

July 2022

EB 2022-12

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An Investigation of Marketing Channels and Suggested Methodology for Channel Assessment for Hemp Products

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Acknowledgement: The authors thank the hemp growers that participated in the research. This research is based on work supported by the USDA Agricultural Marketing Service. The findings and conclusions in this publication are those of the authors and should not be construed to represent an official USDA or U.S. Government determination or policy.

Abstract

Hemp product marketing is relatively new in the United States, with the crop only becoming legal under federal law in 2018. In the rush to market the new crop, many producers sought direct-to-consumer (DTC) channels to capture a high degree of the value. This bulletin summarizes marketing channel performance factors as discovered through interviews with New York (NY) and Colorado (CO) hemp farmers using DTC channels. The nature of the emerging market, the timing of the outbreak of the COVID pandemic, and hemp product perishability all influenced how hemp product marketers evaluated their opportunities. Channel assessment factors were found to be similar to those used by fresh produce growers, but with important differences due to perishability. We conclude that price setting and monitoring sales volume are an effective way to evaluate channel performance.

Project Summary:

Farm Interviews: 16 total, 12 in Colorado and 4 in New York.

Hemp Type: Cannabidiol (CBD)/Cannabigerol (CBG).

Channels utilized: Online sales, farmers markets, farm store, and wholesale.

Introduction

Hemp became a legal crop in Colorado in 2014 by state law. However, it was not until 2018 that hemp became a legal crop under federal law, opening the doors to farmers in every state. The project team interviewed sixteen hemp growers in NY and CO to ask them about their operations, decision making, and experiences marketing hemp products. Summaries of the four NY farm cases studies are included at the end of this bulletin. Through the interviews, we examined what factors farmers cited to assess channel selection and performance to determine the primary factors needed to develop a market channel assessment framework. To do so, we developed a standardized set of questions about production, processing, products, and marketing channels to facilitate cross-farm comparison. Some farms did their own processing (in whole or in part), while others contracted out those services. Sales channels included online, own store (or farm) sales, farmers markets, community supported agriculture (CSA), and wholesale to other farms, processors, and grocery, natural food, and specialty retailers. The main factors that matter most to farmers when selecting or evaluating a market channel were categorized as: (1) profit (or margin), (2) customer interaction and market exposure, (3) sales volume, (4) labor requirements, and (5) risk.

All of the farmers interviewed for this project fit the USDA's definition of "beginning farmer" with respect to hemp production, i.e., they have grown and marketed hemp for less than 10 years. The most experienced farms in the group started in 2014 (CO), with 11 of the 16 having started in 2018 and after. Many had previous DTC marketing experience, such as selling vegetables at farmers markets.

Our approach is informed by previous channel assessment work done with diversified vegetable growers that resulted in the Marketing Channel Assessment Tool or MCAT (LeRoux et al. 2010, LeRoux & Schmit 2014). The MCAT project identified six similar factors for channel assessment: profit, lifestyle preference, sales volume, labor required, risk, and channel-specific costs. While the factors mentioned by vegetable growers and hemp growers are similar, the characteristics of the products are quite different (particularly regarding processing, storage, and perishability), thus operational assessments of channels differ. We conclude that relatively low perishability of the product (i.e., long shelf-life) is the primary mechanism driving channel assessment and performance.

Profit

Profit was the most frequently cited factor for channel evaluation. Specifically, farmers referenced margins (sales less costs), operating costs, labor, and customer demand (wholesale and retail price points) as indicators affecting profit. A traditional accounting of profit includes the costs of crop and product (processing) production, as well as assorted marketing expenses, including labor costs, for each step. Without more detailed financial data collection beyond the scope of this project, we cannot describe actual channel profit calculations used by participating farmers. For this reason, we describe this factor as "perceived profit" garnered by producers. Farmers said that farm production costs for hemp were equal across all channels with minimal channel-specific variation in the processing stage (e.g., drying hemp flower for smokeable or consumable products versus oil extraction for tinctures, by hand or mechanized processing, and in-house versus contracted for services).

Most farms describe DTC online sales as their most profitable channel, possibly due to the ratio of sales dollars generated compared to hours dedicated to marketing (after the online store/presence is developed). Online sales allow constant selling without staff present to complete the sale. Orders are received automatically and are then packed and shipped efficiently in batches. While labor requirements are relatively low, effective online marketing, including email marketing, represents another source of marketing labor and cost in the channel for both established and new customers. A few farms cited wholesale as the most profitable channel, citing larger volumes of product sold with relatively lower time (labor) commitment. Similar to online sales, wholesale channels do not require staff to sell the products.

Customer Interaction and Market Exposure

Customer interaction and market exposure ranked as the second most frequently cited factor for channel assessment. Hemp growers evaluated channels by the opportunity to and enjoyment of directly communicating with consumers. Customer interaction is a valuable channel trait, providing farmers with feedback on consumer preferences for hemp products. It also allows customers to tell the farmer how they use the products and what other products they would like to buy, informing product improvements. Customer interaction also allows the seller to use consumer education and anecdotes as selling techniques. This aspect is useful since CBD products are still relatively new products in the United States.

