

THE VERY USEFUL INDUSTRIAL HEMP
 Hemp cultivation requires no chemicals, pesticides or herbicides.
 with over **50,000** different uses...

HEMP SEEDS

HEMP STALKS

HEMP RESOURCE 20:4

HEMP SEEDS
 Hemp seeds are a rich source of protein, fiber, and essential fatty acids. They are also a good source of calcium, magnesium, and potassium. Hemp seeds are a healthy and nutritious food source.

HEMP STALKS
 Hemp stalks are a source of fiber and are used in a variety of products, including paper, textiles, and building materials. Hemp stalks are also a source of biomass, which can be used for energy production.

INDUSTRIAL HEMP
 Hemp Fiber, Hemp Stalks, Hemp Seed

HEMP FIBER
 Hemp fiber is a natural, biodegradable fiber that is used in a variety of products, including paper, textiles, and building materials. Hemp fiber is also a source of biomass, which can be used for energy production.

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HEMP PRODUCTS
 Hemp products include paper, textiles, building materials, food, and biofuels. Hemp is a versatile crop that can be used in a wide range of applications.

Hemp

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The Facts

- Hemp fibers have been used in the following ways:
 - fabrics, textiles, yarns, spun fibers, carpeting, home furnishings
 - paper, construction and insulation materials, oil absorbents
 - the seeds and oilcake used in salad and cooking oil and dairy alternatives/ alternative protein source
 - oil from hemp seed used in soap, shampoo, lotions, bath gels, cosmetics
 - medicinal and therapeutic value
 - as a building material mixed with lime products, lightweight insulating materials, plastics for fiberglass alternative in automotive and aviation sectors
 - promoted as a potential biodiesel feedstock and cover crop
- Botanically, both hemp and marijuana are both *Cannabis sativa*, but hemp is the plant without the delta-9 tetrahydrocannabinol concentration of not more than 0.3 percent on a dry weight basis, as delta-9 is the psychotropic property of cannabis.

Figures

Figure 3. Hemp Fiber and Seed, Global Acreage (2000-2015)

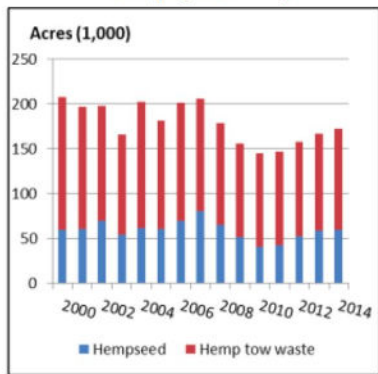
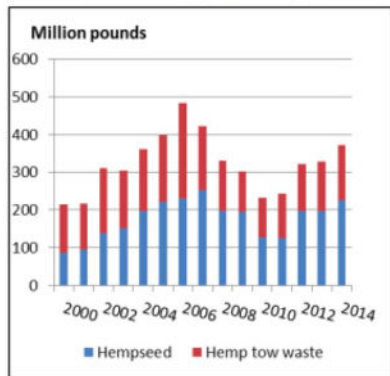


Figure 4. Hemp Fiber and Seed, Global Production (2000-2015)



