Progress in the Commercial Production of American Elderberry



Christopher J. Patton, MA, MBA
President, Midwest Elderberry Cooperative
https://www.midwest-elderberry.coop
June 2024

The Big Vision

- Decentralized Regional Processing Hubs
 - Grower participation in more of the value chain
 - Chosen production varies by farmer resources & choice
- Commercial volumes = repeat buyers @ competitive prices
- Commercial Competition: imported S. nigra, mostly European
 - European IQF elderberries for \$3.00+ lb. (FOB east coast)
 - Annual contracts, pourable totes instead of frozen blocks
 - Powders & concentrate from frozen berries & juice
- > Decentralization helps with distribution logistics & total price



Most of us today

Small operations are successful



Some of us are better

Still not high volume commercial scale

Market Forces

Affect Farmer Revenues

- Strong demand for elderberry remains
 - Consumer trend for local and healthy foods
 - River Hills Harvest & others' presence in the marketplace developed American Elderberry awareness and demonstrated potential growth
 - Big companies use low price, imported elderberry ingredients
- > Imports affect type/form of ingredients desired & local prices
 - High labor inputs due to hand harvest and machine assisted processing
 - Dependable supply, year after year required
 - Imports set volume buyer price expectations
 - Buyer production lines designed for specific ingredient formats
 - High volume, pourable Individually Quick Frozen (IQF) berries

MEC's Network

- > Funding & Growth Partners Renewing the Countryside MN/WI
 - ~ The Walton Family Foundation time & expenses
 - ~ Food Investment Institute, Savannah Institute WI
 - ~ UMN Forever Green Initiative education & market development
 - ~ Elderberry, aronia berry and black currant farmers
- Berry Ingredient / MEC Business Plan
 - ~ Individually Quick Frozen Processing any small fruit
 - Whole berry, juice & pomace powders and concentrate
 - ~ Copacker partner is Arise Nutrition, LLC in WI
- > MEC website currently being re-designed to grow brokered sales

Continuous Living Cover Market Development MN Bill

- > Funding to help meet American Elderberry's technical challenges
- > Fabrication of a New Design Continuous Flow Destemmer
 - ~ Fountain Ark Farms, LLC in Delano, Jon Jobes, Brian Weber
 - Additional funding still needed to build/acquire a processing line, commercial kitchen, frozen storage, shipping
- Scalable with challenges
 - ~ Best matched with Individually Quick Frozen pack
 - ~ Current access to 100,000 lb. of unsold frozen elderberries
 - ~ Over 4,000,000 lb. frozen aronia berries in storage

