



NATIONAL HEMP
ASSOCIATION

Industrial Hemp Economic Impact Summary

Industrial Hemp Economic Impact Summary

GROWING OUR SUSTAINABLE FUTURE



NATIONAL HEMP
ASSOCIATION



Jobs Impact

Industrial hemp can assist in the repatriation of more than 66,000 American jobs by 2030



Rural Impact

By 2030 industrial hemp can account for over \$9 billion of economic output in rural areas



Recurring Annual Impact

Industrial hemp can have up to a \$32 billion total economic impact in the US by 2030



Capex Impact

Facilities and equipment expenditure could reach \$18 billion by 2030, creating 150,000 jobs and saving 8M tons of CO2 a year

Jobs Impact

Industrial hemp can assist in the repatriation of more than 66,000 American jobs by 2030

The average hemp fiber & grain processing facility employs 117 people, with an annual payroll of \$6.1 million. The total economic output attributed to a single processing facility is estimated at more than \$30 million. Facility employees spend a substantial portion of pay locally, which in turn creates induced economic impacts in regions where processing facilities are located.

Biobased companies generate avg 2.79 jobs in other sectors for every biobased job.



NATIONAL HEMP ASSOCIATION

Assumptions by 2030

Based on current industry growth rates:

Scenario 1

2.4 million acres under cultivation, roughly the size of the 2020 US sunflower crop.

Scenario 2

8 million acres under cultivation, roughly the size of the 2020 US rice and sorghum crops. **Most likely outcome.**

“Rapid Climate Action” scenarios include the assumption of State and/or Federal subsidies:

Scenario 3

13.2 million acres under cultivation, roughly the size of the 2020 US cotton crop

Scenario 4

22 million acres under cultivation, roughly the size of the 2020 Canadian canola crop.

Net Job Creation by 2030



Rural Impact

By 2030 industrial hemp can account for over \$9 billion of economic output in rural areas

Hemp stands out from other natural fiber crops in that it provides farmers multiple revenue streams in non-correlated industries (seed for protein and nutrition, fiber for industrial inputs) which can hedge against market fluctuations. This is especially attractive to highly leveraged farm operations which are more vulnerable to market disruptions.

Hemp is often cultivated as a "dual-purpose" crop: both fiber and seed are harvested from the same acre.



NATIONAL HEMP ASSOCIATION

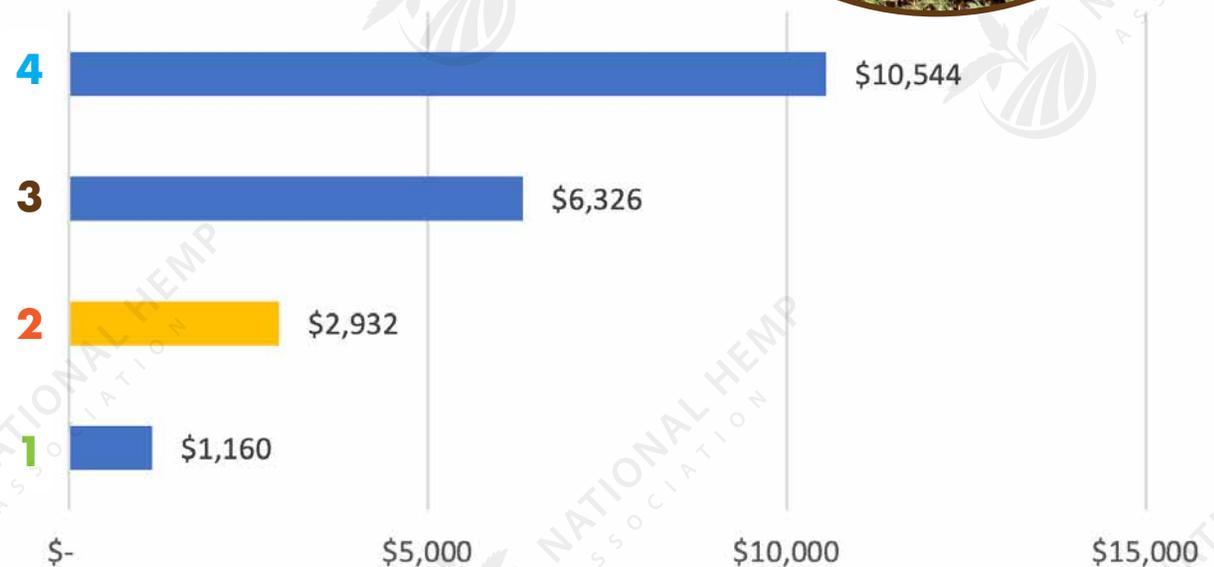
Hemp Commodity Prices (August 2021)

Fiber	\$718/acre
Food, Feed & Seed	\$600/acre
Planting Seed	\$667/acre



~\$1400/acre before calculating carbon credits

Projected Farm Income by 2030 (In Millions \$ USD)



Recurring Annual Impact

Industrial hemp can have up to a \$32 billion total economic impact in the US by 2030



NATIONAL HEMP
ASSOCIATION

Scenario 1

	DIRECT	INDIRECT	TOTAL
PERMANENT JOBS CREATED	6,941	19,366	26,307
INDUSTRY INCOME	\$ 1,779,759,135	\$ -	\$ 1,779,759,135
PROCESSING FACILITY PAYROLL	\$ 360,935,153	\$ -	\$ 360,935,153
INDUSTRY EXPENDITURES	\$ 643,686,969	\$ -	\$ 643,686,969
FARM INCOME	\$ 1,159,802,287	\$ -	\$ 1,159,802,287
LOCAL EXPENDITURES	\$ -	\$ 836,793,060	\$ 836,793,060
A. TOTAL RECURRING ANNUAL IMPACTS	\$ 3,944,183,544	\$ 836,793,060	\$ 4,780,976,605

