



# AGROFORESTRY NOTES

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## Developing Consumer and Market Research for Non-Timber Forest Products

### Introduction

Non-timber forest products (NTFPs) present an opportunity for many forest landowners to get additional income from their woodlands. This option may be useful for landowners who are not interested in harvesting trees from their land or for landowners who are interested in growing additional products that provide shorter term income streams in addition to their timber harvest. Many markets for NTFPs are growing.

Non-timber forest products generally fall into four categories:

1. Forest-based food products, like mushrooms and berries;
2. Medicinal plants, like ginseng and black cohosh;
3. Woody florals for decorative use, like pussy willow and holly;
4. Craft products and specialty woods, like boughs and vines for wreaths.

The first step in establishing any sort of non-timber forest product enterprise should be to understand the management and conservation of NTFPs on a landowner's woodlands. Significant resources exist to help with gaining this knowledge.<sup>1</sup> However, to gain income from NTFPs, landowners must also consider the feasibility of their proposed enterprise and develop a business plan for it. A key part of this process is understanding the consumer demand and market for the product they are growing or processing.

There are a number of questions to ask before you get started with a new business enterprise. This publication outlines these questions about consumer demand and provides resources for landowners and natural resource professionals to use in investigating the answers. It uses the consumer studies done by the The Center for Agroforestry at the University of Missouri on American elderberry (*Sambucus canadensis*) as an example to showcase ways to understand consumer preferences for a non-timber forest product and to illustrate the research that should be done on any NTFP before starting a new enterprise.

### Feasibility Studies and Business Plans

Consumer demand for a NTFP should be considered within the broader context of developing a business plan for the product. Feasibility studies and business plans can be simple or complex, and lots of resources exist to help producers create these plans.

There are many important reasons to write a business plan.<sup>2</sup> Writing a business plan or carrying out a feasibility study helps producers think through key questions that should be asked before they begin. It helps to identify potential problems and opportunities that might come up, before a producer makes significant investments. The development of the feasibility study can help with identifying “go” or “no go” points along the way. A business plan helps producers identify what steps to take and in what order to take them – it creates a plan of action for the producer. Business plans are often required to obtain financing, which may be an important early step for the business.

<sup>1</sup> For more information on management of non-timber forest products and forest farming, visit the eXtension Forest Farming Community of Practice at [http://www.extension.org/forest\\_farming](http://www.extension.org/forest_farming) or see the following publications:

<http://nac.unl.edu/documents/agroforestrynotes/an07f01.pdf>

<http://nac.unl.edu/documents/insideagroforestry/vol16issue2.pdf>

<http://nac.unl.edu/documents/morepublications/sfp1.pdf>

[http://www.nrcs.usda.gov/wps/portal/nrcs/detailfull/national/landuse/forestry/sustain/guidance/?cid=nrcsdev11\\_009304](http://www.nrcs.usda.gov/wps/portal/nrcs/detailfull/national/landuse/forestry/sustain/guidance/?cid=nrcsdev11_009304)

<sup>2</sup> Hofstrand, Don. Writing a value added business plan. [http://www.agmrc.org/business\\_development/starting\\_a\\_business/creating\\_a\\_business/articles/writing\\_a\\_valueadded\\_business\\_plan.cfm](http://www.agmrc.org/business_development/starting_a_business/creating_a_business/articles/writing_a_valueadded_business_plan.cfm)

Business plans tend to have a few key components, described below.<sup>3</sup> This publication goes into depth about markets, but producers should be sure to consider the other topics described below as part of their research before beginning their NTFP enterprise.

