





Marketing Agroforestry Products:

Lessons from Producers



USDA National Agroforestry Center

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Introduction

Farmers, ranchers, and forest owners are increasingly interested in integrating the production of fruit, nuts, root crops, mushrooms, and other crops into their production systems using agroforestry practices. Many producers want to learn about and connect with markets for these products before they get started. While these crops can be sold in local, regional and national markets, information or resources for accessing markets are scarce.

This publication shares producer experiences with marketing agroforestry products, including how producers entered — or created — the markets for their products. These individual stories highlight a diversity of experiences, from family-run farms to intermediaries assisting with market access. U.S. Department of Agriculture (USDA) and other federal, state, and local programs can provide capital or technical assistance to farmers at different phases of market development. The case studies in this publication highlight programs and resources available through USDA.

An Overview of Agroforestry

Agroforestry — the intentional integration of trees or shrubs with crop and animal production systems to create environmental, economic, and social benefits¹ — is often grouped into five common practices (see Table 1). These practices can improve the ecological health of the land by enhancing soil quality, filtering water, and creating wildlife habitat. In addition, farmers, ranchers and forest owners who diversify their production systems with tree crops and non-timber forest products can potentially realize economic benefits. Agroforestry practices can layer crop production systems to grow more products on the same unit of land. These economic benefits help to support local communities and boost local economies.

About the USDA National Agroforestry Center

The mission of the USDA National Agroforestry Center is to advance the health, diversity, and productivity of working lands, waters, and communities through agroforestry. This work advances the U.S. Department of Agriculture's efforts to strengthen the stewardship of private lands through technology and research and facilitate rural prosperity and economic development.

With its national network of partners, the center conducts and supports research, develops technologies and tools, and provides educational materials and training on agroforestry.



Photo credit: Delaware Valley Ramps

¹U.S. Department of Agriculture (USDA). 2019. Agroforestry Strategic Framework. Washington, DC: U.S. Department of Agriculture. 26 pp. https://www.usda.gov/sites/default/files/documents/usda-agroforestry-strategic-framework.pdf

Benefits of Agroforestry Practices²

| Practice | Description | Primary benefits and uses |
|----------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Alley cropping (also called tree-based intercropping) | Trees or shrubs planted in sets of single or multiple rows with agronomic crops, horticultural crops or forages produced in the alleys between the tree rows that also can produce additional products. | Produce annual and higher-value, but longer-term crops. Enhance microclimate conditions to improve crop or forage quality and quantity. Reduce surface water runoff and erosion. Improve soil quality by increasing utilization and cycling of nutrients. Enhance habitat for wildlife and beneficial insects. Decrease offsite movement of nutrients or chemicals. |
| Windbreaks (also includes shelterbelts) | Single or multiple rows of trees or shrubs that are established for environmental purposes; depending on the primary use, may be referred to as crop or field windbreak, livestock windbreak, living snow fence, farmstead windbreak, or hedgerow. | Control wind erosion. Protect wind-sensitive crops. Enhance crop yields. Reduce animal cold stress and mortality. Serve as a barrier to dust, odor, and pesticide drift. Conserve energy. Manage snow dispersal to keep roads open or to harvest moisture. |
| Riparian forest buffers | An area of trees, shrubs, and herbaceous vegetation established and managed adjacent to streams, lakes, ponds, and wetlands. | Reduce polluted runoff from adjacent land uses entering into waterways. Stabilize streambanks. Enhance aquatic and terrestrial habitats. Increase carbon storage in plant biomass and soils. Diversify income either through added plant production or recreational fees. |
| Silvopasture | Trees combined with forage and livestock production. | Diversify livestock and plant products in time and space. Produce annual and higher-value, but longer-term products. Reduce nutrient loss. |
| Forest farming (also called multistory cropping) | Existing or planted stands of trees and/or shrubs that are managed as an overstory with an understory of plants that are grown for a variety of products. | Improve crop diversity by growing mixed, but compatible crops having different heights on the same area. Improve soil quality by increasing utilization and cycling of nutrients. Increase carbon storage in plant biomass and soil. Reduce harvest pressure on native plant populations. |

Agroforestry — from Farms to Markets

This publication shares the stories of five producers and two organizations that support producers, and how they found markets for diverse products. The products include pecans, ramps, maple syrup, elderberries, pawpaw, herbs, and breadfruit. Each case study offers insights and strategies used by producers to grow their businesses, create innovative products, hone their marketing efforts, and leverage assistance and resources from USDA as well as other federal, state, and local programs.

