Marketing Agroforestry Products
2015 Agroforestry Academy

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A Global Center for Agroforestry, Entrepreneurship and the Environment
Agroforestry

- Sustainable agriculture
- Environmental benefits
- Habitat for wildlife
- New market opportunities
- Diversified farm income
  ➢ “Market-based conservation”
In this presentation

• A framework to approach the marketing of agroforestry products and overcome some of the challenges associated with it.

  – Market research
  – Marketing strategies
# Agroforestry Products (Specialty/Niche)

## Edibles
- Mushrooms (shiitake, oyster, stropharia, truffles)
- Nuts (chestnuts, pecans, black walnuts, hickories, hazelnuts)
- Fruits (persimmon, paw paw)
- Berries (elderberry, aronia, other “blue fruits”)

## Herbal medicinals
- Ginseng, Goldenseal
- Witch hazel
- Elderberry

## Specialty wood products
- Diamond willow canes
- Red cedar closet liners
- Walnut gunstocks

## Florals and greenery
- Willow, dogwood, ...
- Ferns
- Salal

## Recreation
- Fee hunting, Agritourism
Agroforestry Specialty Products
Specialty Product Market Strategies

*The “Black Box” of Agroforestry Enterprises*

- Agroforestry enterprises often produce specialty products for markets about which little is known.
- All that may be known about the market is that someone is growing the product and consumers are buying the product.
- What happens to the product between producer and consumer is unknown, i.e., a “black box”.

➢ **Challenge:** How to overcome the lack of market information.
Black Box
Questions to Explore

• How do I get into the market?
• What are my costs?
• Wholesale and retail prices?
• Where can I buy what I need for my business and for what price?
• Is the supply I need readily available?
• Who are my customers? What do they want?
• For how much can I sell my products?
• Who are my competitors? What are they doing?
• What can I do differently?
• These and many other questions complicate the decision to produce and market agroforestry (specialty) products

• Applying standard market research approaches and the Porter Five Forces Model to specialty products provides answers to these questions and enables development of sound marketing strategies
Specialty “niche” product markets represent unique products with ‘a face and a place’

http://www.hilltopcommunityfarm.org/

• Niche markets based on trust and authenticity
• Large firms cannot manufacture trust and authenticity
• Competitive advantage to smaller firms with a unique, personalized, customer-oriented approach
Country Natural Beef – Buy Local
http://www.countrynaturalbeef.com/

- A good story
- Savvy branding
- Fantastic product
Country Natural Beef – Buy Local

• A national leader in natural beef production.
✓ “Our consumers know where the cattle come from, and they know the people who produce it”


➢ Ranchers own +100,000 cows on 6.3 million acres of private and public lands.

• Developed working relationships with leading restaurateurs and retailers across the nation.

• Pricing Strategy: Based on return on investment, cost of production and fair profit. Stable prices to customers.
Market research

**Secondary** information sources
- Published reports and studies
- Online information
- Journals and magazines
- Business directories

**Primary** information sources
- Personal interviews
- Trade shows
- Farmers markets
- Grocers, etc.
- Observations
- Surveys
- Focus groups
SWOT ANALYSIS

**Strengths**
- Previous farming experience
- Available land
- Children returning to the farm
- Location – close to a big city

**Weaknesses**
- Moderate finances
- Seasonal and perishable product
- Lack of marketing skills

**Opportunities**
- New cultivars made available
- Cooperative (e.g., Midwest Elderberry Co-op)
- Increased interest in locally produced products

**Threats**
- Competition from imports
- Increased federal and state regulations
- Extreme climate events

***Example - farmer who would like to start growing elderberry***
Porter Five Forces Model

5 Forces Example
Shiitake Mushrooms Industry

THREAT OF NEW ENTRANTS
- The cost to establish a business is not high
- Production and marketing knowledge need to be acquired through experience
- Incumbent firms create reputation through quality, customer service, consistent supply

SUPPLIERS
- Limited number of spawn suppliers
- Good relationship between suppliers and producers

COMPETITION
- From shiitake produced on sawdust and imports

SUBSTITUTES
- White button mushrooms and portabella mushrooms for lower price and higher availability
- Oyster mushrooms – same price and availability
- Chanterelle, maitake, morels, porcini – higher price, lower availability

BUYERS
- Local market
- Gourmet restaurants, farmers markets, on farm
- High prices
Next steps

• Decide on what products to produce
• Identify who wants the product and under what conditions will they buy it (target market)
• Formulate marketing strategies to meet the needs of the target market
Target market(s)

- Market segments

- Target market

- Demographic characteristics (age, sex, religion, education, income)
- Geographic location (counties, states, regions)
- Psychographic characteristics (lifestyle, behavior, values, attitudes)
Market segments