Several farmers cited "helping people" as the reason they began growing and selling hemp products, specifically regarding reported medicinal qualities of cannabidiol (CBD) products. Thus, hemp growers

who utilize DTC channels may be a group that self-selected based on their enjoyment of customer interaction. The experience of selling into different channels, specifically the like or dislike of customer interaction, also motivated sales channel selection as seen in previous work conducted with diversified vegetable growers. For example, some growers described their enjoyment of direct customer interactions or their preference to just be alone on the farm. Some growers talked about stress caused by wholesale buyers and avoided the channel to avoid stress and anger.

Similar to customer interaction, market exposure builds consumer recognition and familiarity with farm brands. Hemp growers described channels, such as in-person, DTC, and wholesale, as offering broad market exposure, similar to vegetable producers advertising their CSA or farm store while participating in farmers markets. Hemp growers want to get their brand and products out in front of a large audience by selling at a retail store, farmers market, festival, or other heavily trafficked outlet. Even if those consumers do not make an immediate purchase, they are becoming more familiar with the brand just by seeing the products or farm's presence (i.e., an advertising mechanism) at these locations. Indeed, some producers reported their sales simply covered their labor and travel costs, but the broader market exposure of their brand was sufficient to warrant participation.

Since markets for CBD and other hemp products developed, in part, during the Covid pandemic, growers had fewer in-person market options, which may impact their views of channel performance. Most said that customer interaction and market exposure are positive traits for channels, however those opportunities were limited at the height of the pandemic. If nascent hemp markets had developed pre-pandemic, comments about lifestyle preferences may have been more similar to those from the vegetable growers interviewed earlier. The relatively large presence in online sales is also likely a reflection of pandemic conditions.

Risk

Risk was the third most frequently described factor for channel assessment. Generally, when producers mentioned risk as a factor for channel assessment, they spoke in terms of the risk of lost sales. This includes inclement weather keeping customers away at farmers markets or buyer back-out in wholesale channels, as well as other risk factors.

For hemp farmers, corporate policies and government regulation are also significant and unique risks. Five farms described the risk of losing an entire sales channel due to changing and/or misinterpreted regulations. E-commerce platforms and credit card processors have shut down and banned several of the farms over confusion about the legality of the products they sell. Companies such as Square, QuickBooks, and Facebook have banned farms for illegal activities, often incorrectly. For example, smokable hemp flower was a problematic product because it was initially legal, then illegal, to sell in NY. In 2021 it became legal again, but left farmers wary about offering it online for fear of having sales of all their products and payment processing shut down. As a result, online sales was the most frequently mentioned channel for risk exposure due to its high visibility and the opportunity for supporting vendors to cease farm sales.

Other risks discussed included cross-state government regulations, access to processing, competition, and supply/demand balancing. Participants talked about the changing landscape of hemp and cannabis regulation and how it presents the risk of ceasing sales of individual products over state lines. Currently, hemp producers in CO and NY can sell their products to customers in some other states. However, as laws change an entire state can be lost. Similarly, a glut in the supply of product and numerous competitors

rushing into the hemp market were cited as threats to sales volume. Farms also cited insufficient access to processing at third-party processors as a threat to getting enough product produced in a timely manner and using methods they prefer. At times when processors are booked far out in the future, farmers worry about interruptions in their product offering resulting in lost sales.

Sales Volume

Sales volume per market channel is most easily measured as gross sales over a time period, be it daily, weekly, monthly and so on. The gross sales total for a channel encompasses the number of units sold for each product and the average selling price. Very high production in the 2019 growing season coupled with business failures and fears as Covid emerged caused a large volume of hemp products to flood the market and drive values down. As such, some farmers felt the volume of product sales factored into their interest in pursuing market channels. In this case, they were describing channels in which they thought they could sell any product at all. When asked about supply and demand, respondents were split in their estimations with some saying demand for CBD products is greater than the supply and others citing the “boom” of 2019 to say that the supply is greater than demand.

Labor Requirements

Also related to perceptions of profitability, respondents commonly cited the labor demands of channels as a factor for assessment. Each sales channel requires a unique amount of channel-specific marketing labor, including post-production activities such as making sales calls, writing invoices, time spent managing online and email marketing, packing orders, loading and unloading orders, travel for deliveries and to/from markets, and time spent selling at markets. Labor tends to be the largest cost in DTC channels.

The farms we interviewed stated that their hemp is grown and products created in essentially the same manner regardless of the channel destination. Since production and processing costs are the same across channels, channel-marketing costs (including labor) are the variable with the greatest impact on channel pricing.

Comparing Vegetable and Hemp Marketing Channel Assessment Logic

The Market Channel Assessment Tool (MCAT) was developed for diversified fruit and vegetable growers to evaluate the channels they use and suggest opportunities to improve sales and reduce labor in a perishable-centric product space. Possible adjustments include expanding participation in top performing channels and improving, or eliminating, poor-performing channels.

Labor is the largest marketing cost in DTC and wholesale channels used by produce growers. Labor, measured in hours, was also the most constrained resource on these farms as they usually had very little hired labor, if any.