²Schoeneberger, Michele M.; Bentrup, Gary; Patel-Weynand, Toral, eds. 2017. Agroforestry: Enhancing resiliency in U.S. agricultural landscapes under changing conditions. Gen. Tech. Report WO-96. Washington, DC: U.S. Department of Agriculture, Forest Service. pp. 212.

Pecans by Shepherd Farms

Dan Shepherd's father started growing pecans in 1967 on a single plot of land; today, the farm spans 4,000 acres, including 300 acres of pecan orchards. In the past, Shepherd Farms grew rows of pecan trees with alleys of other crops, such as soybeans and wheat, in an alley cropping system. As the trees grew larger, Shepherd Farms has also integrated hay crops into their pecan orchards. The farm's core focus revolves around the production and sale of eight pecan varieties to ensure that quality remains consistent. The farm also supplements its income with locally made jams and jellies. Shepherd Farms offers three lessons:

1. Sell directly to consumers.

Shepherd sells products directly to consumers to eliminate the need for a middle person and to maintain favorable prices for his products.

2. Create a good experience for customers.

Shepherd Farms operates a seasonal store where customers can view the farm and its processing facility. These experiences connect customers to the farm. Shepherd believes that giving his customers a positive, memorable experience does more than encourage repeat visits - it strengthens the reputation of the farm and its brand.

3. Know the costs of your farm operation.

The key to sustainability is to have a good return on investment. Producers often discount the importance of understanding one's operating costs and its relevance to one's scale of production. In order to achieve a healthy return, producers need to reach a sizable farm scale to balance the level of investment in inputs, equipment, and facilities.



At Shepherd Farms' on-farm store, pecans are sold directly to consumers.



Shepherd Farms' pecans are packaged and ready for sale at the farm store.



Shepherd Farms processes and packs pecans on site. Photo credit: Dan Shepherd, Shepherd Farms

Assistance and Resources Received

Shepherd Farms has received assistance to support its work:

- 1. Conservation Reserve Program: During the early years of the farm, this program benefited the farm operation.
- 2. <u>University of Missouri Extension</u>: Shepherd's engagement with a pecan specialist in the early years helped him learn about pecan varieties and how to address issues, such as diseases.

Shepherd lives by advice from his father: "You can make a little money doing what other people are doing but stand to make a lot more doing what nobody else is doing." Finding and excelling with a niche product and market can be rewarding. For Shepherd, it is his love for pecans, inherited from his father, which pushes him forward.

Ramps by Delaware Valley Ramps

Twelve years ago, Steven Schwartz purchased 20 acres of mature mixed hardwood forest with excellent soil, where wild edibles can thrive. Schwartz has focused on the sustainable production of ramps, or wild leeks, and other wild edibles, such as fiddlehead ferns and stinging nettles. He developed the market for <u>Delaware Valley Ramps</u> based on his experience living in New York City, where many restaurants were interested in wild edibles. Schwartz, who sells most of his products wholesale, offered these tips:

1. Find marketing channels that work for your products.

Schwartz started his journey trading ramps for restaurant meals; this eventually led to business opportunities. Today, people learn about Delaware Valley Ramps primarily through word-of-mouth, friends, and family. The farm uses emails to promote products and update customers when products are seasonally available.

2. Build relationships with your customers.

Schwartz says it's crucial to meet and engage customers, because retaining and finding customers can be a challenge. He found that little gestures, such as sharing recipes and storage methods, creates better connections and lasting relationships. That's because people want to learn about the farm and its products.

