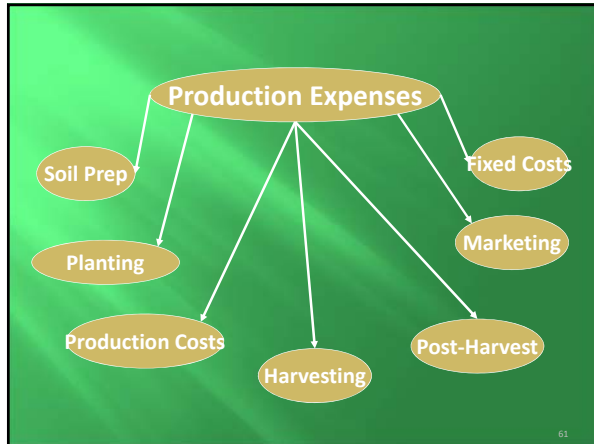
Example of growing peas found in Richard Wiswell's book, [The Organic Farmer's Business Handbook](#)

Enterprise Budgets have two distinct uses

1. During planning before actual production
2. Planning after each year to check how the budget performed

Profitability

- ▣ Budget as accurately as possible including estimates of costs and returns



High Tunnel Tomato Budget 5.1

PRODUCTION EXPENSES

Special	Unit	Purchase Price/Unit	Quantity (Purchased if needed)	Manager Labor		Hired Labor		Total Costs	
				Hours Worked	Expense	Hours Worked	Expense		
Soil Preparation									
Soil test	test	10.00	0.50	5.00	0.1	1.50	0.00	6.50	
Organic Material #1	ton	10.00	0.30	3.00	0.00	1.0	12.00	15.00	
Organic Material #2	ton	8.00	0.20	1.60	0.00	1.0	12.00	13.60	
Other Soil Amendments	ton	3.00	0.20	0.60	0.00	0.4	4.80	5.40	
Major tillage	hour	6.00	0.25	1.50	0.3	4.50	0.00	6.00	
Second tillage (rototill)	hour	3.00	1.00	3.00	1.0	15.00	0.00	18.00	
Other tillage	hour	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Raised Bed establishment	hour	0.00	3.00	3.00	45.00	0.00	0.00	45.00	
Fertilizer & Lime	pd	10.00	2.00	20.00	1.0	15.00	0.00	35.00	
Mulch (Plastic or other)		10.00	1.0	15.00	1.0	12.00	0.00	37.00	
Irrigation drip tape		8.00	0.5	7.50	0.5	6.00	0.00	21.50	
Preemergent herbicide		0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Soil insecticide		0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Seeding or Transplanting									
Seeds		0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Transplant Equipment, pots		0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Transplant Media		0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Transplant Utilities & Water		0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Transplants		175.00	0.25	43.75	0.5	7.50	1.0	12.00	63.25

- ### Production Costs (Todd Griggs)
- Soil Sample
 - Amendments
 - Seed
 - Seed Starting Supplies
 - Labor
 - Fertilizer
 - Greenhouse Utilities
 - Greenhouse Depreciation
 - Transportation
 - Labor
 - Field Prep Labor
 - Fertilizer
 - Plastic Mulch
 - Drip Tape
 - Fuel
 - Bed Prep
 - Herbicide
 - Planting Labor
 - Starter Fertilizer
 - Staking/Tying Supplies
 - Staking Labor
 - Water
 - Fertilizer
 - Chemical
 - Spray Labor
 - Harvest Labor
 - Transportation
 - Cooling
 - Packaging Supplies
 - Packaging Labor
 - Loss
 - Transportation
 - Marketing Expenses/Supplies
 - Marketing Labor
 - Record Keeping
 - Finally you get to Go to the Bank

High Tunnel Tomato Budget 5.1

Marketing Costs

Special	Unit	Price/Unit	Quantity	Manager Labor	Hired Labor	Total Costs		
Packaging/Boxing		150.00	4.0	60.00	0.00	4.0	40.00	250.00
Advertising #1		20.00	2.0	30.00	0.00	0.00	0.00	90.00
Advertising #2		30.00	2.0	30.00	0.00	0.00	0.00	60.00
Delivering to Market #1		0.00	6.0	90.00	0.00	0.00	0.00	90.00
Delivering to Market #2		0.00	0.00	0.00	5.0	60.00	0.00	60.00
Delivering to Market #3		0.00	0.00	0.00	5.0	60.00	0.00	60.00
Other Management Costs								
Office Supplies		10.00	0.00	0.00	0.00	0.00	0.00	10.00
Book keeping		0.00	2.0	30.00	2.0	24.00	0.00	54.00
Record keeping		0.00	0.00	3.0	36.00	0.00	0.00	36.00
Miscellaneous								
Work Clothing		10.00	1.0	15.00	0.00	0.00	0.00	25.00
Supplies		15.00	1.0	15.00	0.00	0.00	0.00	30.00
Insurance		30.00	0.1	1.50	0.00	0.00	0.00	31.50
Taxes on land and buildings		20.00	0.1	1.50	0.00	0.00	0.00	21.50
Other		0.00	0.00	0.00	0.00	0.00	0.00	0.00
Variable Costs Listed								2412.25
Production Fixed Costs (From Table)								285.87
Manager Only Costs (From Table)								123.00
				P & P Costs	Manager	Hired Labor		
Total Production Costs				585.45	687.00	1262.80		2821.12