- A. *Summary* – Summarize the business opportunity. It can be easily shared with others who want a snapshot of the project.
- B. *Business summary* – Describe the business concept. This can include background information, a mission statement, goals, objectives, the structure of the business, the products the business will create, any research and development that has gone into those products, and other information.
- C. *External Environment* – This section should describe changes in the economy, society, and industry that provide opportunities and threats for the business and its products. Include information about both the economic, social, and agricultural environment, as well as some analysis of the industry the business will be a part of.
- D. *Management* – Include information about your team’s abilities in business management and experience specific to the project and products being sold. This section should show that you or your management team is capable of managing the business.
- E. *Markets* – Demonstrate that customers will buy the products created by the business. Include description of the market, customer analysis, market outlets, competitive assessment, market access, distribution, pricing, and promotion. Most NTFPs are niche products, which require more attention to marketing than traditional crops.
- F. *Operations* - Describe how you will get the product to market. Include information about the methods and costs for management and conservation along with harvesting, processing, packaging, and marketing the NTFP. Include information about labor and a discussion of regulatory and environmental requirements. Financial decision support tools and enterprise budgets can help in improving understanding of these factors.<sup>4</sup>
- G. *Finances* – Demonstrate how the business will make money. It should include information about the team’s abilities in business management and specifics to the projects and products being sold.
- H. *Implementation* – This section should demonstrate how this business plan will be executed. It can include an action plan of steps to be taken to get the business started.

## Other Resources Available

In addition to articles provided by the Agricultural Marketing Resource Center,<sup>5</sup> there are other resources available for information on creating a business plan:

- USDA Rural Development information sheet: [http://www.rurdev.usda.gov/SupportDocuments/OR\\_BCP\\_BIBizPlan.pdf](http://www.rurdev.usda.gov/SupportDocuments/OR_BCP_BIBizPlan.pdf)
- US Small Business Association online tool: <http://www.sba.gov/tools/business-plan/1>
- US Small Business Association articles: <http://www.sba.gov/category/navigation-structure/starting-managing-business/starting-business/how-write-business-plan>

## Consumer Research

To understand the prospective market for the NTFP, it is important to understand the potential customer. Understanding the intended consumer for a NTFP is an important first step in understanding demand. This information can be gained through asking customers about their preferences or through doing surveys (either online or by visiting places where similar products are sold).

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<sup>3</sup>This outline was adapted from the following article, which includes more in depth information on each section of the business plan: Hofstrand, Don. Create your own business plan. [http://www.agmrc.org/business\\_development/starting\\_a\\_business/creating\\_a\\_business/articles/create\\_your\\_own\\_business\\_plan.cfm](http://www.agmrc.org/business_development/starting_a_business/creating_a_business/articles/create_your_own_business_plan.cfm)

<sup>4</sup>Financial decision support tools give estimates of the costs of various aspects of an enterprise, based on existing commercial enterprises. Existing tools include:

- Eastern black walnut decision support tool: <http://www.centerforagroforestry.org/profit/#specialty>
- Elderberry decision support tool: <http://www.centerforagroforestry.org/profit/#specialty>

<sup>5</sup> <http://agmrc.org/>

Important questions to consider:

- *Who are my customers for this product? Are there people who buy this product that I don't want purchasing my products?*
- *Where are the consumers for the product? Are they local, regional, or from across the country of world?*
- *What are their current wants and needs?*
- *Am I going to try to compete with existing demand or create a product that meets a different demand?*
- *What are their perceptions of the product?*
- *How is it currently being sold? Would I package it in the same way or differently?*
- *How much of the product do the buyers want?*
- *How often do they want the product? Can I meet those needs?*
- *How easily can I or others saturate the market? (How big is the market? Does it need more suppliers?)*

For example, to investigate potential opportunities for elderberry enterprises, important research was carried out by the University of Missouri.<sup>6</sup> The 2011 study of elderberry juice and jelly products surveyed 1,043 households throughout the United States. This survey asked respondents questions such as: A) Are you familiar with elderberry products? B) Have you purchased elderberry products in the past year? C) What types of products have you purchased? D) Where did you purchase these products? E) How often do you consume elderberry products? Using this and additional information, this study helped identify marketing strategies to be applied by elderberry firms to stimulate growth in sales and gain competitive advantage.

Before beginning their research, producers should investigate whether previous research has been carried out. After examining the existing research, producers can supplement their own. This kind of exercise can also be done on a smaller scale.

