Web-based interactive decision model for determining economic feasibility of growing grapes and establishing a small winery for wine and grape juice

Mary Holz-Clause  
*Iowa State University*, mclause@iastate.edu

Craig Tordsen  
*Iowa State University*, ctordsen@iastate.edu

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Abstract
Farmers and entrepreneurs interested in growing grapes and producing wine receive a realistic picture of the process and what it takes to be successful by using these web-based decision-making tools.

Keywords
Business management distribution and marketing, Grapes wine and viticulture, Models and assessment tools

Disciplines
Agribusiness | Business Administration, Management, and Operations | Horticulture | Marketing | Viticulture and Oenology

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Web-based interactive decision model for determining economic feasibility of growing grapes and establishing a small winery for wine and grape juice

Abstract: Farmers and entrepreneurs interested in growing grapes and producing wine receive a realistic picture of the process and what it takes to be successful by using these web-based decision-making tools.

Question & Answer

Q: What information could be helpful to potential producers of grapes and wine?

A: The results of this project (the video and the spreadsheets) offer grape and wine producers background information about how to market grapes and wine, what it costs to produce and sell and other important considerations.

Background

Grape growing and wine making have become popular agricultural alternatives for existing and potential Iowa farmers. The goal of the project was to provide would-be growers and vintners with factual, accessible tools to help them decide if these were viable options for their farm operations. The project investigators researched the industry and worked with experts to develop a series of web-based decision-making tools to help these farmers. The materials were offered as part of several outreach programs and now are posted on the web site of the Agricultural Marketing Resource Center (AgMRC) at www.agmrc.org/agmrc/commodity/fruits/wine.

Collaboration

In addition to the project investigators and ISU Extension Value Added Agriculture program staff, other ISU faculty and staff helped create the video presentations and the spreadsheet publications. Paul Domoto and Gail Nonnecke and their graduate students in the horticulture department worked on the financial spreadsheets. Dr. Murli Dharmadhikari provided expertise on the last video. The ISU IDEA (Information Development ~ Expanding Awareness) Program and ISU Extension Marketing and Management Services assisted with the video production.

Grape and Wine Industry Videos

Four videos cover important topics for farmers who are considering grape and wine ventures.

The Total Wine Package: Exploring the Opportunity
This nine-minute video offers a basic look at the grape and wine industry, as well as exploring some of the myths and realities of the wine business. Growing grapes and making wine require persistence, patience, passion and money.

The Total Wine Package: Behind the Scenes
Creating a good bottle of wine is both an art and a science. The five-minute video examines the resources and assistance available to viticulturists and vintners.

The Total Wine Package: Growing the Business, Selling the Package
Planning a marketing strategy is the focus of this nine-minute video on developing a Midwestern winery business. Footage shows how to make the winery stand out, and enhance unique selling aspects.

The Total Wine Package: Frequently Asked Questions
A typical Iowa couple is shown pondering how to get started in the wine business and what resources are available to them.

Principal Investigator:
Mary Holz-Clause

Co-investigator:
Craig Tordsen
Value Added Agriculture Program
Iowa State University Extension
Iowa State University

Budget:
$20,000 for year one
$20,000 for year two
available. In the 15-minute video, the couple learns about grape varieties, costs of production, where to site the vineyards and winery, and other key business development issues.

The streaming videos are available for viewing at http://www.agmrc.org/agmrc/commodity/fruits/wine/winevideo.htm

Financial Planning Tools

Two Excel workbooks were created to help farmers generate a cash flow analysis for vineyards and wineries. They can be found on the web at http://www.agmrc.org/agmrc/commodity/fruits/wine/wineryfeasibility.htm

Vineyard Establishment and Production Cost per Acre

This workbook is designed to report all income and expenses of a one-acre vineyard for up to 13 years. There are three different vineyard workbooks, each for a different trellis style, showing realistic data based on the trellis style chosen. Each trellis does the same thing, but there are different costs associated with each style. Labor costs can include overhead costs such as insurance, taxes and vacation costs for up to six different job skills. Machine costs are based on horsepower, fuel expenses, and rental value. Interest expense is calculated for each year’s expenses as well as carryover debt, up to the point when income repays all past expenses. Printed reports are available for all years, along with a summary report.

Ten-Year Winery Financial Planning Workbook

Suitable for use by any size of winery, the program offers flexible options for sources of capital, equipment, marketing, staffing, fixed and variable expenses, and sales projections. The program allows up to three term loans. Income source is the average price per bottle of wine sold with three possible options for selling wine; in the winery, retail, or wholesale. Gift shop income also is included. Reports include asset and depreciation schedule, a two-year monthly cash flow, a ten-year cash flow, income statements, and balance sheets with a percentage analysis.

