

Profitable Specialty Crop Farming



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Outline

- Introduction
- Inventory your resources
- Determine the cropping system
- Considerations in producing the crop
- Marketing the crop



Introduction

- Why are you interested in produce farming?
 - Increase family cash income
 - A step to full time farming
 - Aid in times of unemployment
 - Supply part of the family food supply
 - Farming experiences for children
 - Hobby



Introduction

- Is produce farming for you?
 - Time and labor
 - Desire
 - Capital
 - Technical knowledge, experience
 - Markets

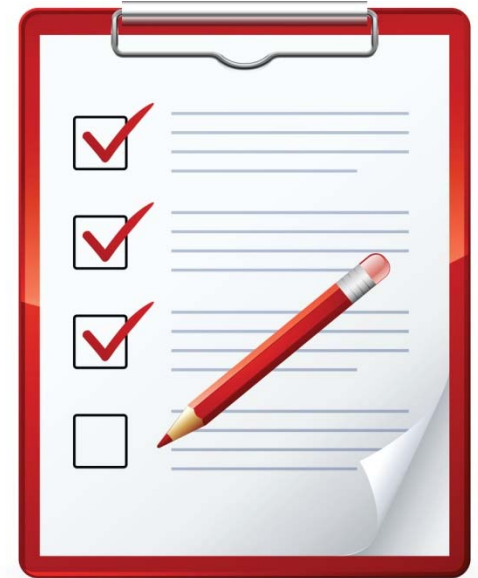


Introduction

- Is produce farming for you?
 - Adverse weather and other problems
 - Site
 - Time for business establishment
 - Quality products
 - Cooperation

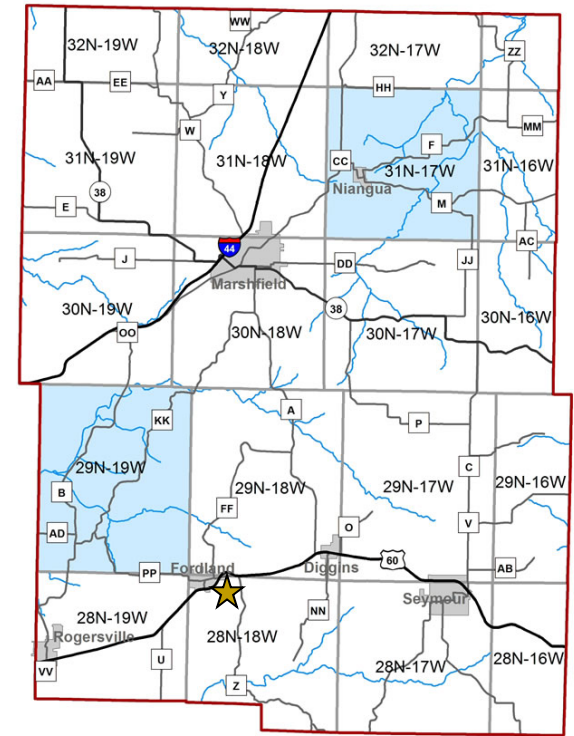
Inventory Your Resources

- Site
- Soil
- Climate
- People
- Capital
- Facilities and equipment



Inventory Your Resources Site

- Location, location, location...
- Production considerations
 - Limitations



Inventory Your Resources

Soil

- Arrange for a soil test
- Important soil characteristics
 - Chemistry
 - Soil pH
 - Fertility level
 - Organic matter
 - Water drainage
 - Overall soil health
 - Previous uses of the site



Inventory Your Resources

Soil

- Modifying soil characteristics
 - Soil pH - amendments
 - Fertility level – nutrient amendments
 - Organic matter – green manures, cover crop rotations, compost, organic amendments
 - Water drainage – berming, tile drainage, terracing

Inventory Your Resources

Climate

- Important climate considerations
 - Temperature
 - Water
 - Light



Inventory Your Resources

Climate

- Modifying your climate
 - Temperature
 - Protected structures-high tunnels, greenhouses
 - Row covers
 - Water
 - Irrigation
 - Planting on berms or raised beds
 - Light
 - Shading