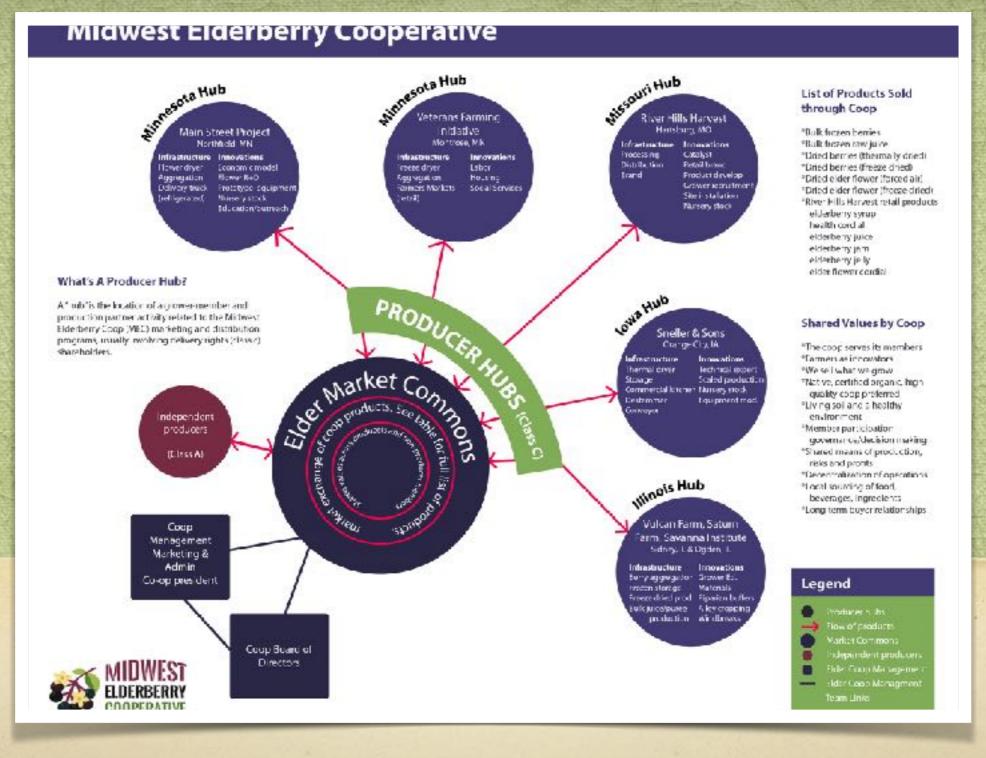
Destemmer Challenge Project is Underway

- Destem, clean, pack & freeze on day picked
 - ~ Organic production & SWD quality control
 - ~ Berries spoil in days even when refrigerated
- Current batch process 300-500 lb./hr.
 - ~ Labor required: 3-6 people or more
- Continuous flow @ 1000+ lb./hr., 2 workers
- Service growers within 2 hr. travel time of hub
- > Process line to clean & pack > frozen storage



Hub Business Plan

- > \$100,000,000+ US elderberry ingredients market imported
- Take market share from imports with competitive pricing
- Contracts for crop & ingredients in advance of harvest
- > \$500,000 hard costs needed for IQF hub infrastructure
- Unapproved grant application > roadmap forward
 - ~ Grant and government programs
 - ~ Investors: MEC a 308B coop with non-voting preferred shares
 - ~ CoBank and/or other lenders



Regional Hub Org Chart

Pilot Product Runs

Arise Nutrition, LLC

- Identify best ingredient candidates by market demand
- Use business plan to secure project financing 5,000+ lb.
 - ~ Minimum normal process run $\sim 20,000+$ lb.
 - ~ Analyze production costs and pricing
- Produce certified organic ingredient(s) in volume
 - ~ Samples for lab tests, product development
 - ~ Samples large enough for buyer pilot runs
 - ~ Independent lab tested for nutrient quality documentation

Powders Project

NRCS-MN-MULTI-24-NOF00001323

- > Total award of \$200,984 funds after 9/15/24
- Arise Nutrition to process 8,000 lb. of certified organic berries
 - ~ 960 lb. of dried whole berries / whole berry powder
 - ~ 800 lb. of Juice powder
 - ~ 320 lb. of pomace powder
 - ~ Carrier: acacia gum, not sourced yet
- > Funding to market at 6 regional/national trade shows
- > Funding to develop a commission based sales position

A Coop Answer

General Principles

- Cooperate to attract & proportionately share capital while increasing scale/size to compete effectively
- American Elderberry can benefit from traditional economies of scale: special machinery, aggregation of crop, etc.
- Should lead to more efficient field and crop handling, thus to lower costs of production:
 - ~ Competes more effectively against global prices
 - ~ Generates higher returns on invested \$ and time
 - ~ Spreads the risks geographically and by market segment

An Open Cooperative

Every Farm Business is Different

- Cooperatives balance the freedoms of individual ownership with the opportunities of larger size: "OPEN" means more options
- Open Coops join capital & labor to optimize distribution of resources and give farmers multiple options of participation
- > MEC currently operates as a broker: helping growers to sell
- > Farmers may share in production operations > profits/losses
- Specialized equipment/technology required to lower production costs > labor hours, fixed costs/lb. in desired ingredient format
- Contracted purchases to feed high volume processing required co-packing services cost effective & secure repeat buyers

Cooperation = Capital

& More Dependable Farmer Revenues

- > Present crop challenges make it easier for a Big Corporation to buy from MEC than to do it themselves.
- > We will reduce grower costs to lower prices not profits
- Secure & retain multi-year sales contracts
- Consolidate harvest destemming, processing in hubs with continuous flow capabilities, IQF American Elderberries
- By combining our existing production and efforts we can attract good co-packer partnerships nationally
- Midwest Elderberry Cooperative: coast-to-coast