3. Use creative marketing.

Aside from the sale of products, Schwartz also participates in an annual collaboration with a local restaurant that features wild edibles in a five-course dinner. The intimate setting provides a space for customers to enjoy unique food, engage with foragers, and learn more about their food.



Staff wash ramps after harvest. Photo credits: Delaware Valley Ramps



Ramps (Allium tricoccum) grow at Delaware Valley Ramps.

Assistance and Resources Received

Schwartz collaborated with Penn State on research funded by a Pennsylvania Department of Agriculture Specialty Crop Block Grant, through the USDA Agricultural Marketing Service. Together, they did field sampling and research into the phytochemical in two ramps subspecies - red and white stem.

Maple Syrup by Passamaquoddy Maple

<u>Passamaquoddy Maple</u>'s journey began in 2013, when the Passamaquoddy Tribe decided to move away from timber and towards forest products that could benefit more individuals in the community. Since the forests were dominated by sugar maple, the Tribe kicked off the operation with 3,500 taps.

Today, under the supervision of Marie Harnois, Passamaquoddy Maple boasts 13,000 taps, a sugar house, and bottling facility. Its products are available online, at its store, and to wholesalers. While entering a saturated market like maple syrup can be an uphill challenge, the maple syrup operation adopted strategies to build a name for its new products. Passamaquoddy Maple learned:

1. Produce unique and high-quality products.

Passamaquoddy Maple wanted its maple sugar products to stand out. Its solution? Curate unique glass bottles for selling its maple syrup. Also, a range of products allows it to cater to different niche markets. Passamaquoddy Maple is certified organic and is bottled based on demand.

2. Use digital tools for bigger reach.

Passamaquoddy Maple maintains an active presence on Facebook. Harnois found that consumers engage more with personal content, such as sharing daily work activities. This content highlights the values they share with customers. They also use data from Google and Facebook to curate content and photos.

Passamaquoddy Maple maintains a website for online

Passamaquoddy Maple maintains a website for online sales.

3. Perseverance leads to success.

Harnois says their biggest achievement, so far, was winning over a store to carry Passamaquoddy Maple products. At first, the store owner only agreed to stock non-syrup products, as they did not want additional maple syrup brands. However, eight months into the relationship, they agreed to sell Passamaquoddy Maple's holiday products, which quickly sold out. First charmed by the unique glass bottles, customers came back for more after recognizing the product's quality. Customer demand led to the store agreeing to stock other Passamaquoddy Maple products.



Passamaquoddy Maple uses unique glass bottles to package its maple syrup products.

Photo credit: Nadine Primeau, Unsplash

Assistance and Resources Received

Passamaquoddy Maple says different grants have helped at various growth stages:

- 1. A grant from US Department of Health and Human Services' Administration for Native Americans was used to start Passamaquoddy Maple.
- 2. A grant from Northern Border Regional Commission helped start the first sugar house facility.
- 3. A Rural Business Enterprise Grant from USDA's Rural Development helped start the bottling facility.

Elderberries by River Hills Harvest

Terry Durham's foray into elderberries started when he worked with a University of Missouri research team to select native elderberries for commercial production. According to Durham, more than 95 percent of U.S. elderberry products are imported from Europe. He saw an opportunity for American growers to profit from this nutritious crop, as demand for elderberry products was growing. Durham turned that crop into juice with a recipe developed specifically to maintain the most nutrition while creating a shelf-stable product. Today, River Hills Harvest produces a variety of elderberry products for consumers, as well as specialized equipment for elderberry growers. Durham's venture into elderberries offers interesting insights:

1. Create the infrastructure that is required to grow a business.

River Hills Harvest dedicated itself to growing the elderberry industry. It manages a nursery that grows a selection of elderberry varieties that thrive in the area, trains producers to grow elderberries, produces and sells equipment, and buys elderberries from growers to sell wholesale. At each stage, growth brings new opportunities to the community of farmers that work with the brand. Durham sees this as a model that can be replicated for other native fruits.



