Midwest Elderberry Cooperative

Feasibility Study

Assessing Market Opportunities and Commercial Applications for Certified Organic Operations

January, 2017



About this Feasibility Study

Midwest Elderberry Cooperative

http://www.midwest-elderberry.coop/

The Midwest Elderberry Cooperative (MEC) was formed in 2012 to be the vehicle by which small farmers could work together to determine the feasibility of wide-scale production of elderberries in the state and region, for subsequent cooperative processing and marketing of value-added juices, wines and concentrates.

Cooperative Development Services

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Since 1985, Cooperative Development Services has helped existing cooperatives retain their vitality and plan for future growth opportunities. CDS also actively engages with new cooperatives and organizations operating in a cooperative manner to launch new business ventures and plan for long-term viability.

Funding for this Feasibility Study Provided By:



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Table of Contents

Feasibility Process	1
Executive Summary	3
Technical Feasibility	6
Organic Production	8
Organic Processing	10
Freeze Drying	12
Rotary Convection	13
Liquified Frozen	20
Market Feasibility	27
National Market	27
Regional Market	37
Competition	41
Financial Feasibility	46
Management Feasibility	50
Appendix	51

Feasibility Process

This study assessed the feasibility of Midwest Elderberry Cooperative (MEC) to engage in certified organic production for the intent of producing certified organic value-added elderberry products. This study follows a prior Feasibility Study and subsequent Business Plan which confirmed market attributes, production scales, and financial outcomes leading to the formation of a producer-owned cooperative enterprise. This feasibility study seeks to address:

- organic elderberry production issues;
- organic elderberry market dynamics;
- organic elderberry processing requirements; and
- financial feasibility of commercializing organic protocols throughout the elderberry value-chain.

Methodology

This feasibility study was conducted by Cooperative Development Services (CDS) based on prior experience in feasibility analysis of agricultural and rural businesses, with particular experience with cooperative businesses. Staff employee Robert Olson was the lead consultant. The scope of the study was a comprehensive look at certified organic operating elements of MEC. The study is conducted according to USDA-RD 4279-B titled "A Guide for Completion of Feasibility Studies." This standard breaks the study into four sections:

- 1) Technical Feasibility
- 2) Market Feasibility
- 3) Financial Feasibility
- 4) Management Feasibility

CDS reviewed MEC planning documents and financials for completeness and relevance to the proposed certified organic business enterprise. CDS also conducted independent research within each of the study sections and spent time with key management and board members of MEC. The study process included specific questions, information and document requests to MEC management. At that stage, the process became iterative and MEC management was extremely forthcoming and responsive. CDS assessed competitive aspects of the proposed organic business sector and risks to success on several levels.

In this sort of study, with MEC operations still in an early stage, CDS must offer judgments based on the cooperative's limited history of aggregating/processing elderberries. We utilize the prior feasibility study and business plan authored by CDS as a benchmark for current operations and rely on market projections and financial proformas to assess likelihood of future success. Since circumstances and execution within emerging circumstances will affect the success of the cooperative, judgments made in this report are designed to support decisions by board members, creditors or related agencies. This report is therefore not predictive in nature.

CDS collected, reviewed and analyzed a significant amount of information to develop the feasibility of the proposed organic business venture. Objective data is included in the body of the report or appendix. Analysis of this data is well within the capacity of CDS. Although significant efforts are extended to ensure accuracy of information, it cannot be guaranteed. However, CDS believes when analyzed as a whole, the data allows for a justifiable conclusion. Source references are cited within the report narratives in an informal manner with every effort made to attribute data originating outside CDS resources. Mistakes in citing, if any, are unintentional.

Executive Summary

Midwest Elderberry Cooperative (MEC), a Minnesota Statute 308B cooperative formed in 2012 with 4 members, has a current membership base of 20+ independent producers who engaged in elderberry commerce for the first time following the 2015 growing season. This initial foray into commercial aggregation, processing, and freezing of de-stemmed elderberries was motivated by the group's initial exploration of options which led to a Feasibility Study and subsequent Business Plan.