## Products Sold

Producers should think about what sorts of products they want to sell. An important factor is how much processing they want to do. The amount of processing affects price point, finances, and many other aspects of the business. Different products will have different sale prices. It can be helpful to ask other retail and wholesale buyers the prices they pay for particular products. Quality characteristics can affect price, and quality is often where producers can best compete. Producers should be sure not to underprice their products or their time. All costs should be calculated before prices are set, including hired labor, overhead costs (rent, utilities, insurance, mileage, postage, advertising, packaging, etc.)<sup>7</sup> It is particularly important to pay attention to seasonally variable costs (heating, fuel, etc.)

Product	Sale Price <sup>8</sup>
Cuttings	\$1-2.50-each
Plants	\$5.00 each
	\$0.50/lb with stem to winery
	\$1.25/lb pick your own
Fresh Berries	\$3.00/lb de-stemmed for pie-making
	\$5.00/lb to winery (de-stemmed)
	\$11.00/lb to dietary supplement manufacturers
Wine	\$10-14 per bottle
Juice	\$12-17 per 11 oz. bottle
Concentrate	\$25 per 12 oz. bottle

A market study performed by the Center for Agroforestry identifies a variety of elderberry products created and sold in the U.S. including: seeds, cuttings, plants in pots, fresh and frozen elderberries, dried flowers, wine, juice, concentrate, extract, syrup, jelly, jam, food colorants, vinegar, fudge, barbeque sauces, salad dressing, carbonated beverages, cordials, juice blends, yogurt and pie. They sell for different prices as presented in the figure above. In general, unit prices increase with increased amounts of processing.

## Market Outlets

Part of the market assessment is deciding where the enterprise plans to sell their products. Four main outlets exist for NTFPs:

- Processors
- Direct to consumer (fairs, farmers markets, roadside stands, internet sales)
- Retail
- Distributors

<sup>6</sup> Marketing Specialty Forest Products. <http://nac.unl.edu/documents/morepublications/sfp1.pdf>

<sup>7-8</sup> Mihaela Cernusca, Michael Gold, Larry Godsey. University of Missouri Center for Agroforestry. Elderberry Market Research. August 2011. <http://www.centerforagroforestry.org/profit/elderberryreport.pdf>

Market outlets have different characteristics and price points, and may or may not exist for particular NTFPs in a location or region. Markets also look for NTFPs that have already been processed to different degrees. For example, wineries may prefer de-stemmed elderberry and nutraceutical companies may prefer dried elderberry instead of fresh fruit.

In general, direct to consumer outlets require smaller quantities and attract higher prices. Distributors attract lower prices but can accept greater quantities. Retail buyers generally fall somewhere in the middle.

**Financial Assistance**

Performing consumer and market research as part of feasibility studies and business plans is important to accomplish before starting a new business. There are resources available to help producers carry out this work and get started.

<b>Program</b>	Business & Industry Guaranteed Loan (B&I)	Rural Business Enterprise Grants (RBEG)	Value-Added Producer Grant (VAPG)
<b>Assistance Type</b>	Loans for rural lenders or businesses	Grants to rural public bodies, private non-profit corporations, and tribes	Grants for independent producers, farmer and rancher cooperatives, producer groups, majority-controlled producer-based business ventures
<b>Uses</b>	Real estate, buildings, equipment, supplies, working capital and some debt refinancing	Refinancing, land acquisition, construction, equipment, streets and roads, utility and service extensions, revolving funds, technical assistance and rural distance learning networks	Feasibility studies, business plans, working capital
<b>More Information</b>	<a href="http://www.rurdev.usda.gov/bcp_gar.html">http://www.rurdev.usda.gov/bcp_gar.html</a>	<a href="http://www.rurdev.usda.gov/bcp_rbeg.html">http://www.rurdev.usda.gov/bcp_rbeg.html</a>	<a href="http://www.rurdev.usda.gov/bcp_vapg.html">http://www.rurdev.usda.gov/bcp_vapg.html</a>

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A partnership between:  
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