Sales volume is another important factor to produce growers and is measured in dollars of sales. Sales volume is made up of the quantity of each item multiplied by the price at which it was sold. For channel assessment with produce growers, the characteristics of fresh produce put emphasis on the *quantity* sold as more important than the *price* (Figure 1). Fresh fruits and vegetables are highly perishable, with many only marketable for 5-7 days post-harvest. In addition, produce comes in unpredictable yields as the season’s weather and other growing conditions impact productivity. Finally, for many crops, the supply of produce to sell is replenished as more fruit or leaves grow and ripen throughout the growing season, becoming ready for harvest. Since produce is highly perishable and comes in an unpredictable, but semi-continuous supply, the more important part of sales volume is the *quantity* sold. Channel selection, therefore, includes both *quantity* and *price* for consideration with *quantity* the more heavily weighted factor.

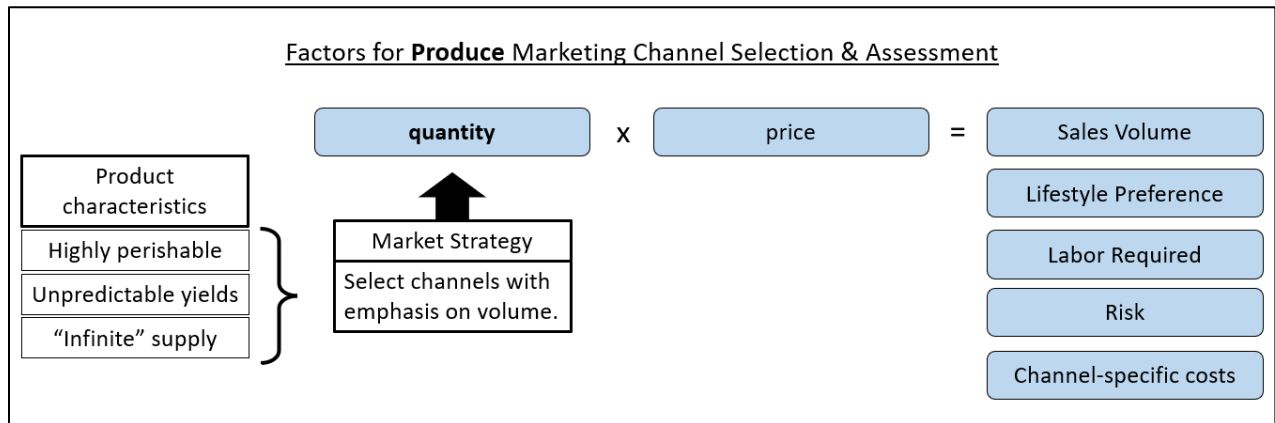


Figure 1: Because produce is abundant and perishable, the farmer views the quantity sold as more important than the price received.

Hemp Marketing Channel Assessment Logic

In contrast to vegetable producers, perishability is a minor consideration for hemp growers and therefore hemp producers require a specific assessment logic. Hemp flower, when properly stored, has a shelf life of one year and most producers consider CBD oil to last longer than that. Even dried, unprocessed hemp flower is said to have a one-year shelf life. We heard from farms that pull batches of dried hemp from stored supplies for oil extraction throughout the year. Once the hemp is harvested and stored, sellable products are created by processing the dried hemp. While crop yields and, to a degree, quality are unpredictable, due to growing season conditions, production of sellable products from the stored supply comes from a finite supply of the crop (the amount harvested and dried at the end of the growing season). The conditions of low-perishability and a finite supply with predictable conversion yields (e.g., from dried hemp to CBD oil) makes price a more weighted consideration of sales volume (Figure 2). Channel selection, therefore, consists of determining the product prices needed to justify participation (labor and other costs) in a channel and then determining if the necessary prices to allow sufficient sales volume are accepted among the channel’s customers.

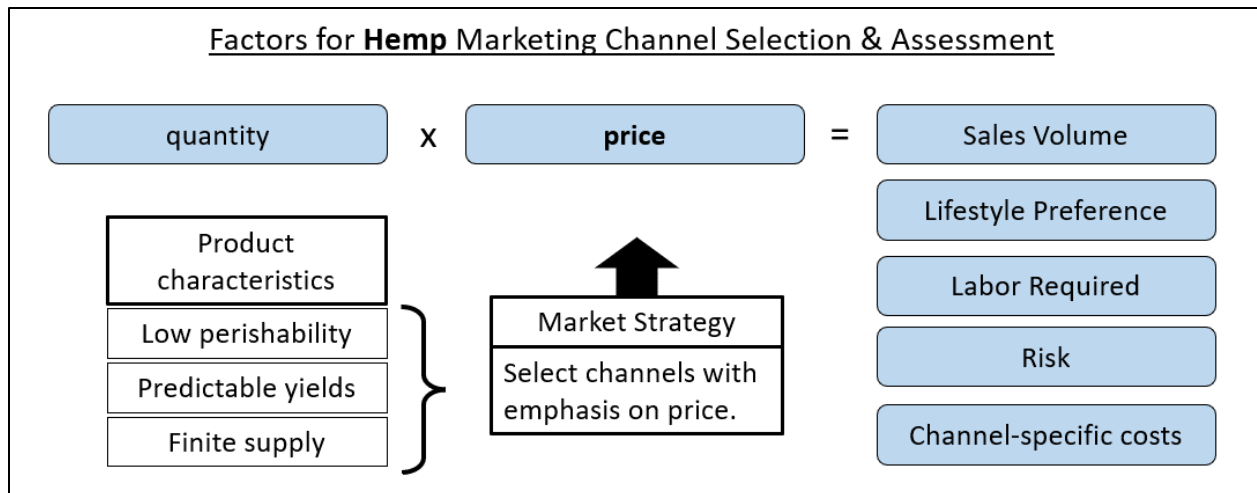


Figure 2: Because hemp for processing has a long shelf life, the farm can hold inventory while seeking the best price, thus putting more weight on the price component of sales volume.