Inventory Your Resources

Climate

- Modifying your climate
 - Water
 - Irrigation
 - Availability of water
 - Quantity of water
 - Water quality



Inventory Your Resources

People

- You!!!
- Management
- Labor
- Family vs hired labor
- Support system



Inventory Your Resources

Capital

- Undercapitalization is a primary reason for failure!!
- What will be the source for startup capital?
- Where will operating capital come from?
- Plan ahead
 - Business and marketing plans
 - Crop production budgets

Inventory Your Resources

Facilities and Equipment

- What are facility needs?
 - Starting transplants
 - Production
 - Handling the crop
 - Sales needs
 - Storage
- What are equipment needs?
 - Routine needs
 - Occasional needs
 - Do you really need a new tractor?





Determine the Cropping System

- Cultural requirements
- Crop value
- Perishability
- Production costs
- The right crop mix
- Personal preferences

Determine the Cropping System

Cultural Requirements

- Easy to grow crops
 - Blackberry
 - Green bean
 - Okra
 - Sweet potato
 - Sweet corn
- Difficult to grow crops
 - Tree fruit
 - Grape
 - Tomato
 - Vine crops



Determine the Cropping System

Crop Value

- High value crops

- Tomato
- Asparagus
- Berries
- Peach



- Low value crops

- Cabbage
- Radish
- Turnip



Determine the Cropping System

Perishability

- More perishable

- Berries
- Peach
- Asparagus
- Sweet corn
- Peas
- Muskmelon
- Greens

- Less perishable

- Potato
- Sweet potato
- Winter squash
- Onion
- Apple



Determine the Cropping System

Production Costs

- High costs

- Tomato
- Fruits

- Low costs

- Sweet corn
- Root vegetables

Determine the Cropping System

The Crop Mix

- Specialization vs diversification
- Analyze the market
- Carefully evaluate each crop
- Consider the combination of crops





Determine the Cropping System

Most Profitable Crops

- Depends on the realities of your farm
- Depends on the realities of your market
- Protected culture vs open field
- Harvest time/off season production
- Novelty crops or cultivars may offer niche opportunities
- Organic vs naturally grown vs conventional



Determine the Cropping System

Most Profitable Crops

- Tomato – field or protected culture
- Specialty greens, lettuce, spinach (especially off season)
- Herbs (cilantro, basil, chives, dill)
- Cucumber
- Peppers
- Berries
- Cut flowers

Determine the Cropping System

Personal Preferences

- Growers tend to do better with crops they like and have experience growing.





Production Considerations

- Site selection
 - What are the site characteristics?
 - What is the history of the site?
 - What is going on around the site?
 - Will it be difficult to prepare the site?

Production Considerations

- Site selection
- Cultivars
 - Choose adapted cultivars
 - Choose disease resistant cultivars
 - Consider production challenges
 - Consider market needs





Production Considerations

- Site selection
- Cultivars
- Seed and plants
 - Determine if direct seeding or transplants is the best way to go
 - Always buy from a reputable source
 - Always use fresh seed
 - Consider your planting plan

Production Considerations

- Site selection
- Cultivars
- Seed and plants
- Soil preparation, fertility, improvement
 - Consider the soil test
 - Organic matter is important



Production Considerations

- Site selection
- Cultivars
- Seed and plants
- Soil preparation, fertility, improvement
- **Planting techniques**
 - Standard practice is to grow in beds
 - Direct seeded or transplants?
 - Plastic or organic mulches?
 - Cover crops between rows?



Production Considerations

- Site selection
- Cultivars
- Seed and plants
- Soil preparation, fertility, improvement
- Planting techniques
- **Cultural practices**
 - Pest management – consider IPM
 - Weed management
 - Training and pruning
 - Trellising
 - Protection – tunnels, low tunnels, row covers



Production Considerations

- Cultural practices
 - Irrigation
 - Drip or trickle is favored
 - Consider water quality
 - Food safety issues and water



Production Considerations

- Site selection
- Cultivars
- Seed and plants
- Soil preparation, fertility, improvement
- Planting techniques
- Cultural practices
- **Harvesting, handling, packaging, storage**





Marketing the Crop

- Crop characteristics
- Demand
- Competition
- Location, location, location...

