Adding Value with Horticulture 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 horticultural farming?
  – Increase family cash income
  – A step to full time farming
  – Better use of a farm’s physical resources and characteristics
  – New uses for existing skills
  – Integrate a farm with the community
Introduction

What are the benefits of diversifying into horticultural farming?

– Strengthen the sustainability of a farm
– Spread economic risk
– Exploit profitable niche markets
– Create new industries, strengthen rural communities
– Build the domestic food production economy
Introduction

• Is horticultural farming for you?
  – Time and labor
  – Desire
  – Capital
  – Technical knowledge, experience
  – Markets
Introduction

• Is horticultural farming for you?
  – Adverse weather and other problems
  – Site
  – Time for business establishment
  – Quality products
  – Cooperation
Introduction

• Horticulture - consider the possibilities!
  – Vegetables
  – Fruits
  – Herbs
  – Nuts
  – Cut flowers
  – Ornamentals
  – Nursery plants
  – Mushrooms
Inventory Your Resources

- Soil
- Climate
- Labor
- Capital
- Equipment and supplies
Inventory Your Resources

Soil

• Arrange for a soil test
• Important soil characteristics
  – 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

Labor

- Management
- Labor
- Family vs hired labor
Inventory Your Resources

Capital

• 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

Equipment and Supplies

• What are equipment needs?
  – Routine needs
  – Occasional needs

• What do you already have on hand?

• New vs used vs leased vs borrowed equipment
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 for profitability and fit
- 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/sustainably grown vs conventional
Determine the Cropping System

Most Profitable Crops

• Tomato – field, protected culture, hydroponic
• Specialty greens, lettuce, spinach (especially off season)
• Herbs (cilantro, basil, chives, dill)
• Cucumber
• Peppers
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
  - Soil is a biodynamic system
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, storage
Marketing the Crop

- Wholesale marketing potential
  - Produce auctions
  - Sales to other sellers
  - Grocery stores, restaurants, institutions
Marketing the Crop

- Direct market potential
  - Farmers market
  - On farm stand or roadside market
  - Pick your own
  - CSA, Food Circle
In Conclusion...

• Success depends on:
  – Inventory your resources
  – Determine the cropping system
  – Considerations in producing the crop
  – Marketing the crop

• Horticultural crops can be an important part of your farm!
Any Questions?

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