How is the “necessary price” determined? By careful examination of all costs, including labor, and the farm’s identified profit goals. Ideally, farms should formulate prices for each channel they use, accounting for channel-specific costs and profit goals. Labor and channel-specific costs are likely the variables between channels that most dictate the need for channel-specific product pricing. Therefore, different prices for each channel reflect accounting for those variations to maintain a constant profit goal. As a result, farmers need to price products uniquely for each channel to achieve a consistent profit per item across channels, rather than observing high or low profit goal per channel.

Setting Prices for Channels

One approach to product pricing with respect to channel profits is to set the desired profit equally across channels. Then marketing labor becomes the largest variable to account for when formulating product pricing. Once this is done, the farm can set prices for each channel, expecting equal profit margin/item in every channel.

A hypothetical example is shown in Figure 3. The cost of production and processing for a batch of 24 bottles of CBD tincture are equal across channels. The farm identified that a profit margin of \$500/batch meets the farm’s income goals and the goal is equal across all channels. Thus, the only costs that vary are the marketing costs, consisting predominantly of labor. The price needed to realize the profit goal is therefore lower in Channel 1 than in Channel 3.

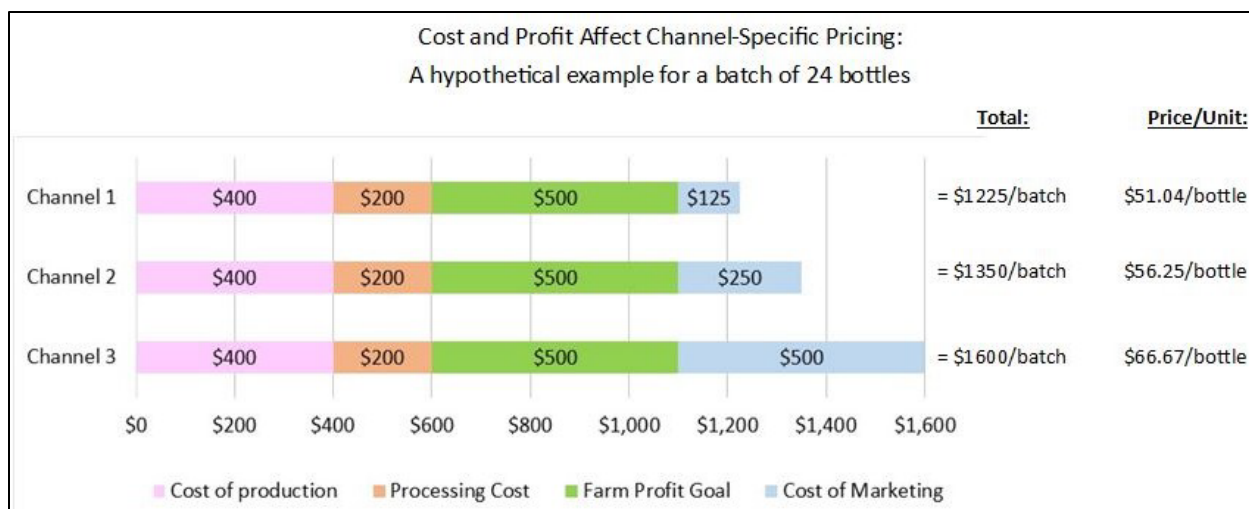


Figure 3: A hypothetical example of how channel marketing costs impact pricing when product profit goals are held constant across all channels.

Recommended Methodology

The goal of channel assessment is to inform decision making for farms using their own data, leading to changes that increase returns through both labor reduction and increased sales. To improve channel performance for hemp, growers must examine product pricing. Producers must determine the prices necessary to cover costs and attain profit goals for each channel. Product price calculations need to include cost of utilized crop and product production, estimated marketing labor, and other channel specific costs. Once costs are accounted for, the farm adds the determined margin required to reach farm income goals to arrive at product prices for the channel.

After product pricing for the channel is determined, producers will need to actively participate in that channel to provide data and determine if a sufficient sales volume is possible. This process will require testing and repeated evaluation over time. Thus, channel evaluation comes through price setting and testing the channel. If producers reach sales goals over a designated period of time with the pricing matrix, the channel serves the farm well. If not, the farm can work to support channel sales with improved marketing techniques and/or consideration of revised pricing strategies. In some cases, farms will determine that a channel is simply not a good fit and eliminate it.