River Hills Harvest has developed elderberry processing equipment and processes.

Photo credit: River Hills Harvest.

2. Build a market through education.

Since America's elderberry market was in its infancy when Durham started, he first worked to build awareness about locally grown elderberries — with consumers, growers, and buyers. Durham started with small actions, such as providing samples of his products at local stores, so that he could engage customers and build relationships. Today, River Hills Harvest sells at 700 stores in the region, and has warehouses for national distribution.

3. Adapt your marketing to the times.

Internet sales are important to River Hills Harvest; it has seen internet sales increase 300 percent. Using YouTube and social media further expands the reach to potential customers. Durham says that producers need to market products in ways that are relevant to their customers.



Elderflower in summer at River Hills Harvest. Photo credit: River Hills Harvest.

Assistance and Resources Received

Several strategic partnerships and forms of assistance helped Durham grow at a time when there was little scientific knowledge about elderberries. These include:

- 1. A USDA Specialty Crop Block Grant produced materials used to educate growers.
- 2. University of Missouri's Center for Agroforestry spearheaded the funding for research on elderberry varieties.
- USDA Natural Resources Conservation Service's Environmental Quality Incentive Program provided financial assistance to address conservation concerns on the farm.

Pawpaws by Integration Acres

In the foothills of Appalachia, Chris Chmiel launched <u>Integration Acres</u>, which may be the world's largest processor of pawpaw, a native fruit that grows in the eastern United States. Chmiel currently manages 50 acres of farmland, including a 2-acre pawpaw orchard and a collection point for nearby growers. Integration Acres focuses on collecting, processing and adding value to pawpaw, as well as spicebush berries, persimmons, black walnuts, and hickory nuts. It has also integrated goats into its orchard. Integration Acres learned to:

1. Add value to a native fruit.

Chmiel extended this highly-perishable product's shelf life with an array of pawpaw-based products: pawpaw maple vinaigrette, frozen pulp, seeds, jam, and chutney. By diversifying, he created a more resilient business.

2. Market an experience.

The Ohio Pawpaw Festival draws about 10,000 people, spans three days, and boasts music, art, history, and family-friendly activities. The festival has become an innovative way for Integration Acres to market pawpaws, build its brand, and help others learn more about the native fruit. Further, the festival attracts journalists whose stories tell others about pawpaws and the farm.



3. Diversify the farm with agritourism.

Chmiel wants to bring more visitors to his farm through a practice known as agritourism. While the Ohio Pawpaw Festival is the farm's main agritourism event, he wants to build on that foundation. In the future, he wants to build an education center.

One of Chmiel's proudest moments came in 2009 when, after working with lawmakers, the state designated pawpaw as the native fruit of Ohio.

Integration Acres creates value-added products from pawpaws. Photo credit: Integration Acres

Assistance and Resources Received

Chmiel received support that helped Integration Acres through various stages of its growth:

- 1. A grant from USDA Sustainable Agriculture Research and Education helped develop ideas and products.
- 2. USDA Natural Resources Conservation Service's Environmental Quality Incentives Program helped build fences, develop a forest management plan, and implement conservation practices.
- 3. Ohio's Current Agricultural Use Value program reduces the taxes paid by the farm.
- 4. The USDA's Rural Energy for America Program installed solar panels for the facility, which enables it to be more sustainable and save money.

Appalachian Harvest Herb Hub by Appalachian Sustainable Development

The staff at Appalachian Sustainable Development — whose work spans five states — play a multifaceted role, as they seek to ensure farmers have the knowledge they need to be successful from seed to sale. One recent innovation is the 2017 creation of the Appalachian Harvest Herb Hub, which Agroforestry Program Director Katie Commender describes as a post-harvest facility that enables farmers to process sustainably grown and harvested herbs such as ginseng, black and blue cohosh, bloodroot, and Solomon's seal. Here, farmers and staff can wash, dry, package, and label herbs for wholesale herb companies. Appalachian Sustainable Development (ASD) offers aggregation and marketing services to help herb farmers access wholesale markets collectively.