Impact of results

As a result of the work that went into developing the videos and workbooks, ISU experts and others have gained greater knowledge of the financial and marketing aspects of Midwest grape and wine growing. This knowledge base will continue to have a beneficial impact on agricultural diversity and successful business creation in Iowa. The Value Added Ag Program continues to demonstrate the videos and workbooks at extension meetings, industry conferences, and through winery tasting rooms.

The effect of the videos and workbooks on the public is hard to judge. But there are data indicating the work has been warmly received across the country and especially here in Iowa. Data collected from the Iowa Department of Commerce Alcoholic Beverages Division reports that the number of wineries in Iowa has increased from 13 in June 2001 to 55 at the end of 2005. Extension staff tracking the number of vineyards have seen numbers increase from under 20 in the 1990s to more than 300 today.

Additional survey work is being planned to answer the question “Are we addressing the needs of the grape growing and wine making clients?” This survey work will be completed by the fall of 2006 and is part of other information being collected for ISU Agriculture and Natural Resource Extension.

Comments received concerning the workbooks from industry leaders and new startup investors have been very supportive.

This is AMAZING — kudos, kudos. - Ohio Wine Producers Association
Just took a quick look at your new resources. Wow! I am very impressed. -Michigan Department of Agriculture
Howdy ISU extension! Just wanted to let you all know what an absolute treasure this Winery Financial planning workbook is... I have been making wine and building/upgrading wineries for 27 years and this is one of the most comprehensive, functional tools I have ever seen. Kudos to you’all. -Brutocao Cellars, Hopeland, CA
We are very pleased to find a copy of your planning spreadsheet. You have done our industry a tremendous service by making this knowledge public. -Historic Hopewell Vineyards & Secretary Pennsylvania Association of Winegrowers
Thanks for the workbooks. I was in the process of creating my own and you have saved me a great deal of work. - Platteville, WI
I have been using your spreadsheet to put together our business plan for a winery. It is a very good spreadsheet and has been very helpful.
I am retiring after 35 years as an attorney here in California. My brother and I plan to start a vineyard and build a winery on our family farm near Ottumwa, IA. Your workbooks have been a great tool to help us plan the business.

Education and outreach

Nearly 140 copies of the Total Wine Package video were distributed in early 2005 to the ISU Extension network, industry leaders, and farmers in Iowa and surrounding states. The AgMRC web site registered more than 3,772 viewers of the package from Feb. 2005 to April 2006.
ISU Extension staff presented the video at several wine and grape conferences where more than 2,000 people were able to view it. Among these events were the Midwest Grape and Wine Growers Conference in Missouri, the Iowa Wine and Grape Growers Association Annual Conference, and the Sustainable Agriculture Resource and Education and American Farm Bureau Federation conferences, both held in North Carolina.

The AgMRC web site registered, in the last six months, 4,177 viewers of the Winery and 1,951 viewers of the vineyard workbooks. Additionally, over 10 other state grape and wine associations in the United States offer links to the workbook sites on AgMRC.

Leveraged funds

Two grants have been applied for which will directly leverage the wine videos and spreadsheets. The first is a grant applied for through the Risk Management Agency for $290,090, entitled Fields of Success: Planning for Agricultural Profitability. The grant proposed is a series of workshops in Iowa and across the U.S. that will feature opportunities in niche and specialty markets. One of the niche markets which will be featured is the wine industry.

The one grant applied for is a grant through the Federal-State Marketing Improvement Program Transportation and Marketing Programs entitled Expanding on-farm product sales through agri-tourism. One of the areas that will be featured in the workshops, development of tools and web learning will be the wine videos and spreadsheets. The grant, if funded, will be $95,000.

The other major activity that is currently leveraging the work funded by the Leopold Center is the posting of the spreadsheets and videos on the Agriculture Marketing Resource Center (AgMRC) web page. This project funded in part by the USDA Rural Development has a significant number of visitors. AgMRC averages more than 2.5 million hits per month, so the leveraging of this project with AgMRC provides a very broad distribution of viewership for this tool.

A third grant application is in process with the Risk Management Agency for $150,000, entitled Risk Management Tools and Educational Outreach to the Grape and Wine Industry in Iowa, Minnesota and Wisconsin. The grant proposes to provide a number of risk management tools in the areas of agronomic production, wine manufacture, business management and marketing.