• Example:

Product: *Elderberry jelly*
Customer segments:
1. **Online customers**
   - Geographic: Nationwide (USA)
   - Demographic: Younger, moderate to high household income, high level of education
   - Psychographic: Price sensitive
   - Needs/Preferences: Like the comfort of shopping from home

2. **Health food stores customers**
   - Geographic: Regional area
   - Demographic: Older, higher household income, high level of education
   - Psychographic: Health conscious, less price sensitive
   - Needs/Preferences: Prefer healthy, high quality products

Customer profile:
- Who are they?
- Where are they?
- What do they need?
- How do they buy?
- How large is the segment?
Marketing strategies

• Product Strategy
  ➢ Differentiation

Minneapolis Elderberry Cooperative
Marketing strategies

Differentiation = Adding Value

• Processing
  – Extend availability and shelf life
  – Potentially higher returns
  – Use lower quality products
  – Diversify market outlets
  – Higher investment
  – Financial resources and human resources/expertise

• Extra convenience
• Customer service
• Product image (healthy, environmental friendly, locally produced, organic)
Marketing strategies

Value-Added Strategy Implementation

• The difference between the cost of raw materials and the price received for the final product
  ➢ Determine who your customers are
  ➢ Identify the benefits the customer wants
  ➢ Determine customer purchasing criteria
  ➢ Assess sources of uniqueness in how you determine benefits
  ➢ Identify the cost of providing the benefit
  ➢ Choose value chain configuration that provides the most benefits for the cost (competitive advantage)

http://www.suro.ca/en/
The Market Value Chain

Eastern Redcedar

Producer

Processor

Wholesaler (Distributor)

Retailer

Consumer

PRODUCTS FOR SALE

CedarCide
"Chemical Free Solutions"
THE CLASS OF 2000
## Eastern red cedar products - $Value Added

<table>
<thead>
<tr>
<th>Product</th>
<th>Unit Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Logs</td>
<td>$120-250/MBF</td>
</tr>
<tr>
<td>Cants</td>
<td>$500/MBF</td>
</tr>
<tr>
<td>Paneling</td>
<td>$1,800/MBF</td>
</tr>
<tr>
<td>(grade 1, 2 1/4” clear boards)</td>
<td></td>
</tr>
<tr>
<td>Cedar “moth” balls</td>
<td>$5.19 (3 oz. Package, 36 balls)</td>
</tr>
<tr>
<td>Cedar boxes</td>
<td>$2.00/box (5”x3”x2 1/8” - wholesale)</td>
</tr>
<tr>
<td>Shavings</td>
<td>$5/cu yd (poultry bedding)</td>
</tr>
<tr>
<td>Shavings</td>
<td>$2.50/bag (3 cu ft - retail)</td>
</tr>
</tbody>
</table>
# EASTERN RED CEDAR PRODUCTS - $ VALUE ADDED

<table>
<thead>
<tr>
<th>Products</th>
<th>Unit price</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>➢ Cedarwood oil</strong></td>
<td></td>
</tr>
<tr>
<td>aromatherapy</td>
<td>$1.83 (5 ml)...$27.61 (16 oz) $7.95 (10ml) (on line store)</td>
</tr>
<tr>
<td>perfume and cosmetic</td>
<td>$6/lb drum quantity, $9/lb &lt; one drum</td>
</tr>
<tr>
<td>industry and household use</td>
<td></td>
</tr>
<tr>
<td>(improve fragrance, moth resistance properties in closets, dressers)</td>
<td></td>
</tr>
</tbody>
</table>

**➢ Animal bedding**

- Dog bedding compressed bail $22 /bail (retail price)
- Premier Pet Red Cedar Bedding $9.99 (5 cu ft) (retail price)
- L/M animal farms bedding $4.49 (700 cu in) (retail price)

**➢ Mulch**

- Retail: $30.95/cu. Yd.
- Contractor: $28.95/cu. Yd.
Marketing strategies

• Distribution Strategy - getting the products to the buyer

• Direct marketing
  – Outlets: farms, farmers markets, PYO, CSA, Internet
    » Capture larger share of consumer’s spending
    » Closer relationship with the consumer
    » Higher risk
Marketing strategies

• Distribution Strategy - getting the products to the buyer

  • Intermediary distribution
    – Wholesalers, distributors, cooperatives, retailers
      » Provide constant dependable supply
      » Maintain product integrity along the value chain
      » Reduced risk
Marketing strategies