Scenario 3

	DIRECT	INDIRECT	TOTAL
PERMANENT JOBS CREATED	37,860	105,630	143,491
INDUSTRY INCOME	\$ 9,707,777,100	\$ -	\$ 9,707,777,100
PROCESSING FACILITY PAYROLL	\$ 1,968,737,196	\$ -	\$ 1,968,737,196
INDUSTRY EXPENDITURES	\$ 3,511,019,834	\$ -	\$ 3,511,019,834
FARM INCOME	\$ 6,326,194,294	\$ -	\$ 6,326,194,294
LOCAL EXPENDITURES	\$ -	\$ 4,564,325,784	\$ 4,564,325,784
A. TOTAL RECURRING ANNUAL IMPACTS	\$ 21,513,728,424	\$ 4,564,325,784	\$ 19,751,859,913

Scenario 2

	DIRECT	INDIRECT	TOTAL
PERMANENT JOBS CREATED	17,550	48,965	66,515
INDUSTRY INCOME	\$ 4,500,000,000	\$ -	\$ 4,500,000,000
PROCESSING FACILITY PAYROLL	\$ 912,600,000	\$ -	\$ 912,600,000
INDUSTRY EXPENDITURES	\$ 1,627,518,750	\$ -	\$ 1,627,518,750
FARM INCOME	\$ 2,932,481,250	\$ -	\$ 2,932,481,250
LOCAL EXPENDITURES	\$ -	\$ 2,115,774,375	\$ 2,115,774,375
A. TOTAL RECURRING ANNUAL IMPACTS	\$ 9,972,600,000	\$ 2,115,774,375	\$ 12,088,374,375

Scenario 4

	DIRECT	INDIRECT	TOTAL
PERMANENT JOBS CREATED	63,101	176,051	239,151
INDUSTRY INCOME	\$ 16,179,628,500	\$ -	\$ 16,179,628,500
PROCESSING FACILITY PAYROLL	\$ 3,281,228,660	\$ -	\$ 3,281,228,660
INDUSTRY EXPENDITURES	\$ 5,851,699,723	\$ -	\$ 5,851,699,723
FARM INCOME	\$ 10,543,657,157	\$ -	\$ 10,543,657,157
LOCAL EXPENDITURES	\$ -	\$ 7,607,209,639	\$ 7,607,209,639
A. TOTAL RECURRING ANNUAL IMPACTS	\$ 35,856,214,040	\$ 7,607,209,639	\$ 43,463,423,679



Capex Impact

Facilities and equipment expenditure could reach \$18B by 2030, creating 150K jobs and sequestering over 8M tons of CO2 a year.

Hemp is an ideal rotation crop with corn and soy. Adding just 5% to the current rotation equals 8M acres.



NATIONAL HEMP ASSOCIATION

In 2020 FSA reports 89M acres of corn were planted and 82M of soybean. Converting 5% of that 171M to hemp by 2030 equals 8M acres of hemp.

Decortication facilities can run at 5T per hour with initial start up cost of \$30M.

One such facility can process 15,000 acres per year.

2022/2023 Plan to Support 75,000 Acres

Decortication Facilities:	5	\$30M ea	\$150M
Combines/Kits needed	50	\$600k ea	\$30M
Balers needed	50	\$40k ea	\$2M

\$182M

10 Year Plan to Support 8M Acres

Decortication Facilities	525	\$30M ea	\$15.75B
Combines/Kits needed	5000	\$600k ea	\$3B
Balers needed	5000	\$40k ea	\$200M

\$18.95B

Jobs Created:

Direct:	15,000
Indirect Farming & Manufacturing:	100,000

Environmental Impact of 8M acres

CO2 Sequestered per year:	8,800,000
Tons of fiber per year	20,000,000

Equipment projections are based upon real world usage from European hemp fiber decortication facilities. Equipment projections do not include ancillary equipment such as tractors, self-propelled windrowers, or seed handling equipment.

Contact

Geoff Whaling, Chair

geoff@nationalhempassociation.org

610-554-6929

National Hemp Association

1629 K Street, NW

Suite 300

Washington, DC 20006

202-706-3911



Researched, compiled, written and designed on behalf of NHA by Wilson Kello and Trevor Grode, 2021.

The full reports: “Potential Economic Impacts Of The Domestic US Hemp Fiber And Grain Industry” and “Building The Sustainable Hemp Industry in The United States” are available in the member section of the NHA website.

DISCLAIMER: The information contained in this report is selective, does not claim to be complete, and has been prepared for informational purposes only.

Statements, conclusions, projections, claims, or inferences made in this report are not being made by the National Hemp Association for investment purposes and should not be relied upon by the recipient thereof. All projections and forecasts contained in this report represent the Association’s own good faith assessment and interpretation of information available to it as of the date hereof and has been included herein on a basis the Association believes is reasonable. No representation or warranty is made by the Association that any such projections or forecasts will be achieved.

No representation or warranty, expressed or implied, is being made by the Association as to the accuracy or completeness of this report or its contents. All statements, data and information contained therein are made as of the date hereof unless stated otherwise and the delivery thereof shall, under no circumstances, create an implication that the information contained therein is accurate as of any time subsequent to its date.

Certain assumptions are also set forth in this report and, while the Association considers such assumptions to be reasonable, assumptions are inherently subject to significant business, social, legal, economic, political, regulatory, competitive and other risks and uncertainties, contingencies, and other factors that could cause actual performance, actions, events, or results to differ materially from those projected herein. Because many of such assumptions are based on factors and events that are not within the control of the Association, there can be no assurance that the assumptions will prove to be correct.