Industrial Hemp Update

BPIA Conference – Portland, Oregon

Beau R. Whitney 03-04-2020



Agenda

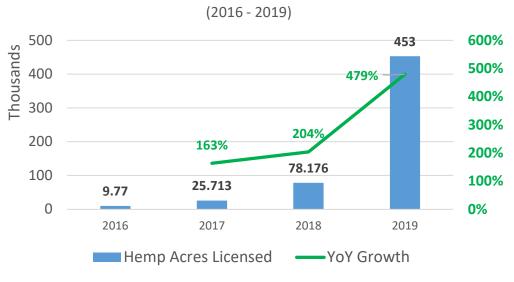
- Overview of U.S. Hemp Cultivation
- Issues Facing Industry
- Global Hemp
- Outlook for the Future



U.S. Overview

- Farm Bill Resulted in a surge of Market Participation
 - The passage of the 2018 Farm Bill was a watershed moment for the hemp industry.
 - With little regulatory direction, investors and operators poured into the market. Acres licensed increased nearly 500% since 2018.

U.S. Hemp Acres Licensed



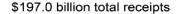


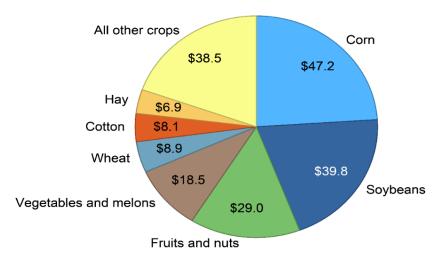
Source: Whitney Economics

Hemp: The Fourth Crop

- Even with conservative harvest estimates in 2019 and 2020, Hemp is poised to become U.S. agriculture's "fourth crop".
- With 2019 revenue projected to be between \$2.5 billion \$5.0 billion, hemp is set to quickly become the 3rd largest cash crop in the U.S.

2018 crop cash receipts (\$ billion)







Note: Components may not sum to total due to rounding. Data as of August 30, 2019. Source: USDA, Economic Research Service, Farm Income and Wealth Statistics.

Farmers Facing Many Issues

- While there was over 500,000 acres licensed, lack of regulatory structure and supply chain infrastructure is inhibiting revenue growth.
- Of the survey respondents, 65% of farmers did not have a buyer for their crop.
- Farmers facing capacity constraints at drying, storage, transportation and processing areas within the supply chain.

States with respondents to buyer question (n=18 states)		
Respondent Type	Pounds	Value @ \$12.5/lb
Buyer	224,554,400	\$2,806,930,000
No Buyer	417,029,660	\$5,212,870,750



Source: Whitney Economics

Hemp: A Global Industry

- Asia, the EU and other areas are ahead of the U.S. market in terms of market maturity.
- Look to Africa and South America as emerging markets.
- Do not rely too much on the EU as a destination for exports
- Processing capacity constraints are a world-wide phenomena
- Fiber and non CBD sectors will overwhelm the CBD opportunities
- Large-scale CPG companies are waiting for supply chain to mature before committing to market entry.
 - They are doing product development though.
- While it is important to compete locally, it is critical to keep an eye on the global markets.



Source: Whitney Economics

Summary

- The deployment of the U.S. hemp industry accelerated exponentially in 2019 with 500% year over year growth.
- As with any emerging market, the supply chain infrastructure is still developing and is creating challenges for business operators.
- Regulatory uncertainty is also introducing risks and potential public safety issues.
 Acceleration of rules making is strongly recommended.
- Regardless of current challenges, the future of the hemp industry is bright and is poised to become the 3rd largest agricultural cash crop in the U.S.
- This is a global market
- The potential of hemp is just beginning to be realized



Contact

Beau R Whitney
Whitney Economics
whitneyeconomics@gmail.com
503-724-3084



About Beau

- A leading cannabis and hemp economist with expertise on cannabis markets, operations and supply chain. (Published "The Field of Dreams" on hemp cultivation in 2019.)
- Developed pioneering models on demand elasticity, the multiplier effect, estimating illicit to legal market consumer conversions based on price, tax policy analysis and jobs and tax forecasts that have been adopted throughout the economics community.
- Provides cannabis tax forecast inputs into the Oregon Office of Economic Analysis and participates in the Oregon Governor's Council of Economic Advisor meetings.
- Chapter president of the National Association for Business Economics (NABE);
 member of the American Economics Association.
- Provided policy recommendations at the state, national and international levels, most recently providing regulatory recommendations to ministry members of multiple sub-Saharan African nations.

