Considerations for Adding Value to Agricultural Products in Maine

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Farmers are very effective in growing raw produce including fruits, vegetables, tubers, herbs, grains, meats, eggs, or milk. These products are usually sold directly to consumers by the farmer at roadside stands, farmers markets, or through a community supported agriculture model (CSA). Depending on the product, many farmers also sell raw products to other sellers such as other farmers or growers, local grocery stores, restaurants, caterers, schools, colleges, nursing homes, or hospitals.

Is the selling of raw products the best way to generate a consistent income for the farmer? Are there income gaps in the calendar year when raw product is not available? Are there enough customers to purchase all the raw products a farmer plans to produce? Would adding value to raw products through some level of processing be beneficial to the farm business? The purpose of this fact sheet is to outline the challenges and benefits of adding value to food products so that farmers considering this type of enterprise might make the wisest business decision to fit their situation.

Starting and operating a value-added enterprise is not for everyone. Your knowledge, skills, experience, support, available time and financial situation will determine if next steps should be taken to add value to a specific farm food produc
Challenges to Adding Value to Farm Products

Several challenges exist in adding value to farm products. Some may be more limiting than others. Ignoring a challenge could be detrimental to achieving success. Consider each challenge listed and seriously think about how it could be addressed effectively.

- **Risk**—A certain amount of risk is assumed when adding a value-added product or enterprise to the farm. Your farm business may lose money if the value-added enterprise flounders or fails. Also, any time a product is processed in some way (even if it’s as simple as peeling or cutting), it creates an opportunity for introduction of pathogens that could lead to foodborne illness.

- **Time**—Adding value to products takes time. Time is essential for actions such as washing, peeling, cutting, cooking, freezing, bottling, or bagging. In addition, marketing, record keeping and management of a value-added product take a considerable amount of time.

- **Management**—In some situations additional management will be necessary. You may not be available to manage advanced processes, distribution, sales, and/or marketing of a new product or to new set of customers.

- **Labor**—Adding value takes labor. One or more workers are needed to process and to manage the processing of raw products. Workers will likely need to be properly trained for product processing such as equipment operation, product handling, food safety, and more. Employees will need to be paid for their work, knowledge, and skills.

- **Equipment**—Adding value usually means the purchase of specific equipment. This equipment needs to be purchased or rented as well as maintained, repaired, and operated. Besides the equipment needed for direct processing, a forklift or truck to move or transport product may also be necessary depending on the product or the situation.

- **Energy**—Adding value usually requires extra energy. Energy such as electricity, propane, wood, or oil may need to be purchased to run the equipment or heat or refrigerate the facility. In some situations, 3-phase electricity may be required to run the equipment.

- **Water**—Adding value typically requires the need to wash products with fresh, potable water. The source of water must be of the proper quantity and quality. An extra (or deeper) well or other water source might be required. If city water is used, payment for water will be required. Regular water testing will also likely be necessary.

- **Waste**—With any process, waste will likely be generated. Wastes may include organic materials from your product, wash water, debris, and shipping packaging. The proper disposal of these wastes from processing will need to be considered. Disposal of waste usually has a cost associated with it.

- **Packaging**—Adding value to products usually means the purchase and use of packaging or containers such as jars, bottles, boxes, totes, bags, or wraps. These items need to be comprised of proper (food-safe) materials. Specific types and sizes of these containers may be essential for packing, stacking, and storage.
• **Labeling**—Depending on where you market your value-added products, you may be required to have very specific labels that include a barcode, a list of ingredients, and contact information for traceability. Designing and printing these labels is an added cost.

• **Processing Space**—Adding value to a product usually means that space for processing (washing, peeling, cutting, steaming, cooking, etc.) will be required. You may already have suitable space for processing to take place, but often improvements to the space may be necessary for food safety or other codes. Renting commercial space for processing (off the farm) may be an option.

• **Financial Capital**—Starting a value-added enterprise requires increased financial capital to purchase or lease a facility and equipment, hire new employees, purchase additional inventory, provide working capital, etc. It’s not unusual for start-up costs for a value-added enterprise to exceed $50,000.

• **Extending Credit**—Selling value-added products through new channels may require selling on account which adversely impacts cash flow and introduces another management task.

• **Storage Space**—Adding value to a product usually means that storage space is required. Storage could include freezers, refrigeration, or dry storage that should not go below a certain temperature. If suitable space is not available on the farm, renting space for storage (off the farm) may be an option.

• **Competition**—A valued-added product from your farm will likely compete for sales and value with many other products in the marketplace. Realize that the competition may be better positioned than you in all phases (start-up, capitalization, production, maintenance, marketing, and/or expansion).

• **Product Liability**—Additional product liability insurance will likely be needed to minimize risks for value-added products from your farm.

• **Distribution**—Distributing a value-added product will likely require concepts such as logistics, cost, quality control, and shelf life.

• **Intellectual Property**—A patent, a trademark or a service mark may be needed for your product. This action protects the process or product that you have created so that others don’t immediately copy the idea.

• **Regulations**—Adding value usually means that state or federal regulations need to be followed. This means that the proper licensing or certifications of the farm, commercial kitchen, personnel, or facility are obtained and maintained. In addition, the labels for specific product packaging may need to meet certain specifications. Inspections of facilities may be a requirement. Proper record keeping will also be necessary as a part of meeting regulations.

