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Sustaining agricultural producers through direct marketing of processed foods

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Sustaining agricultural producers through direct marketing of processed foods

Abstract

Farmers who want to grow specialty crops need to cultivate different marketing skills. They also need information about the profitability of producing raw foods and processed products.

Keywords

Business management distribution and marketing, Community-based food systems, Market research and feasibility studies

Disciplines

Agribusiness | Business Administration, Management, and Operations | Marketing



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Sustaining agricultural producers through direct marketing of processed foods

Abstract: Farmers who want to grow specialty crops need to cultivate different marketing skills. They also need information about the profitability of producing raw foods and processed products.

Question & Answer

Q: What are the possibilities for growing specialty food crops in Iowa?

A: Both raw and frozen produce have the potential to be profitable and ISU Extension fact sheets are available to help with decision making.

Background

Many agricultural producers would like to look beyond commodity crops toward food crops to maintain profitable farming operations. Specialty crops, however, require a different set of marketing skills that center on creating demand, differentiating products, and growing products to meet buyers' specifications. Initial studies have been conducted to determine the purchasing traits of various buyers, which allow potential food producers to see what they must do to meet the expectations of potential buyers.

This education and demonstration project in northeast Iowa posed two questions that need to be answered before farmers invest time and money shifting to food crop production.

- What is the potential demand for various processed food products?
- How profitable are the various raw and processed food products?

Approach and methods

To answer the question about potential demand, face-to-face interviews were conducted with a sample group of hospitals, nursing homes, and other large food buyers in northeast Iowa. The questions focused on processed products rather than raw produce. For the institutional buying segment of the study, survey data was collected by Kamyar Enshayan in 2002 from 16 Waterloo, Iowa, dining institutions. The survey was developed to gauge need for and commitment to buying locally grown and processed produce.

Raw produce was purchased from area growers and processed in a licensed kitchen facility as part of Project Freeze. Jill Weber recorded expenses incurred as the produce was converted from a raw to a frozen product. Expenses were categorized and processing budgets were developed.

Three central Iowa farmers kept records relating to their time and inputs purchased to grow a variety of herbs and produce. Fourteen production budgets were developed detailing cost and returns.

Results and discussion

Institutional buyers. The interviews with 16 institutions dealt with demand for lightly processed food products and focused on food packaging and handling specifications, timing of products, and general acceptance/barriers for

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Budget:
\$13,465 for three years

locally processed products. Of the 16 institutions contacted, five said they did not use frozen produce. The remaining institutions that purchase frozen produce would be interested in locally grown and processed fruits and vegetables if they were readily available. Two respondents noted that prices needed to be comparable to existing frozen food products.

The top six produce items that might be purchased frozen were corn, strawberries, green beans, asparagus, peas, and spinach. Preferences for package sizes varied with the institution. Most institutions preferred that vegetables be pre-cut and fruits be sliced.

Buyers answered questions about the quantities of each item that were currently used and the prices being paid. Eight of the 11 food buyers felt that using fresh and lightly processed locally grown produce would increase their business or customer satisfaction because of taste. Six of the 11 food buyers said they would be willing to pay more for locally grown and processed items, but they stressed that the quality of the product needed to be high.

Everyone in the group was interested in marketing assistance touting the sales or use of locally grown/processed food items. Items cited as desirable marketing tools included signage, newspaper articles, fliers, and bulletins.

Project Freeze. The demonstration component showed how to extend the season for fresh produce through light processing and freezing. Processing budgets were completed for these seven frozen products: strawberries, strawberry jam, sliced green beans, cut corn, corn (cobettes), sliced apples, and apple puree. Processed products were sold to local restaurants and institutions such as nursing homes. The final two years of Project Freeze focused on strawberries and sweet corn, the two products in which buyers showed the most interest.

The state of Iowa requires that processing be done in a licensed kitchen using an approved procedure for converting raw produce to a processed product. A food processing manager has to be on-site during the processing. Jill Weber received the necessary certification in food processing and worked with the Iowa Inspection and Appeals Department to obtain a processing license for St. Patrick's Church in Cedar Falls.

Converting raw produce to a frozen product is labor intensive. In this case, volunteer labor from the local food bank and St. Patrick's Church was used. The number of volunteers varied by the type of product being processed and the number of hours worked by each volunteer, but the total number of volunteers could be 20 or more. The organizations represented by the volunteers then received a share of the processed product based on the number of volunteer hours that were contributed.

Preliminary findings indicated that some products were significantly more profitable than others. Items that required additional processing (jams, jellies, purees) were more profitable than products that merely were frozen. Specialty products such as corn cobettes were more likely to yield a profit than cut corn due to the intended use of the product. Moreover, profits are affected by the assumptions made regarding value placed upon the product used, rental value of the facility, wage rate of labor, and expected retail price of the product. An ISU Extension publication will be developed to outline some general budgets and potential management considerations when processing produce.

Production budgets. Fourteen production budgets were developed over several years with the help of three current vegetable producers who are experienced operators of Community Supported Agriculture (CSA) businesses. The crop budgets included asparagus, basil, carrots, cherry tomatoes, eggplant, garlic, green beans, greens, potatoes, red raspberries, snow peas, strawberries, sweet potatoes, and tomatoes. Each budget was reviewed by all three producers to verify that the numbers were realistic and representative of small farm vegetable production.

Returns vary annually depending on yields. Prices for produce remained relatively constant for producers. Returns did vary considerably by product. Tomatoes offered good returns for investment by the grower, while crops such as carrots, eggplant, garlic, specialty green beans and potatoes had lower prices and/or yields and higher labor requirements. Extension bulletins to be developed on these production budgets will a) outline the various budgets and present management considerations, and b) describe ways of using budgets for decision making.

Conclusions

Three components of food production and marketing were analyzed. Kamyar Enshayan, through his survey, found that there is interest in and demand for fresh frozen products in the Waterloo area. Corn and strawberries were mentioned most often by buyers, who indicated they were willing to pay more for local products if the quality was higher.

Jill Weber has been trained in food processing techniques and the procedure for registering a licensed kitchen. She has experience working with volunteers and determining how a crop share of frozen products may work to reduce cash outlays for the facility and labor. Freezing products for future sale can return additional dollars above the cost of production. The amount of return depends largely upon the market price of the frozen product.

Growing vegetables, herbs, and fruit can be profitable. Net returns vary by product, but average \$70 to \$80 per 100' by 4' bed. With 80 plant beds per acre, net returns would average around \$5,000 per acre.

Impact of results

The buyer survey clearly indicates the interest and willingness to purchase locally grown products. The preliminary budget data show that producing raw and frozen produce

can be profitable. This budget information needs to be published and included in future outreach programs from ISU Extension and other agencies. The budgets also should be incorporated into decision making models and whole farm systems, and compared to more conventional farming systems.

There is an ISU Extension fact sheet available with the budgets. Look for it at <http://www.extension.iastate.edu/Publications/pm2017.pdf>.

Education and outreach

Craig Chase made eight presentations that used the preliminary production budget data developed by this project. Topics for the presentations included alternative markets, direct marketing of vegetable, marketing and product mix, and budgeting and decision making. Approximately 160 people attended the presentations. Several newspaper articles in eastern Iowa have described the Project Freeze components of the study.

Leveraged funds

No additional funds were received.

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