Source: EAGSTAT <http://www.fao.org/eagstat/>

Figure 2. U.S. Hemp-Based Product Sales by Category, 2015

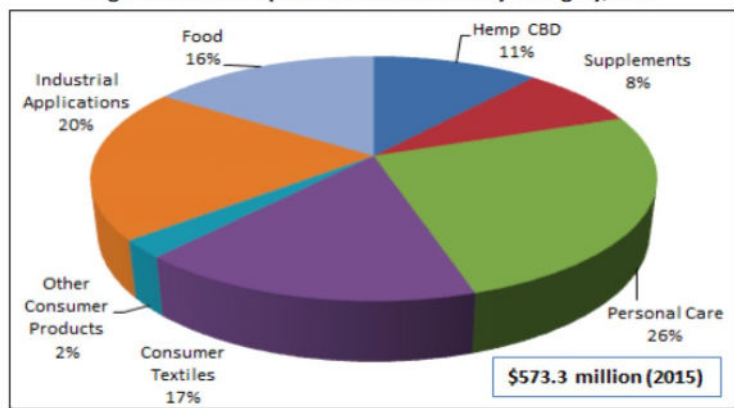


Figure 6. State Laws Related to Industrial Hemp

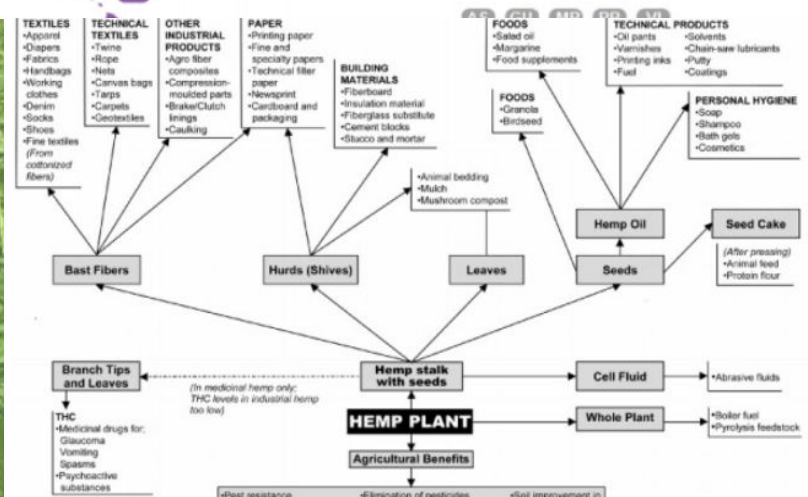
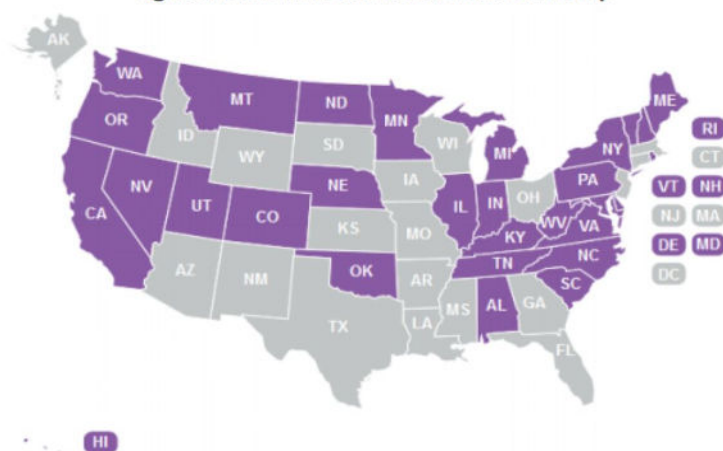


Table I. Value and Quantity of U.S. Hemp Imports, 1996-2015

	Units	1996	2000	2005	2010	2011	2012	2013	2014	2015
Hemp Seeds (HS 1207990320)	\$1000	—	—	271	5,125	6,553	13,035	26,942	29,326	54,191
Hemp Oil and Fractions (HS 1515908010)	\$1000	—	2,822	3,027	1,833	1,146	1,098	2,264	3,446	4,836
Hemp Seed Oilcake and Solids (HS 2306900130)	\$1000	—	—	—	2,369	2,947	4,388	6,279	8,159	16,281
True Hemp, raw/proc. not spun (HS 5302)	\$1000	100	577	228	94	181	157	78	114	292
True Hemp Yarn (HS 5308200000)	\$1000	25	640	904	296	580	496	482	909	1,497
True Hemp Woven Fabrics (HS 5311004010)	\$1000	1,291	2,258	1,232	1,180	1,364	1,363	1,057	900	1,020
Total		1,416	6,297	5,662	10,897	12,771	20,537	37,102	42,854	78,117

What did we learn?

CANNABIS SATIVA

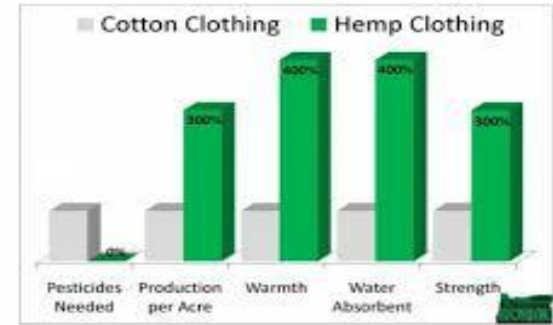
While hemp and marijuana come from the same plant, they have distinct differences.