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**Benefits of Adding Value to Farm Products**

The list of benefits is shorter than the challenges. However, one or more these benefits may be the force/reason for the decision to have a value-added product.

• **Cash Flow**—Adding value to one or more farm products can improve cash flow in the months of the year when sales of raw products are decreasing or don’t exist. Raw products from farms are typically sold during the growing season and have limited shelf life. While some raw products such as apples, potatoes and winter squash are “good keepers,” a value-added product that is canned, cooked, frozen, or processed in some way usually has a
longer shelf life than the raw product. An extended shelf life usually means you will have more time to identify buyers, make sales, and satisfy buyers.

- **Price/Pound**—Adding value to a raw product usually results in an increase in the selling price per pound (or price per unit) of the product. This increase could improve your bottom line.

- **New Markets**—A value-added product could generate one or more new markets for your product. Added markets could improve farm recognition, product recognition, and farm income. These new markets could be in state, across state lines, or international.

- **Competition**—Although viewed as a challenge, competition can also be an important reason for creating a value-added product as a way to outperform the competition and sell more of your product.

- **Workforce**—Having one or more value-added products can help to maintain a trusted and reliable workforce. One major purpose of employing individuals is to make money for the business and it is costly to hire and train new employees. Keeping farm workers employed on a full-time or part-time basis throughout the year may be an effective way to keep good employees. Maintaining a consistent and effective workforce is good business.

- **Family & Transition**—Adding value to one or more farm products as an added enterprise to the farm business may provide a way to have family members (spouse, children, grandchildren, or other relatives) employed and involved in the farm. This involvement could be instrumental in transitioning the farm to the next generation or others.

- **Facility Rental**—Once a processing facility is up and running, you could have the option of renting your facility to others as a way to generate additional income. This could happen on days (or nights) when the facility is unused.

**Steps to adding value to one or more farm products**

1. **Create an Outstanding Product**—Develop a unique high-quality product that is differentiated from the competition, meets a growing consumer need in the marketplace and is likely to sell. Develop a prototype of your product. Test market the product and collect consumer feedback. Make product refinements based on this feedback.

2. **Do your homework**—Determine if a market exists for your proposed value-added product and the strength and reliability of this market. Consider all the aspects of adding value such as your ability to produce (or purchase) adequate quantity and quality of raw product. Identify possible products and fully research them online. What are all the points you need to consider in adding value to a specific product? Who will be your customers? How will you reach them? What prices will you charge? How many products are you likely to sell each week, month and year? Who are your top competitors? What distinguishes your product(s) from the competition?

3. **Push a pencil**—Consider the business aspects of this possibility. Consider every phase of the operation when it comes to adding value to a product and where investments need to be made (money spent). Make decisions based on your business records and a solid understanding of the current financial condition of your farm business. Calculate an estimated break-even point. How many units will need to be sold to break even? Is this amount of units feasible and reasonable?

4. **Talk to others**—Consider talking to farmers in your own state and other states to learn how they added value to their products. Why were they successful? What were their failures? What advice do they have for you? Consider proposing your value-added idea to
an Extension educator, business advisor or consultant. When doing so, demand confidentiality.

5. **Modify Your Business Plan**—Make adjustments to your current farm’s business plan. Have a lender or business advisor review your plan to determine its feasibility. Your business plan will be your “roadmap” to success. Use real world facts and figures in developing your plan. Failures or weaknesses in a paper plan are much easier to handle than mistakes made with cash.

6. **Checklist**—Assemble a checklist of actions or needs for the proposed value-added product(s). Your checklist should include all aspects of the timeline such as identifying the raw product to which you intend to add value, conducting market research to determine the feasibility of the proposed value-added enterprise, developing a product recipe, licensing requirements, food safety regulations, growing of the product, equipment needs, water needs, labor needs, energy needs, facility needs, automation, storage, sales, and more. Include an exit plan in your checklist.

**The Maine Food Testing Service**

The University of Maine Cooperative Extension's Food Testing Service offers a team approach to provide food-testing services and specializes in working with small and start-up food businesses. While the service’s primary mission is to support Maine food businesses, it also works with businesses across the U.S. and is a recognized process by the Food & Drug Administration (FDA).

The testing service process involves submission of your batch recipe, processing methods, and one container of the product you wish to produce.

**Additional Resources**

- Maine Food Testing Services - [https://extension.umaine.edu/food-health/food-safety/services/](https://extension.umaine.edu/food-health/food-safety/services/)
- Keys to Success in Value-Added Agriculture (ATTRA Publication) [https://attra.ncat.org/viewhtml/?id=271](https://attra.ncat.org/viewhtml/?id=271)
- Value-Added Products (University of Maryland Extension Publication) [https://extension.umd.edu/agmarketing/value-added-products](https://extension.umd.edu/agmarketing/value-added-products)
- Resources for Food Entrepreneurs (University of Maine Cooperative Extension Website) [https://extension.umaine.edu/business/specialty-foods/](https://extension.umaine.edu/business/specialty-foods/)

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