• Pricing Strategy
  – Pricing to the market
    • What others are charging for the same type of products
    • Power to set prices (differentiation, reputation, promotion)
    • Demand sensitivity to price changes
  – Pricing to your costs
    • Cover expenses
    • Make a profit
Marketing strategies

• Communication Strategy
  – Message: freshness, local, sustainably produced, healthy
  – Tools: ads, flyers, press releases, tasting samples
Marketing strategies

• Communication Strategy
  – Delivery: festivals, local radio, word of mouth, local media, social media
  – Frequency
  – Costs
Marketing plan

Structure of a Marketing Plan

• Introduction
• Market research and analysis
• Marketing and financial objectives and goals
• Marketing strategies
  – Product
  – Price
  – Distribution plans
  – Communication
• Marketing budget - estimated costs of the planned marketing strategies, the cost associated with market analysis and an explanation of the source of funds (e.g., borrowed, savings, percent of revenue).
Conclusion – The Framework

- Goals/objectives
- Site assessment
- List of potential “Best bets”
- Market research
  - Collection of information
  - SWOT Analysis
  - Porter Five Forces Model
- Refine “Best Bets”
- Marketing planning
  - Identify target market
  - Formulate marketing strategies (product, distribution, price, communication)
  - Finalize marketing plan
Market Opportunity Woody Florals

- **Woody florals** (e.g., scarlet curls willow) *in windbreaks, alley cropping or riparian forest buffer plantings*

- **Gross returns** $800 to $2,000 per 1,000 linear feet

( [http://nebraskawoodyflorals.com](http://nebraskawoodyflorals.com) )

Photos: Scott Josiah
FOR MARKETING PURPOSES, NOT NECESSARILY NATIVES, BUT CULTIVARS
<table>
<thead>
<tr>
<th>Cost item</th>
<th>Unit cost</th>
<th>Total cost at 6-feet spacing&lt;sup&gt;y&lt;/sup&gt;</th>
<th>Total cost at 4-feet spacing&lt;sup&gt;z&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1 costs (establishment year)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Site preparation per linear foot</td>
<td>$0.05</td>
<td>$50</td>
<td>$50</td>
</tr>
<tr>
<td>Planting costs per plant</td>
<td>$0.40</td>
<td>$67</td>
<td>$100</td>
</tr>
<tr>
<td>Plant material costs per plant</td>
<td>$0.70</td>
<td>$117</td>
<td>$175</td>
</tr>
<tr>
<td>Weed control: three herbicide applications/year at $0.02/foot</td>
<td>$0.02</td>
<td>$60</td>
<td>$60</td>
</tr>
<tr>
<td><strong>Year 1 total cost</strong></td>
<td></td>
<td><strong>$294</strong></td>
<td><strong>$385</strong></td>
</tr>
<tr>
<td>Year 2 costs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Replacement of mortality (20%) (plant material + planting cost)</td>
<td></td>
<td>$33</td>
<td>$50</td>
</tr>
<tr>
<td>Weed control: three herbicide applications/year at $0.02/foot</td>
<td>$0.02</td>
<td>$60</td>
<td>$60</td>
</tr>
<tr>
<td><strong>Year 2 total cost</strong></td>
<td></td>
<td><strong>$893</strong></td>
<td><strong>$110</strong></td>
</tr>
<tr>
<td><strong>Total establishment costs, years 1 and 2</strong></td>
<td></td>
<td><strong>$387</strong></td>
<td><strong>$495</strong></td>
</tr>
</tbody>
</table>

Year 3 and thereafter

<table>
<thead>
<tr>
<th>Cost item</th>
<th>Unit cost</th>
<th>Total cost at 6-feet spacing&lt;sup&gt;y&lt;/sup&gt;</th>
<th>Total cost at 4-feet spacing&lt;sup&gt;z&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weed control: two herbicide applications/year at $0.02/foot</td>
<td>$0.02</td>
<td>$40</td>
<td>$40</td>
</tr>
</tbody>
</table>

<sup>x</sup> Establishment costs from the 2004 Natural Resource District (NRD) Tree Program Survey  
<sup>y</sup> 167 plants/1000 linear feet  
<sup>z</sup> 250 plants/1000 linear feet
Table 4. Woody Floral Estimated Gross Returns per Plant, Per Acre, & Per 1,000 Feet of Row Production Average of Five Harvests – 2000-2005