Marketing the Crop

- Direct market potential
 - Farmers market
 - On farm stand or roadside market
 - Pick-your-own
 - CSA, Food Circle
 - Internet sales



Marketing the Crop

- Wholesale marketing potential
 - Produce auctions
 - Sales to other sellers
 - Grocery stores, restaurants, florists, institutions







Marketing the Crop

- Value Added products from your crops
 - Expand your marketing
 - Diversity into new markets
 - Increase profitability





Specialty Herbs

- Advantages
 - Basil and cilantro – consistent demand
 - Increasing demand for other herbs – rosemary, sage, oregano, mint, dill
 - Some adapted to hydroponics
 - Potential for dried herb sales
 - Potential for value added – herb salts, herb rubs, herb teas, etc.
- Disadvantages
 - Overall small niche market



Specialty Herbs

- Production considerations
 - Standard cultural practices
 - Generally best started as transplants (except cilantro, dill)
 - Weed management critical
- Marketing considerations
 - Well suited for direct market local sales
 - Increasing demand from restaurants, grocery stores
 - Consider sales of potted herbs
 - Basil and cilantro – good market demand
 - Niche markets for other herbs



Berries

- Advantages
 - Consistent growth in berry consumption
 - Recent improvements in cultivars – thornless blackberry, blueberries for hi pH soils, cultivars adapted to plasticulture
 - Cultural innovations – RCA trellis, tunnel culture, plasticulture
 - Well suited for value added
- Disadvantages
 - Perishable fruit
 - Pest management



Berries

- Production considerations
 - Site prep important
 - Cultivar choice critical
 - Refrigerated storage critical
- Marketing considerations
 - Well suited for local direct markets
 - Well suited for larger scale production
 - Local production has not met demand



Specialty Greens

- Advantages
 - Suitable for 12 month production and sales
- Disadvantages
 - Perishable
 - Food safety considerations
 - Labor intensive crop



Specialty Greens

- Production considerations
 - Consider food safety concerns
 - Adapted to protected culture
 - Range of cultural considerations
- Marketing considerations
 - Lots of marketing options – whole heads, fresh cut mixes, microgreens
 - In demand from many markets



Garlic

- Advantages
 - Growing demand
 - Durable product
- Disadvantages
 - Labor intensive crop



Garlic

- Production considerations
 - Straightforward production
- Marketing considerations
 - Adapted to many markets – local direct market, restaurants, wholesale, internet



Table Grapes

- Advantages
 - Limited supply of local table grapes
 - Recently developed adapted cultivars
- Disadvantages
 - Expensive to establish
 - Pest management
 - Labor intensive
 - Management intensive



Table Grapes

- Production considerations
 - Trellis
 - Insect and disease control critical
- Marketing considerations
 - Low supply of local table grapes
 - Adapted to many markets



Cut Flowers

- Advantages
 - Limited supply of local cut flowers
- Disadvantages
 - Quality is critical!
 - Labor intensive



Cut Flowers

- Production considerations
 - Well suited for protected culture
 - Varied production practices
 - Cold storage is necessary
- Marketing considerations
 - Variety of markets available



In Closing...

- Educate yourself
 - Reading
 - Workshops
 - Conferences
- Consider individual consultation with Extension specialists and other subject matter experts
- Develop your peer network



Upcoming Programs of Interest

- **Midwest Winter Production Conference**
 - February 11-12, Jefferson City
- **Missouri Blueberry School**
 - February 22-23, Springfield
- **Bringing Back the American Small Farm Conference**
 - March 19-20, West Plains
- **Missouri Tomato School**
 - May 30-31, Jefferson City
- **Riverhills Elderberry Conference**
 - June 13-15, Jefferson City
- **Hops Field Day**
 - August 6, Columbia
- **Pawpaw Field Day**
 - September 20, Mount Vernon
- **Blackberry Workshops**
 - Versailles, April 3; Kirksville, April 5; Kansas City, June; Mount Vernon, July 9



Any Questions?