To support farmers who want to sell directly to smaller retail stores, ASD staff have trained farmers in post-harvest handling and making voucher specimens (a requirement for some buyers to sell). They have also provided training on forest farming practices, identifying plants, site assessment and analysis, and the use of techniques and tools that lead to success. Appalachian Sustainable Development also provides cost-share funding to producers to offset the start up costs of planting stock and certifications like Forest Grown Verification.

Through Appalachian Sustainable Development's extensive work with farmers, they have identified the following lessons:

1. Identify and create what farmers really need to access markets.

Appalachian Sustainable Development says its Herb Hub enables farmers to work more efficiently and, therefore, to earn more. The idea for the facility came from two farmers who were selling to a wholesale buyer interested in purchasing products that were Forest Grown Verified. As pioneers in their first year of forest farming, they were processing herbs in their home kitchen; using a sink, toothbrushes and tabletop dehydrators to get the work done, but it took too much time. That's how the need for the herb hub was born - those farmers now save \$34 per dry pound by using the facility's commercial herb processing equipment to more efficiently process black cohosh roots.

2. Balance supply and demand.

Forest botanicals are non-timber forest products, many of which are vulnerable or at-risk from over-harvesting and habitat loss. Due to these concerns, a growing number of herb companies and consumers are seeking a more sustainable supply of forest botanicals. Demand now far outweighs available supply. In 2016, only one herb company was buying sustainable forest botanicals from Appalachian Sustainable Development; by 2018, there were five buyers. As perennial herbs, many forest botanicals take seven years or more to reach harvestable maturity from seed. This makes it difficult to play catchup with growing demand.



Plants are rinsed during processing at Appalachian Harvest Herb Hub.

While building up cultivated supply, ASD has worked with forest farmers to "wild steward" existing stands of forest botanicals using sustainable harvest techniques, harvest rotations, and other best management practices to encourage plant regeneration.

It will take several years of long-term production planning to catch up with growing demand, but by reducing barriers to forest farming, ASD is building a pathway to a sustainable supply chain for forest botanicals.

3. Create tools that direct people to places that sell fresh, regional food.

Appalachian Sustainable Development created a map tool, called <u>Food Guide</u>. It connects community members to places that support a local food culture, such as farmers, restaurants, bakeries, breweries, and other businesses. This tool gives people a way to connect with producers, while also creating a presence for them.



Plants are prepared for drying at Appalachian Harvest Herb Hub.



Through the Herb Hub, Appalachian Sustainable Development provides equipment for processing medicinal plants for sale.

Photo credits: Appalachian Sustainable Development

Assistance and Resources Received

Some of the support that has enabled Appalachian Sustainable Development to advance its mission:

- 1. A Partnerships for Opportunity and Workforce and Economic Revitalization (POWER) grant from the Appalachian Regional Commission for \$1.5 million was awarded to Appalachian Sustainable Development for a food distribution corridor project. To launch the herb hub, \$60,000 of this grant was used for startup funding.
- Funding from the Virginia Department of Agriculture and Consumer Services supported the group in getting its Good Agricultural Practices certification, as part of a larger Specialty Crop Block Grant, funded by USDA Agriculture Marketing Service.
- 3. The Virginia Department of Agriculture and Consumer Services also provided support through a mini-grant program for Forest Botanical Nurseries to build up the wholesale availability of forest botanical planting stock. This grant is also supporting forest farm site visits, training, aggregation, and marketing assistance.

'Ulu Fruit by Hawai'i 'Ulu Cooperative

The <u>Hawai'i 'Ulu Cooperative</u> was formed in 2016 with a mission to revitalize 'Ulu, a traditional staple, by developing a new industry centered on breadfruit ('ulu Initially, the co-op's work involved aggregation and minimal processing of breadfruit to improve its shelf life for members, says Dana Shapiro, the co-op's project manager. What started as a nine-member co-op now has now grown to 65 members, and its membership increases every month. With this exponential growth, the role of the co-op has expanded to include education and technical assistance, diversification to other crops, and production promotion.