Hemp	Marijuana
<p>Hemp, also known as industrial hemp, refers to the plant grown for agricultural products such as seeds, fibers and oils.</p> <ul style="list-style-type: none">Hemp is grown tall and thick in a single main stalk with a few leaves and branches.It is closely planted to avoid flowering. <p>Average THC content: < 1 percent</p>  <p>13 states have some form of industrial hemp program.</p> <p>Canada and the EU draw the line at 0.3 percent. Below that is industrial and requires a license to grow. Above 0.3 percent is a drug.</p>	<p>Marijuana is the flowering tops of the cannabis plant specifically bred to have a high THC content.</p> <ul style="list-style-type: none">Marijuana grows short, clustered and bushy with many flowering buds.Marijuana is planted with generous spacing. <p>Average THC content: 10 percent</p>  <p>8 states have legislated the sale of recreational marijuana.</p> <p>Some sample tests indicate THC levels of 20 percent, 40 percent or higher.</p>

Source: State-level legislation tracked by Congressional Cannabis Action

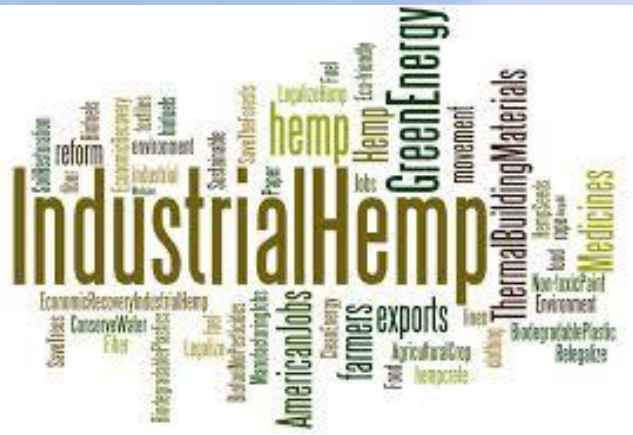
Industrial hemp is a 100% versatile material in its ability to be used in almost all the components of the house; including the construction boards, insulation, finishes, paint, and plumbing. In the interior of the home, hemp is in the desk, the papers inside, clothes in the closet, the fabric of carpets, and the plastic component of electronic devices. In this way, with the legalization of hemp, it can be incorporated into nearly all aspects of our daily life without a change to our habits. Another thing is that though the US will import an estimated \$500 million worth of products made from hemp, it continues to be illegal for farmers to grow on domestic soil. Hemp is used as a community building material. Research developments are used to access the seeds of industrial hemp, particularly in Kentucky, though the DEA threatens to go to federal court and charge farmers that try and plant the crop, despite its numerous uses.

Is this life supported?



Though I do believe the use of this biosustainable plant is important, it will clearly take a long time for it to become this highly integrated into our everyday lives. As many states consider legislation over the legalization of industrial hemp, it will take time for it to be incorporated into mainstream consumerism to the point where nearly all components of the infrastructure of the house are made of hemp, as well as daily commodities, such as newspapers and clothing. However, as this material is sustainable and researchers are constantly looking for new ways to reduce greenhouse gas emissions and lessen the effect on the environment that the manufacturing of essentials has, things like cars and paper would be I believe widely accepted because of their sustainability. On the other hand, realistically there might be some criticism in its integration because some people may be uncomfortable using a material that they associate with the illegal drug.

Reflection



I myself have always supported the legalization of hemp, but I was looking at it from a political, social, and cultural lense. However, with the research for this challenge, I have come to realize all the benefits of industrial hemp and fully believe that it should be legalized nationwide. I understand that some states may be skeptic to enact legislation and consumers may be reluctant to integrate this material into their everyday lives because of its association, but I think the benefits of the material far outweigh the potentially negative consequences of public backlash. For example, industrial hemp is exceptionally versatile in ways that I would have never imagined, and I now see all the ways in which we can improve on our daily habits and accessories by using hemp to make our lives more sustainable.