Importantly, marketing techniques support pricing and that includes producers knowing their target consumer, where they shop, and their preferences. Producers need to dedicate sufficient marketing effort to determining if pricing “works” in a channel, noting that some channels are simply not a fit for farms and products.

Conclusion

Hemp is still a relatively new product in U.S. markets, having only become legal under federal law in 2018. While exploring a method for channel assessment for hemp producers we discovered that, because the product has low perishability, farmers should focus on determining the required pricing to meet farm goals. Once pricing is developed, farms should observe labor and sales for a test period to determine if the channel performs adequately or needs improvement. For an accurate measure of channel potential, sufficient marketing effort and technique need to be applied to support required pricing.

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Colorado's Brand Distributing, LLC dba Glenna's CBD Best Oil & Spa – Interview Summary

Farm Summary:

Owner: Glenna Colaprete

Location: Rochester, NY

Scale of Production: ≈ 4 acres

Hemp Type: Cannabidiol (CBD), Cannabigerol (CBG)

Farm Products: Hemp flower, tinctures, salves, lotions, pet products, and food/beverage edibles. **Hemp Marketing Channels:** Online sales, farm store, and wholesale.

Background

Glenna Colaprete became interested in hemp products while seeking relief from her severe nerve pain. She discovered that CBD offered her relief and began using both ingested and salve products. She found that while she benefited from the products, she did not like their flavor or smell. In response, she began making her own products. She also saw a need for products that offered people relief without having them feel “altered.” Having experienced first-hand the relief that CBD and other hemp derivatives could offer people with various ailments, Glenna is driven to promote the products.

Early in her business, hemp products were burdened with negative perceptions from consumers who thought they were illegal and associated with, then illegal, marijuana use. Glenna was careful in her branding and outreach to avoid those associations and to focus on the safe, legal, and effective benefits of her products. Her deliberate marketing efforts made the products accessible to consumers who may have avoided hemp otherwise. She also stayed abreast of changing laws and made sure that everything she did was legal. She carefully managed the “optics” - the appearance of her company and hemp products - over the coming years. For example, she never used the hemp leaf in her branding since it caused confusion and an image of currently prohibited activities.

Glenna began selling her own branded products when growing hemp was first legalized in NY in 2018. At that time she faced challenges with credit card processors and website hosting companies, as well as consumers, who were unclear about the legality. Repeatedly providers that perceived illegal activities shut down her websites and credit card processing. She and her business were banned from several services including Google Ads, Paypal, Facebook, Quickbooks, Square, Shopify, and Stripe over the perception that she was involved in illegal activities. She sent some of these companies proof that her activities were legal but was not able to convince them. Despite changing laws, she is still banned from those services today. Only Square reversed their decision upon learning that her products were legal.

Glenna has a B.S. in Criminal Justice, a multi-disciplinary Master's in Business and Project Management from Rochester Institute of Technology (RIT) and an engineering background with multiple patents. Glenna is an Adjunct Professor in Regulations in Cannabis Cultivation at Finger Lakes Community College. She serves on the NY Cannabis Growers & Processors Committee as a Social Equity Co-Chair and Sustainability, Education and Retail Committee member. She uses her skills and experience to professionalize the image of hemp products and the businesses that make and sell them. She loves teaching other people how to get started in hemp products and to manage for profit. Glenna sees hemp

products as an opportunity to lift people up in more than one way. She sees how it can potentially help people with nerve pain, as she uses CBD to mitigate her own nerve damage, arthritis and/or anxiety to name a few examples. She also sees how selling the products is profitable and can help people prosper. As part of her business, she teaches people to retail her hemp products inclusive of various marketing techniques to help facilitate their success in becoming financially independent and building their success story.

Production and Processing

Glenna was first licensed to grow hemp in NY in 2018. She grew her first hemp on 3 acres, outdoors, in Lima, NY. While she continues to grow hemp outside, in 2020 and 2021 she also grows hemp in a greenhouse and an indoor grow facility. For 2019 and 2020, she selected hemp strains for various cannabinoid profiles from sources in NY, Oregon, and Colorado. Based on her experience, she plans to grow varieties and strains indoors and outdoors in 2021 and 2022. In addition to using her NY-grown hemp in her products, she also enjoys trying different formulations and terpenes for their medicinal effects and enhancing user experiences.

Glenna noted that NY still has limited hemp processing capacity. Among the available processors, she has observed various extraction methods and varied levels of quality in the resulting products. She has used a few NY-based processors, and a lab in Colorado that she's worked with since 2015, citing their experience, quality, and product purity as reasons. When processing, she is concerned about maintaining her product purity free of microbials, solvents, heavy metals, and pesticides (she grows organically) in the final products. Glenna runs full panels with third party labs on each batch of products she produces. She was recently licensed to do her own processing and received a NY 20C license for making products.

Products and Channels

Glenna's CBD Best Oil & Spa markets her award-winning products, hemp flower, salves, tinctures (the best sellers), pet and horse products, eye cream, beauty cream, serums, and edibles such as gummies. She envisions continuing her expansive spa product line and infused foods & beverages now that she has a NY 20C food processing license. Her top selling products are her tinctures and salves. She is working on developing more edible products, like the CBD gummies that she has now. Hemp flowers have been inconsistently legal to sell in NY. Initially, hemp flower was legal, then it was banned, and then became legal again in 2021. Due to confusion about the legality and the risk of having her online store or credit card processing shut down, she reserves hemp flower for in-store and wholesale channels presently.