Agroforestry practices are widely used amongst breadfruit growers in Hawaii, and the techniques vary according to the microclimates that exist on the island. This diversity means growers can diversify their income through a variety of crop systems, as well as with poultry. The co-op also provides technical support to help growers adopt agroforestry practices.

The co-op model helped growers expand into new markets, thereby achieving its mission to revitalize breadfruit as a community staple. There were three main lessons gathered from the Hawai'i 'Ulu Cooperative's experience:



Hawai'i 'Ulu Cooperative aggregates breadfruit from many growers.



'Ulu, or breadfruit, is used in a wide range of meals. Photo credits: Hawai'i 'Ulu Cooperative

1. Develop ways to reach larger markets.

About 95 percent of Hawaii's farms are small, making it difficult to supply large volumes. That challenge became critical when upscale restaurants and hotels, looking for authentic Hawaiian foods, wanted more breadfruit. Overcoming that limitation was key to the co-op's success, as it worked with growers to meet the demands from large buyers. The co-op now supplies public schools through its Farm to School programs.

2. Share resources.

The cooperative aggregates and processes breadfruit at the Honalo Processing and Marshalling Facility, leased from the Hawaii Department of Agriculture.

This space is also used by members, further expanding opportunities. Shapiro says there is still a lot of work to be done to further develop the facility; financing new work remains a challenge.

The cooperative also ensures that its own internal standards that are compliant with the Food Safety Modernization Act. For example, the co-op developed a harvest crate system that provides uniformity for its growers. The co-op bought harvest containers in bulk, cleaned and sanitized them, and implemented their use. As the pool of members grows, they plan to look into organic certification in the next three years.

3. Revitalize a traditional staple.

The cooperative was built on the foundation of reintroducing breadfruit to the community. It was once a staple in Hawaiians' diets, but it lost that role after the islands were colonized. According to Shapiro, being able to supply breadfruit to public schools was a big milestone for the co-op. It is being reintroduced into the diet through education; children are learning how to use and eat breadfruit.

Another milestone for the co-op was supplying breadfruit to Kaiser Permanente Moanalua Medical Center for use in patients' meals and the cafeteria menu. By reintroducing breadfruit, the community has a starch that is culturally appropriate and nutritious; breadfruit is known to be low glycemic, gluten free and highly nutritious.



The cooperative minimally processes breadfruit into steamed and frozen products.

Assistance and Resources Received

Developing a new industry is a big task. The Hawai'i 'Ulu Cooperative, achieved progress with the U.S. Department of Agriculture's assistance through several programs:

- 1. USDA Agricultural Marketing Service's Local Food Promotion Program
- 2. USDA Agricultural Marketing Service's Specialty Crop Block Grant
- 3. USDA Agricultural Marketing Service's Farm to School Grant Program
- 4. USDA Rural Development's Value Added Producer Grants

Moving forward, the co-op will use these grants to work with community partners to create resource kits for school teachers, with menus and lesson plans. It will also develop grocery store products, which will expand its reach to consumers. It will require continuous hard work to scale up, while also providing training and technical assistance for growers.

Lessons Learned

Identifying markets that are a good fit for agroforestry products can reduce economic risks and strengthen opportunities. The producers' experiences offer insights to identifying markets for agroforestry products. Five key themes emerged from these producers' stories:

There are Many Routes to Finding a Market for Your Product

Producer experiences indicate that there is no fixed template for identifying and entering markets. Some entered mature markets saturated with competition, while others worked hard to create new markets. Finding a unique spot in a market may require increasing the target audience's awareness and understanding about a product. This can be accomplished by encouraging potential buyers to sample products, through advertising, or creative storytelling. For example, Terry Durham of River Hills Harvest put a lot of effort into educating customers about elderberries and his products; he also spent time educating other growers about planting methods and production tools. Producers need to determine how to best inform buyers of their brand and products.

