Marketing Hemp "We grew it.....now what?" Stephen Komar and William Bamka

Slide 1: Introduction and welcome. "does anyone know who this person is?"

Slide 2: Levi Strauss. Founder of Levi Strauss and Co. The world famous jeans company. Many know the story of Mr. Strauss; He made his fortune providing clothing to miners during the gold rush. Perhaps you have heard the adage," the only people who got rich during the gold rush were the men selling shovels." This cautionary tail has been used to remind people to concern themselves with the risks associated with any new enterprise...Hemp production is no different.

Slide 3: "does anyone know who this is?" This is one of the many who did not strike it rich during the gold rush. It is important to assess the potential, as well as the concerns and challenges before deciding to grow hemp.

Slide 4: This presentation will cover: the current hemp market, hemp uses and markets, marketing concerns and considerations, and production cost considerations and resources.

Slide 5: As with any agronomic crop, you must consider supply and demand and its impact on price. Although hemp is a potential crop for US production, it is being produced by more than 30 countries. Although several US states are producing hemp, actual production acres and yield data are difficult to quantify.

Slide 6: This graph shows world hemp production for seed and fiber use. Notice the decline following WW II.

Slide 7: US reported acres varies, but it is important to note that actual planted acres appear to be less that the total permitted acres. This raises several questions about US supplies and also raises the question, "Where does NJ fit in?"

Slide 8: Demand for CBD products appears to be rising in response to the 2014 and 2018 Farm Bills. Another potential benefit of recent legislation is the potential for much of the supply to be produced domestically making production potential for US producers.

Slide 9: These graphs show the increased demand for CBD and personal care hemp products. This industry and potential uses for hemp products continues to evolve and expand.

Slide 10: Sources report that hemp is anticipated to grow substantially to a \$2 billion in estimated product sales by 2022.

Slide 11: There are many products that can be produced from hemp and its various components. Depending on the part of the plant used, hemp can be utilized in many consumer products and as a health supplement. These uses are constantly evolving.

Slide 12: The three main uses for hemp are: seed for grain, fiber products and flower extracts (mainly CBD).

Slide 13: hemp seed can be used for several food products including: hemp oils, hemp hearts, flour and other products.

Slide 14: Fiber products have been used for many years and were very popular during WWII to produce cordage. Uses are now being developed including auto parts, building materials, yarns, fabrics and many others.

Slide 15: the inner bark or hurd fibers are used for "hempcrete" blocks for construction and other secondary uses such as bedding material for livestock.

Slide 16-18: Perhaps the most excitement and greatest potential comes from the demand for floral components of hemp and CBD products. Many products are made using CBD as a dietary supplement because of its reported health benefits.

Slide 19: In New Jersey, the market potential is tremendous. More than 29 million people reside within 100 miles of the states' center, with an annual income of more than \$1.3 Trillion. This large population represents a tremendous opportunity to market hemp and hemp products.

Slide 20: Some also speculate the potential for increased tax revenues from hemp and hemp products. The potential for tax revenues from hemp dates to 1937 when taxes were levied to reduce hemp production.

Slide 21: Seed and grain products are marketed much like any other commodity crop. This is, however, a new crop and markets are just now developing. There are also no opportunities for trading hemp on the commodities exchange due to limited infrastructure. These options are being developed and will result in more stable pricing and historic pricing trends potentially in the future. With the developing grain and flour markets, there may be an opportunity for grower contracts and limited futures pricing. There is also great interest from organic consumers.

Slide 22: Fiber production is also a relatively new market, although many new hemp fiber products are being developed. One of the greatest barriers to successful fiber production is the limited processing and buying operations in the US and the northeast.

Slide 23: CBD production is clearly the hot topic and main area of interest for many producers. Mainly due to reports of high prices and high demand. Estimated for CBD products are varied, but some reports estimate that CBD product sales can be a s high as \$200 million. The high demand from the organic consumer may present an opportunity for niche marketing and organic product development. Regardless of the end-use, it is crucial to understand consumer demand before entering into production.

Slide 24: according to research reported by the Hemp Business Journal, \$736 million in sales of CBD products are anticipated by 2022.

Slide 25: As with any business, it is important to understand the potential risks. Some concerns related to hemp production include; limited crop insurance options in the short term, few labeled pesticides, consumer demand and preferences are not well determined, markets are very fluid and the industry has limited processing and infrastructure.

Slide 26: There are also concerns related to pricing with a sharp decrease in reported prices for various components of hemp products, especially CBD/flower components.

Slide 27: a downward trend in pricing has also been observed for refined hemp oil products.

Slide 28: a cautionary tale from Kentucky producers; Kentucky, an early innovator of hemp products noticed very high prices in the early days of the market. In response to tremendous increases in production, supply pressures resulted in severe downward pricing pressure.

Slide 29- 30: Headlines from the Philadelphia Inquirer: One, showing the tremendous potential of hemp, the second demonstrating the tremendous concern regarding the price.

Slide 31: Much of the downward pricing pressure is a direct result of tremendous increases in supply due to the large number of producers who have entered the hemp space.

Slide 32: This table shows the reported acres and purposes the crop was grown for. These data are fairly unreliable but should become more accurate in response to new regulations.

Slide 33-34: Production costs data are limited. Two examples of production budgets are given as examples. Understanding production costs are essential to maximize the potential for success.

Slide 35: Production reports from Kentucky including yield and average price and fees.

Slide 36: Conclusions. Hemp is an exciting crop, but it is important to understand both the potential and the limitations related to hemp production. It is crucial to develop a marketing plan before you begin production. Price fluctuations are expected, and it is important that producers understand the supply and demand factors that will contribute to pricing. Regulatory compliance is also a concern and regulations will certainly change.