Motivated by the Feasibility Studies' positive technical, market, and financial implications for an elderberry cooperative, the initial steering committee of 4 independent producers has grown to its' current 20+, with an additional group of Affiliate member- growers (non-Minnesota members) in the beginning stages of elderberry production. Virtually every current grower/member and every Affiliate member has expressed a keen interest in pursuing certified organic production methods which fit well within their personal aspirations and which correspond well to elderberries' appeal as a healthy, nutritious superfruit.

Through interactions with a leading US-based national importer of natural and organic products, it became apparent that a quantifiable market for certified organic elderberry products currently exists (mostly for dried elderberries and some dried elderflower formats). This organic market, estimated at approximately 80,000 pounds/year dry weight, is virtually 100% imported from Bulgaria. Converting to fresh weight (approximately 800,000 pounds), this single market would represent approximately 133 acres of mature (6,000 pound/acre) elderberries with a frozen value of \$1.6M/year. While the importer does not aspire to replace all of their Bulgarian imports, they feel it prudent to groom another supplier as a risk-mitigating strategy as well as to supplant their existing supply to serve their rapidly expanding market.

This report assesses the realities of certified organic production and processing, and assesses the regional and national organic elderberry market dynamics as a guide to cooperative members' seeking third party validation of assumptions. Overall findings include:

• The economic impact of the coop's proposed certified organic production and processing enterprise is positive. With the cooperative maintaining sales prices of \$3/pound for conventional destemmed, frozen elderberries, the economic value of the product will reach approximately \$750,000/year when the cooperative reaches its' intermediate target of 250,000 pounds (2016 aggregation is approximately 80,000 pounds). With the cooperative gaining a certified organic premium of \$0.50/pound (16.6% premium), the economic value raises to \$875,000/year when 250,000 pounds are processed.

- Small, commercial scale organic elderberry production is attainable. While MEC members currently have very limited certified organic elderberry acreage, virtually 100% of current production (approximately 80,000 pounds or approximately 13.3 acres; 60,000 pounds of this supply or approximately 10 acres is 'transitional organic') is farmed using organic principles. While this study identifies two major organic production issues (use of plastic mulches in organic systems; control of spotted wing drosophila), based on grower interviews it is CDS' opinion that certified organic production is attainable for farms at a scale of 20 acres or more.
- Commercial toll processing services are not cost effective for MEC MEC currently processes approximately 80,000 pounds of conventional elderberries (including approximately 60,000 pounds of 'transitional organic'). Large scale certified organic toll processors exist throughout the Midwest, including processors of elderberries. While commercial organic processing facilities exist, they appear too costly for MEC's current or intermediate-range needs.
- Small, commercial scale organic elderberry processing is attainable. Small scale mobile and/or fixed processing technologies have become technically proven and affordable to own/operate.
- Growth of certified organic foods' market share bodes well for certified organic elderberry products. As health and wellness becomes an increasingly mainstream trend with consumers, living a healthy lifestyle supported by natural/organic products continues to be important to US consumers. Health and wellness are core tenants of elderberry products; adding a certified organic label enhances this health/wellness claim. In the US, volume sales of products with an organic claim on the package grew 13.1% over the 52 weeks ending July 30, 2016. Sales of certified organic berries generated \$459 million for the 12 months ending October, 2016.
- Processing and marketing certified organic elderberry products (frozen and air-dried) can be a profitable venture for MEC. Frozen elderberries (25 pound pails) capture a \$0.50/pound premium over conventional berries with little or no additional processing cost.
- To be profitable, MEC must groom new markets for dried organic elderberry products. While this study has identified existing market demand exceeding 100,000 pounds/year of freeze-dried certified organic elderberries, MEC will be unable to capture portions of this market. With current markets supplied by low-cost imported products (\$4/pound for bulk,

thermal-dried organic elderberries), MEC cannot expect to capture any of this market...

• The MEC board of directors is committed and enthusiastic. MEC currently operates with extensive in-kind support from board members. At this early stage of operations, volunteer management is appropriate. As the business grows, however, the coop should plan to hire a part-time general manager. Primary leadership is provided by Chris Patton, MEC's founder. While Chris' leadership and volunteer efforts are highly commendable, MEC should establish a formal chain of command and emergency operating procedures to ensure continuation of the business.

In summary, CDS believes MEC's intent to formalize a certified organic enterprise for frozen and further-processed elderberries meets conditions of feasibility.