<table>
<thead>
<tr>
<th></th>
<th>Scarlet curls willow</th>
<th>Flame willow</th>
<th>Pussy willow</th>
<th>Curly willow</th>
<th>Yellowtwig dogwood</th>
<th>Bloodtwig dogwood</th>
<th>Bailey dogwood</th>
<th>Colorado dogwood</th>
<th>Cardinal dogwood</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avg. # marketable stems/plant</td>
<td>23</td>
<td>12</td>
<td>32</td>
<td>17</td>
<td>12</td>
<td>10</td>
<td>23</td>
<td>25</td>
<td>15</td>
</tr>
<tr>
<td>Avg. gross income produced/plant*</td>
<td><strong>$10.35</strong></td>
<td>$3.96</td>
<td>$9.60</td>
<td>$7.65</td>
<td>$3.6</td>
<td>$3.33</td>
<td>$7.60</td>
<td>$8.25</td>
<td><strong>$4.95</strong></td>
</tr>
<tr>
<td># plants per acre</td>
<td>605</td>
<td>907</td>
<td>605</td>
<td>907</td>
<td>907</td>
<td>907</td>
<td>907</td>
<td>907</td>
<td>907</td>
</tr>
<tr>
<td>Avg. potential gross income per acre</td>
<td><strong>$6,262</strong></td>
<td>$3,591</td>
<td>$5,808</td>
<td>$6,939</td>
<td>$3,265</td>
<td>$3,020</td>
<td>$6,893</td>
<td>$7,483</td>
<td><strong>$4,490</strong></td>
</tr>
<tr>
<td># plants per 1,000’ of row</td>
<td>167</td>
<td>250</td>
<td>167</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>250</td>
<td>250</td>
</tr>
<tr>
<td>Avg. potential gross income per 1,000’ of row</td>
<td><strong>$1,728</strong></td>
<td>$990</td>
<td>$1,603</td>
<td>$1,912</td>
<td>$900</td>
<td>$833</td>
<td>$1,900</td>
<td><strong>$2,062</strong></td>
<td><strong>$1,238</strong></td>
</tr>
</tbody>
</table>

* The average number of marketable stems include 3-5’ stems. Scarlet Curls and curly willow stems sell for $0.45/stem (wholesale), all others sell for $0.30/stem. Longer stems occasionally bring premium prices.

** Scarlet curls and pussy willow at 6 ft (0.91m) in-row spacing X 12’ between rows (605 plants/ac), all others at 4 ft (0.45m) in-row spacing, 12’ between rows (907 plants/acre)

Gross income: $800-$2,000 per 1,000 linear feet
Woody Florals for Income and Conservation

Katie E. Troutz, Forest Resources and Environmental Conservation, Virginia Tech
John F. Mandell, Forest Resources and Environmental Conservation, Virginia Tech
James L. Chamblee, National Agroforestry Center, USDA Forest Service

Woody florals (also known as woody cut stems) are tree and shrub species that can be grown, harvested, and sold to the floral industry or used in home arrangements for their colorful or unique stems, berries, buds, and/or flowers. Woody florals are good candidates for agroforestry plantings and home landscaping because of their high value in the floral industry and ability to protect water, air, and soil quality. Agroforestry is the intensive and sustained integration of trees and or shrubs with crops and/or livestock and includes practices such as riparian buffers, windbreaks, and fences (for more information on agroforestry visit http://uas.unl.edu).

Woody florals can add significant value to agroforestry plantings, make unique additions to home landscaping, or provide production opportunities on small or large scales. As an example, a demonstration at the Catawba Sustainability Center in Catawba, Virginia was planted in an old hay field near a creek (for more information visit http://www.vtec.vt.edu/catawba/). The planting includes multiple woody floral species and was strategically placed to extend an agroforestry riparian buffer.

Woody florals are typically managed using a coppice system, which is a technique where certain tree or shrub species are purposely cut to encourage sprouting (Figure 1). In a coppice system, plants are allowed to grow for about 2 to 5 years at which point the stems are cut and sold. After being cut, new stems sprout and are allowed to regrow for 2 to 3 years when they can be cut and sold again.

Figure 1. Woody florals are managed as coppiced trees and shrubs. The stems are cut every 2-3 years and grow back.

Figure 2. Woody florals can be grown in rows with 4 to 6 feet between plant and enough space for mowing equipment between rows.

Caution: Local/regional market demand – NOT well known, therefore - you must do your own market research to see if there is a market in your area.
Forest Farming Market Opportunity - Perennials

Cultivate perennial native spring flowers for urban shade landscaping – under shaded forest canopy

Examples:

• Trillium

• Wild geranium

• Bloodroot

• Mayapple

• Jack-in-the-Pulpit

• Bluebells
Winning the Marketing Game

• Know what the consumer wants

• Distinguish yourself and your product

• Be a Price Maker

• Control the marketing chain, don’t let the marketing chain control you
Selected Specialty Crop Market Studies

Selected Specialty Crop Market Studies

Thank You