Customer Experience Matters

Identifying a target market and customers is just a first step in securing an opportunity for sale. For that relationship to develop, producers must pay attention to what customers need, the feedback customers provide, and their experience with the product. Helpful practices can be as simple as creating opportunities for customers to engage with the product or giving updates about the farms where products are grown. Dan Shepherd of Shepherd Farms believes it's important to provide the opportunity for customers to visit his farm and see how his pecans are grown and processed. This helps consumers differentiate his pecans from others in the marketplace.

Diversification Builds Resilience

Producers may work with one product or a range of products, depending on what their land and agroforestry practices provide. Producers can also diversify by developing several value-added products from one crop to build a more diverse offering for buyers. Either approach removes the reliance on one particular product and, in the long run, builds resilience and multiple sources of income. Chris Chmiel of Integration Acres diversified his income streams from his pawpaw production system. His plan to create commercial value for a previously ignored native fruit has evolved into an operation that includes several value-added products marketed through different channels, including a large annual pawpaw festival. One lesson learned from producers is that creativity is often helpful when it comes to marketing.

Build Strategic Partnerships

Often, producers are very focused on what they do best — growing their products. However, marketing a product can require an individual to wear many hats — sales, marketing, and research, to name a few. It is worth looking out for strategic partnerships that can create shared value for producers and their potential partners. Leveraging each other's strengths through collaboration may lead to new opportunities. Partnerships can take various forms, such as research with institutions or collaboration with other brands. River Hills Harvest illustrated this by working with a local university to identify suitable elderberry varieties that would thrive in Missouri. As a result, Terry Durham has launched an entirely new industry, benefiting his farm, as well as the farming community around him.

Seek Relevant Assistance

Sometimes, barriers to expanding markets can include lack of technical expertise or funding. The producers highlighted in this publication shared some of the assistance they sought, and received, at different stages of growth. For Hawai'i 'Ulu Cooperative, a series of U.S. Department of Agriculture grants helped to develop a new industry to revitalize breadfruit. These resources can help producers along the way.

Conclusion

While marketing tree crops and non-timber forest products can be a challenge for producers, there is room for growth and opportunities to expand. Producers need to be strategic in approaching desired markets and reaching their goals. To do so may require thinking outside the box, as demonstrated in these producer case studies. It is crucial for producers to assess options and identify assistance available to support their growth.

Resources and Additional Information

The USDA National Agroforestry Center (NAC) provides information and resources that can support the business and economics of agroforestry. USDA programs can help with producers' and organizations' business planning.

USDA programs related to marketing and value-added production include:

- Agricultural Marketing Service <u>Local Food Promotion Program</u>
- Agricultural Marketing Service Specialty Crop Block Grant
- Food and Nutrition Service Farm to School Grant Program
- Rural Development Value Added Producer Grants
- Rural Development Rural Business Development Grant
- Sustainable Agriculture Research and Education grant programs

The factsheet titled <u>USDA Programs in the Local Food Supply Chain</u> provides information on additional programs that support regional food economies.

USDA National Agroforestry Center publications related to business and economics include:

- Marketing Specialty Forest Products
- Agroforestry Note #45: Developing Consumer and Market Research for Non-Timber Forest Products
- Agroforestry Note #27: Direct Marketing of Agroforestry Products
- Working Trees Information Sheet: Where can edible non-timber forest products be sold?
- Working Trees Information Sheet: What are agroforestry's income opportunities?
- Working Trees Information Sheet: Why add edible and floral plants to riparian forest buffers?
- Working Trees Information Sheet: Can windbreaks do more than slow the wind?

For more information, visit: https://www.fs.usda.gov/nac/topics/business-economics.php

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The USDA National Agroforestry Center (NAC) is a partnership of the Forest Service (Research & Development and State & Private Forestry) and the Natural Resources Conservation Service. NAC's purpose is to accelerate the development and application of agroforestry technologies to attain more economically, environmentally, and socially sustainable land use systems by working with a national network of partners and cooperators to conduct research develop technologies and tools, establish demonstrations, and provide useful information to natural resource professionals.

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