Glenna processes products in batches sized to sell out in about six months. She stages production in this way to manage for freshness and potency and does not consider perishability a factor for channel selection. Each of her products is labelled with a date and batch code. Any product that is deemed to be "old" is then pulled and not available for sale.

Glenna utilizes several marketing channels to mitigate the risk of any one channel failing or experiencing an interruption. She has had her online sales disrupted more than once. In 2021, she sells in her own two stores in Rochester, NY, one of which is also a day spa. She also sells online, wholesale, and at events/festivals. Wholesale sales of her branded products are to athletic clubs, CBD stores, pharmacies, doctors, chiropractors, boutique stores, spas, and farm stands/stores in several states. She also wholesales white label products to stores and bulk, finished hemp products to other CBD product companies. She participates in large events such as Rochester Party in the Park and the highly attended

Lilac Festival. She enjoys the customer interactions participating provides.

When evaluating channels, Glenna considers the relative profit margin on products. She uses Square sales data and her accounting skills to assess costs and returns on sales through each channel. She reports that despite their overhead costs, her own stores are the best performing channel based on the margin on products. She reports that wholesale channels have the worst margin. When asked what channel she would prioritize if she had a limited amount of product, she answered that she would reserve it to sell through her stores and for her monthly subscription-based orders. This is not just a hypothetical question as she has limited some products and varieties in the past due to supply chain issues. In those instances, she reserved limited products for in-store sales and monthly subscriptions and restricted or stopped wholesale channels while ramping up her inventory.

When asked about consumer demand and the “rush” to grow hemp in NY observed in 2019-20, Glenna responded that she feels that supply and demand have equalized in 2021. She thinks that demand for hemp products like CBD has increased as acceptability and perceptions have changed. She predicts that the legalization of marijuana in NY will increase demand for hemp products because she thinks that consumer perceptions about hemp will shift when marijuana is decriminalized. She has been surprised by some of her more conservative, wealthy customers asking if she will offer marijuana now that it is legal in the state. She believes they are asking because they want to buy it. She does plan to enter the marijuana business as a licensed large cultivator and would like to remain vertically integrated but awaiting the NYS rules and regulations.

Unlike many other farms entering hemp production, Glenna was not growing or selling any farm or other products prior to hemp products. Direct-to-consumer marketing was new to her when she started with hemp. She finds customer interaction, such as her one-on-one meetings, presentations and at festivals, very energizing. She began growing and selling hemp products because she saw the opportunity to help her disability naturally, family, friends and now a wide customer base. She most enjoys helping individuals find something that offers relief in a natural way.

For outreach and customer acquisition, she uses radio and print ads. She has found radio ads to be very effective in her Rochester, NY market area. She finds them so effective that she even pays for radio ads for her wholesale customers if they mention that her brand is available at their stores, an approach to build brand recognition. She also uses direct consumer contact via email marketing and plans to increase and improve that effort with an employee with email marketing skills. She uses social media marketing and would welcome the ability to run Facebook and Google Ads again. Building and running a very successful woman-owned hemp business has been very rewarding. She is passionate in her advocacy and education working with social equity applicants, instructing her class in cannabis growing and regulations. She serves as the Social Equity Co-Chair and participates in the sustainability, education in retail NY Cannabis Growers & Processors Association committees. Glenna regularly speaks at cannabis conferences, consults with legislators and puts on cannabis business symposiums to help build a sophisticated and successful cannabis ecosystem throughout the emerging NY Finger Lakes and Western NY regions.

Growing Family Farms – Interview Summary

Farm Summary:

Owners: Chris Flagg and Paul Loomis

Location: Parma, NY

Scale of Production: Less than 1 acre

Hemp Type: Cannabidiol (CBD)

Farm Products: Diversified fruit and vegetables, hemp flower, tinctures and salves.

Hemp Marketing Channels: Farmers markets, online sales, farm store, and wholesale.

Background

Paul Loomis and Chris Flagg operate Growing Family Farms (GFF) in Parma, NY. The farm produces fruits and vegetables for farmers markets, restaurants, and community supported agriculture (CSA) for many years, becoming Certified Organic in 2016. GFF grows hemp and markets hemp products as a complementary addition to the farm. They chose to grow hemp to diversify their production system and expand their product offering through current market channels. Their goal with offering hemp products was to broaden their offerings with their existing produce customers. They do not endeavor to establish a national or large-scale brand, rather to enter the premium craft cannabis market, akin to craft beer. To match their targeted scale of hemp production, they need 100 customers per month to buy their tinctures. Consumers using CBD tinctures tend to use them daily and, thus, GFF aims to establish a steady customer base with the products.

In 2021, they are growing less than in previous years, largely due to a plentiful supply in stock and not due to processing capacity or demand constraints. They grow hemp on a scale of rows, not acres. Genetic selections are based on disease resistance and yield. As with vegetable crops, each season involves testing of different varieties. Collaborating with Cornell University, which provides professional pest scouting, collection and analysis of plant tissue samples, and advises on pest control measures, is beneficial to the farm to guide production decision making.

