Niche markets in the agricultural enterprise mix: Farm profit optimization and risk analysis

Abstract: An existing MS Excel computer-based program (FARMOR) was further developed and enhanced to assist niche market producers in making appropriate and profitable choices for their enterprises.

What was done and why?
Adding value to a commodity by qualifying it for a niche or specialty market can be a good way to improve market price, but it often requires extra effort, expense and risk taking. This project supported the development of a MS Excel-based linear programming and budgeting program to help producers compare the limitations and benefits of incorporating a natural, organic, grass-fed or other enterprise into their array of potential commercial enterprises.

The project objectives were to:
1. Produce a computer-based interactive optimization program to be used by and to educate clients of the ISU Beginning Farmer Center about the risks and benefits of niche markets.
2. Make available to beginning and existing producers, an interactive application that assists in the discovery of a profit-maximizing set of niche and traditional enterprises, while adhering to resource limitations and constraints.
3. Educate producers with an interest in producing niche market commodities about the associated risks with customizable simulation and risk analysis.
4. Provide producers with examples of risks related to scenario operations typically found in Iowa with niche and traditional enterprises in their business plan.

What did we learn?
The program used by this project is the Farm Optimization and Risk program for niche commodities or FARMOR-Niche. Producers and researchers used the program to determine the best allocation of limited resources such as land, labor, and capital to maximize profitability. The program also identified limiting factors and reported the potential improvement in profitability if a limitation were relaxed. Several example case studies were developed with actual Iowa producers in mind.