High Tunnel Tomato Budget 5.1

Budget and Cost-Return Projection (1000 square feet)

Special	Base Price per Pound	Planting System				Solid Yield (lbs) per 1000 sq ft	Labor Wage Rate (Manager Hourly Rate)	Skilled Labor Hourly Rate	Unskilled Labor Hourly Rate
		Row Width (ft)	Spacing/Row (ft)	Aisle Width (ft)	Plants/1000 sq ft				
	2.00	3.0	1.5	1.0	167	15.00	12.00	10.00	

High Tunnel Tomato Budget 5.1

GROSS INCOME (1000 sq ft)

Special	Base Price per Pound	Wholesale	Poor	Good	Excellent
Regular Market	2.00	1.00	1.50	2.50	3.00
Regular Mkt Factor	1.0	0.5	0.8	1.25	1.5
% Mkt @ Regular	75%	10%	0%	15%	0%
Location Market	Normal	Low Price	High	Very High	
Location Mkt Price	2.00	1.50	3.00	4.00	
Location Mkt Factor	1.0	0.75	1.5	2	
% Mkt @ Location	68%	15%	14%	3%	
Season	Normal	Unusual	Very Unusual		
Season Mkt Price	2.00	3.00	4.00		
Season Mkt Factor	1.0	1.5	2.0		
% Mkt @ Season	95%	5%	0%		
Adjusted Market Price		2.11			
Grade	#1	#2	#3	Cull	Give Away
Grade Price	2.11	1.48	1.06	0.21	0.00
Grade Factor	1.0	0.7	0.5	0.1	0.0
Grade Yield	60%	25%	5%	10%	0%
Adjusted Price w Grade		1.73			
Yield		Low	Base	High	
Yield Factor		0.5	1.0	1.5	
Yield (1000 sq ft)		1250	2500	3750	
Gross Income with Factors		2166.09	4332.18	6498.27	

High Tunnel Tomato Budget 5.1

Special

INCOME SENSITIVITY w BASE YIELD				
Adjusted Mkt Price		YIELD FACTOR		
		Low	Base	High
0.50 Adjusted Mkt Price	0.87	1083.04	2166.09	3249.13
0.75 Adjusted Mkt Price	1.30	1444.06	2888.12	4332.18
Adjusted Mkt Price	1.73	2166.09	4332.18	6498.27
1.25 Adjusted Mkt Price	2.17	2707.63	5415.22	8122.84
1.50 Adjusted Mkt Price	2.60	3249.13	6498.27	9747.40

MANAGER ONLY COSTS				
Item	Total Cost	Total hours	Sig Crops*	Cost for this Crop
Ed Opportunities	75.00	16		10.50
Supplies, Plan, Order, etc		20		10.00
Transaction Exp #1		50		25.00
Transaction Exp #2		40		20.00
Home Office Expense		5		2.50
Planning		75		37.50
Financial Institution #1		5		2.50
Financial Institution #2		5		2.50
Depositing Money		25		12.50
Other				0.00
Total Manager Only Costs/Year				123.00

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QUESTIONS?

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High Tunnel YIELD Tomato Budget 5.1

Item	Cost	# Years used	Yearly Costs
Land Charge	50.00		50.00
High Tunnel Construction	2500.00	10	250.00
Plastic covering	300.00	3	300.00
Off-Farm Vehicles Depreciation	300.00	10	30.00
On-Farm Equipment Depreciation	250.00	5	50.00
Office Equipment Depreciation	220.00	10	22.00
Irrigation Equipment Depreciation	100.00	5	20.00
Tomato Stakes	200.00	10	20.00
Harvesting Equipment	450.00	10	45.00
Cooling Facility	500.00	10	50.00
Total Production Fixed Costs per Year			837.00

Special

FIXED COSTS PROPORTION		
Percentage of total year crop is grown =		65%
Percentage of total space used for growing crop =		100%
Specific Crop Fixed Costs Proportion		544.05

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Future Vegetable Production in Kansas?



Those involved in production agriculture will provide the answer.

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