Hemp: A Global History of Grain and Fiber Use



Introduction

Figure 1: A modern hemp field cultivated for fiber in Brittany, France – reflecting hemp's resurgence as an industrial crop in Europe. Hemp (industrial hemp) refers to low-THC varieties of *Cannabis sativa L*. cultivated for non-drug uses such as fiber and grain. It is one of humanity's oldest domesticated plants, valued for millennia as a source of durable fiber, nutritious seeds, and oil. Archaeological evidence suggests hemp was among the first plants spun into usable fiber over 50,000 years ago, and it remains one of the fastest-growing and most versatile crops on Earth. From ancient rope and textiles to modern food, paper, and even bioplastics, hemp's applications are remarkably diverse.

However, despite this rich industrial and nutritional heritage, public understanding of "hemp" has been clouded by its association with psychoactive cannabis (often called *marijuana*). For much of the 20th century, laws did not distinguish low-THC hemp from high-THC drug cannabis. This legal conflation – epitomized by the U.S. Marihuana Tax Act of 1937, which used the slang term "marihuana" to label all forms of *Cannabis* including hemp – led to

hemp's near-elimination in many countries and a loss of historical knowledge about the crop. Only recently have policymakers begun to re-recognize hemp as an agricultural commodity distinct from marijuana, as seen with the 2018 U.S. Farm Bill legalizing hemp (cannabis ≤0.3% THC) after decades of prohibition.

This white paper provides a comprehensive history of the term "hemp", emphasizing its global legacy as a grain and fiber crop. We explore the word's origins across languages, hemp's traditional uses in food and fiber from antiquity to modern times, and key legal milestones worldwide that shaped public perception and policy. We clarify how historically hemp was differentiated from psychoactive cannabis and how modern legislation blurred that line. Finally, we underscore the importance of reclaiming "hemp" in policy and public discourse – aligning the term with its industrial, nutritional, and agricultural roots – and recommend clear language and policy approaches for the future. The goal is to inform both the general public and policymakers with an accessible yet thorough account, supported by data and peer-reviewed references, to guide evidence-based decisions on hemp.

Origins and Etymology of "Hemp"

The term hemp has deep linguistic roots reflecting the plant's long history of use. Interestingly, the various words for hemp across cultures do not all derive from a single proto-language; instead, several ancient sources converged. The English word "hemp" traces back to Old English *hænep* or *henep*, from Proto-Germanic *hanapiz*. This, in turn, likely came from an older Scythian or Thracian word that also gave Greek *kánnabis* (κάνναβις) and Latin *cannabis*. In the Germanic sound shift (Grimm's law), the *k* of *kannabis* became *h*, yielding forms like Old High German *hanaf*, German *Hanf*, Dutch *hennep*, Swedish *hampa*, and English *hemp*. All these cognates traditionally referred to the fiber-producing plant. For example, the Oxford English Dictionary defines hemp primarily as *"the Cannabis plant, especially when grown for fiber"*, and even as a generic term for other fiber plants. This highlights that in European languages "hemp" was strongly associated with industrial fiber use.

Meanwhile, the scientific genus name *Cannabis* comes from the same Greek/Latin root. Many modern Romance language names (French *chanvre*, Spanish *cáñamo*, Italian *canapa*) descend from Latin *cannabis*. Slavic languages also borrowed this root (Russian *konoplya*, Polish *konopie*, etc.), reflecting ancient trade or cultural exchange in hemp. An intriguing ancient source is the Assyrian word qunnabu, recorded in the first millennium BCE as referring to a plant used for oil, fiber, and medicine. This suggests a Near Eastern knowledge of cannabis by that name, possibly related to later Semitic terms (e.g. Hebrew *kaneh-bosm* in Biblical texts is sometimes debated as referencing cannabis).