Production and Processing

Harvesting and handling hemp flowers and biomass are identical across varieties regardless of marketing channel destination. Hemp flowers are sorted by grade and allocated to specific customers. Hemp processing is contracted out with a few different processors. GFF prefers ethanol extraction for CBD oil rather than CO₂ because they perceive that it produces a lighter colored oil with better flavor.

Products and Channels

GFF sells hemp flower, tinctures, topicals (salves & lotions), and wholesale crude oil. Due to changing laws in NY for smokeable hemp flower, they describe their hemp flower as “consumable” rather than “smokeable” to avoid legal trouble. Retailers they sell to, including specialized CBD product stores, report that tinctures and flower are the fastest moving products and with flower sales exhibiting large year-over-year growth. From their perspective, this may be due to older-aged marijuana users transitioning to hemp flower because it doesn’t have the negative side-effects they associate with marijuana.

Perishability is not a concern since the oil has a long shelf life when stored properly. In particular, they find that once medium-chain triglycerides (MCT), derived from coconut oil or palm kernel oil, is mixed in, the quality is maintained for one year. Similarly, for dried hemp flowers stored in a stable environment and without oxygen exposure, a one-year shelf life is expected.

Before moving into hemp, GFF participated in farmers markets, CSA, and wholesale to restaurants for marketing vegetables. Hemp products are marketed through farmers markets, online (with local pick-up), at the farm, and to their vegetable CSA members to whom a discount is offered. They also wholesale products to specialty retail stores such as CBD and natural food stores. They also wholesale to Flower City that resells GFF products online for home delivery. Hemp flowers are also sold to local re-sellers.

In cases of limited product supply, it is prioritized for the farm's own direct-to-consumer (DTC) channels, including farmers markets, from the farm, and online, largely due to higher perceived profit margins in those channels. In the case of farmers markets, hemp products are an addition to current vegetable offerings since they are already there and not a dedicated market channel for hemp sales in isolation. GFF expects to drop wholesale sales to specialty retailers first if faced with a channel consolidation decision.

Main Street Farm/NY Hemp Oil/Head and Heal – Interview Summary

Farm Summary:

Owners: Allan Gandelman and Karli Miller-Hornick

Location: Cortland, NY

Scale of Production: 30 acres in 2019, 35 in 2020, and 6 acres in 2021

Hemp Type: Cannabidiol (CBD) and Cannabigerol (CBG)

Farm Products: Diversified vegetables, hemp flower, tinctures, salves, and pet treats.

Hemp Marketing Channels: Online sales, wholesale, and farmers markets.

Background

Allan Gandelman began Main Street Farm by growing hydroponic lettuces in 2010. He soon transitioned to growing diversified vegetables in the ground, selling them at farmers markets and through community supported agriculture (CSA). Before hemp was legalized in New York, Allan had successfully expanded Main Street Farm to one of Central NY's largest vegetable CSA's, as well as a large-volume vegetable wholesaler with 50 acres in combined vegetable and hemp production. All vegetable and hemp production on the farm is Certified Organic. For hemp products, three companies participate, all under Allan's direction. Main Street Farms (MSF) grows the hemp, NY Hemp Oil (NYHO) does the processing, and Head and Heal (HH) markets the products. Head and Heal was jointly founded with Allan's business partner Karli Miller-Hornick.

When hemp was legalized, Allan saw an opportunity for NY farmers. As he had done to learn hydroponics, Allan spent a year travelling around the U.S. to learn about hemp and CBD. He grew his first hemp crop at Main Street Farms in 2018. Allan founded the New York Cannabis Growers & Processors Association and currently serves as its president. He also established his company, NY Hemp Oil, identifying two main objectives: 1) to build a processing facility and 2) to launch his own brand of Cannabidiol (CBD) products. Later, a third objective was to become a bulk supplier of CBD oil to other brands of hemp products. By 2020, he had accomplished all three and, at the time of the interview, stated that bulk sales account for about one half of his business.

Production and Processing

The process used by MSF/NYHO/HH for CBD oil products is: harvesting, drying, curing, stripping the buds (by hand), grinding, and finally, oil extraction. They experimented with mechanical stripping but the resulting product was not as good as by hand. Therefore, they hand strip the hemp used for their products.

As a vegetable farmer, Allan had experimented with vegetable processing, for example, freezing spinach. Value-added vegetable processing projects always failed as the costs were high. Likewise, he says that processing hemp is expensive, complicated, and highly regulated, not unlike meat processing. The NYHO processing lab is a "clean room" and Good Manufacturing Practices (GMP) certified.

Allan reports that most hemp growers in NY use third-party processors. In NY, there are plentiful processors and capacity. At the beginning of the state's hemp boom, growers complained about inadequate processing capacity; however, Allan states that many processors have excess capacity in 2021

(including his) due substantial reductions in farmed acres. During the 2019-20 boom, NYHO ran three shifts to keep up with processing. As the boom waned, they had two shifts and now they mainly just process hemp for their own products.