Outside the Indo-European sphere, other cultures had their own terms. In China, the word for hemp is "má" (麻), and its very written character illustrates hemp's importance: the Chinese character 麻 depicts two plants drying under a shelter. Archaeological evidence shows hemp usage in China as early as 5000 BCE, so the term má has been in continuous use for millennia. In ancient India, cannabis was venerated under names like "śaṇa" or referred to as one of the sacred herbs ("soma" or "bhang" in certain contexts), although those terms encompassed psychoactive use as well. Still, Indian usage distinguished the fiber crop (for example, san in Hindi for hemp fiber) from intoxicating preparations like ganja or charas. This pattern of dual terminology – one for fiber or seed use, another for drug use – is found in many cultures. Historically, "hemp" (or its local equivalent) almost always meant the non-narcotic plant used for rope, cloth, or food, whereas terms for psychoactive cannabis were often different (e.g. "hashish" in Arabic for resin, "marijuana" in 20th-century English slang).

It is notable that the word *"marijuana"* itself is relatively recent and was originally Mexican-Spanish slang (possibly from *"mallihuan"*, a Mexican indigenous term) for the drug-type cannabis. It entered American English in the early 1900s and was popularized by prohibitionists. Prior to the 1930s, "marijuana" was not an official term – hemp or cannabis were the common words. The Marihuana Tax Act of 1937 effectively legitimized "marijuana" as a legal

term encompassing all forms of *Cannabis*, including what had historically been called hemp. This marked a semantic shift: a colloquial drug name was imposed on the age-old fiber crop, contributing to public confusion. In Britain and much of Europe, the word "hemp" continued in common usage for industrial cannabis, but even there one finds the term "Indian hemp" in older texts referring to potent *Cannabis indica* drug material. Overall, understanding the etymology reminds us that hemp's identity in language has always been tied to its utilitarian role – a fact that modern policy should reflect by reserving the word for grain and fiber contexts, rather than conflating it with narcotic cannabis.

Traditional Uses of Hemp Across Civilizations

Hemp as an Ancient Fiber Crop

Hemp is among the oldest cultivated fiber plants in the world. Its use predates recorded history and spans numerous ancient civilizations:

- East Asia: In China, hemp has been used since the Neolithic era. Archaeologists have found hemp fiber imprints on Yangshao culture pottery dating to the 5th millennium BCE. By around 2800 BCE, Chinese sources document hemp cultivation for fiber. The strong, long bast fibers from the hemp stalk were used to make textiles, from coarse cloth to ropes. Ancient Chinese texts praise hemp cloth (*"ma"*) for its practicality. Hemp was also critical for early paper: the world's first paper is believed to have been made from hemp rags by Cai Lun in Han dynasty China (~105 CE). Indeed, long before wood-pulp papermaking, Cannabis hemp was a major source of paper fiber due to its high cellulose content. The Chinese also utilized hemp in other ways for example, the seeds were eaten and pressed for oil, and there is evidence of medicinal use of hemp seed in traditional Chinese herbology for conditions like constipation and to promote healing. This holistic use of the plant fiber, food, medicine meant hemp held an esteemed place in East Asian cultures. (The Chinese character 麻 "má" even became a general symbol for something numb or tingling, likely from the plant's mild medicinal effects.)
- South Asia: In the Indian subcontinent, *Cannabis* (including hemp) has been part of culture since at least 2000 BCE. While famous for its religious/psychoactive usage (as *bhang*, *ganja*, etc.), India also cultivated hemp for fiber and nutrition. Ancient Sanskrit texts refer to the plant as one of the "five sacred plants," indicating its significance. Hemp fiber (called *śaṇa* in Sanskrit) was used to make ropes and coarse fabrics. There are records of hemp ropes being used in India for bowstrings and textiles. Hemp seeds and oil were used in cooking and Ayurvedic medicine for example, hemp seed paste was sometimes applied as a poultice, and roasted hemp seeds could be eaten as a grain. The dual use in India hemp as both a sacred intoxicant and a utilitarian crop demonstrates how clearly people distinguished the context and cultivation of the plant. The fiber crop was generally harvested before the plants produced potent flowers, yielding long fiber but minimal resin (and thus non-intoxicating).
- Middle East and Europe (Antiquity): Hemp likely spread west from Central Asia. Herodotus, the Greek historian (5th century BCE), noted that the Scythians (a Central Asian nomadic people) grew hemp and used its fiber to make cloth that he compared to linen. He also famously described Scythians throwing hemp seeds on hot stones and inhaling the vapors, indicating psychoactive use of the plant's vapors or smoke. This suggests that by 500 BCE, Eurasian cultures knew both the fiber value of hemp and its intoxicating properties. In classical Greece and Rome, hemp was used primarily as a fiber crop. The Greeks used hemp for strong ropes (e.g., for their naval vessels) and some medicinal preparations e.g. the physician Galen mentioned hemp's use to treat ear pain. The Romans cultivated hemp (Latin *cannabis*) in various provinces; Pliny the Elder in the 1st century CE wrote about *cannabis sativa*, noting its utility for