Products and Channels

Allan and his business partner started their own brand of hemp products called Head and Heal in 2018. Head and Heal sells cannabidiol (CBD) and cannabigerol (CBG) tinctures in capsule and liquid forms, balms, lotions, roll-on oils, pet products, bath products, and hemp flower. Allan says that CBD oil has very low perishability. He says that the market was flooded in 2020 with very cheap oil as companies that grew large amounts of hemp in 2019 went bankrupt and sold off assets. The combination of large-scale production, company failures, and the pandemic severely affected bulk market prices in this way. Likewise, the stability of CBD oil in storage has prolonged the impact on prices.

Main Street Farms started selling Head and Heal CBD products at their farmers markets because they already sold vegetables there. MSF also offered their CBD products to their CSA members. CBD sales quickly grossed more than vegetable sales at the farmers markets because of their high value. In addition to farmers markets (FM), Head and Heal sells online, wholesale to retailers, and co-packing white label products for other brands.

In 2021, Head and Heal products are sold in stores around the country. Head and Heal is also adding more FM's exclusively for hemp product sales, specifically trying to expand in New York City area FM's. They have a good margin on CBD oil and view FM's as a customer acquisition means. As long as the employee selling at a FM sells enough to cover their labor, it is determined to be "worth it" for expanded market exposure. Allan thinks that online sales are best because online customers tend to spend large sums when shopping online. Head and Heal products are also in one large grocery store chain. Allan says that because their product is in every location of that chain, it is worth dealing with one buyer for such a volume. If it wasn't for that chain, the grocery store channel would be the worst due to the profit margin in the channel.

Singer Farm Naturals – Interview Summary

Farm Summary:

Owners: Tom Szulist

Location: Appleton, NY

Scale of Production: 150 plants in 2019

Hemp Type: Cannabidiol (CBD)/ Cannabigerol (CBG)

Farm Products: Hemp flower, tinctures, tart cherry juice, & garlic.

Hemp Marketing Channels: Online sales, farm store, wholesale, farmers markets.

Background

Tom Szulist started Singer Farm Naturals (SFN) in 2009. The farm and brand have been developed around farm crops and products that offer health benefits. SFN sources tart cherries from their relative's farm, Singer Farm. They market tart cherry juice for its health benefits, including boosting immunity, healthy joints, and antioxidants. The farm also grows garlic, boasting health benefits, particularly those for the cardiovascular system. With the legalization of hemp, Cannabidiol (CBD) and Cannabigerol (CBG) products were added to the SFN product line. Tom touts the health benefits of cannabinoids and their compatibility with human receptors. As a recent article in *The Buffalo News* stated, "when it comes to the topic of legalized marijuana...sic...and the health benefits of cannabis and related products, Tom Szulist will be the first to concede that he is something of an evangelist" (Prohaska 2021).

Production and Processing

SFN's hemp production is small, grown outdoors and counted in plants rather than acres. They have increased the number of plants they grow each year, having grown 150 plants in 2019. The entire hemp crop is harvested and prepared on the farm by hand. Smokeable flowers come from the highest quality plants and require more careful handling to preserve quality. SFN dries, cures, and stores all hemp as if it were destined for their smokeable flower product, even that which is used for oil extraction. The oil extraction is done by processors in NY. Tom has used and continues to use more than one processor. Once the oil is extracted, tinctures are bottled at the farm. The first hemp crop that SFN grew was in 2019. The extracted oils from that crop arrived back from the processors just as the COVID pandemic struck, presenting challenges, as in-person DTC markets shut down, but also opportunities as health-conscious consumers looked for products online.

Products and Channels

Tom offers his products at prices that he perceives to be accessible to consumers in his region, stating that he sets prices so customers can afford the products they need to find relief from ailments. He often offers discounts to his regular customers. His goal is to make it available to consumers in his local community at an affordable price. The hemp products are sold at farmers markets where he also sells his other farm products. He was participating in farmers markets before he began to sell hemp products. SFN sells CBD/CBG tinctures online but not smokeable flower. NY laws allowing smokeable hemp flower sales have oscillated between 2018-2021. During this period, web hosting and credit card processing services have shut down service, sometimes erroneously, over sales of illegal products online. Products sold online are available for shipping or customer pick-up on the farm.

SFN markets some CBD oils as variety-specific products such as “Hawaiian Haze” and “Electra.” Varietals are chosen because each contains different kinds of terpenes that affect product flavor and odor. The farm has a YouTube channel, an email newsletter, and an on-farm store. Once the pandemic has abated to a level he is comfortable with, SFN will attend and sell at festivals. Tom is enthusiastic about hemp and organizes workshops and educational programs that serve as marketing and sales venues as well. In addition to hemp, he plans to enter the cannabis market once it is legal and he can obtain a license.

Prohaska, T.J. 2021. Legal pot opens up vistas of growth for Niagara County farmer. The Buffalo News. April 5 (updated November 18). Available at: https://buffalonews.com/news/local/legal-pot-opens-up-vistas-of-growth-for-niagara-county-farmer/article_f0ec1c00-92ef-11eb-b606-936c3b4e5e2b.html.

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