rope and nets, and mentioning that hemp root could be boiled to make a remedy for joint stiffness. Overall in Europe, hemp began as an introduced crop in the Iron Age or later; one study finds clear evidence of hemp fiber in Western Europe only by the Iron Age (~1st millennium BCE). Nevertheless, by the late Roman period, it was established enough that the term *cannabis* appears in Roman law and agricultural texts.

 Medieval Europe: During the Middle Ages, hemp was a staple crop across Europe, vital for everyday life. Because of its adaptability to temperate climates, nearly every region had some hemp cultivation by medieval times, especially for making ropes, sailcloth, sacks, and coarse textiles for the peasantry. In many languages, the word for canvas (heavy cloth) is derived from cannabis – for instance, French *toile de chanvre* and the word "canvas" itself (from Latin *cannapaceus*) originally referred to hemp-based fabrics. Hemp was truly the "canvas of society," used in everything from ship sails to wagon covers. In fact, hemp was the premier cordage fiber for centuries, prized for its strength and resistance to saltwater rot. By the Age of Sail (16th–18th centuries), the ropes and rigging of European ships relied heavily on hemp fiber. Historical records show that some countries even required farmers to devote acreage to hemp to supply naval stores. For example, in 1535 King Henry VIII of England passed an act compelling landowners to sow a portion of their land with hemp or flax, under penalty of fines, to ensure a domestic supply of fiber for rope and canvas. In colonial North America, similar laws were enacted: the Virginia Assembly in 1619 mandated hemp cultivation by all farmers, and hemp was grown at early settlements like Jamestown for sails, rope, and clothing.

In addition to fiber, hemp seed was utilized in Europe as a food and oil source, though to a lesser extent than fiber. Peasants in some regions ate hempseed porridge or gruel, especially in times of grain shortage. For instance, hemp seeds were boiled into a soup or mashed into a filling for pies in late medieval Germany and Italy. Hempseed oil – pressed from the seeds – was used in lamps as an oil and in paints/varnishes. While not as prized as linseed or olive oil due to its tendency to dry, hemp oil was nevertheless a useful drying oil. Some European folk remedies involved hemp as well: a wash made from hemp flowers or a poultice of hemp leaves might be used to ease inflammation (noting that these would have contained little psychoactive content when taken from fiber varietals). The key point is that throughout pre-modern Europe, "hemp" unequivocally meant the versatile fiber crop and its seed products, integrated into agrarian life and trade.

• Middle East and Islamic World: Hemp fiber was known in the Islamic Middle Ages as well – for example, medieval Arabs used hemp (Arabic *qinnab*) for making ropes and twine. In the 13th century, the famed traveler Marco Polo noted hemp cordage in the Middle East and also described hashish (cannabis resin) use in the region. The term "hashish" became associated with the drug form, while fiber-hemp continued to be grown for practical uses. Some regions like Egypt and Anatolia cultivated hemp; in fact, Egypt in the 12th–13th centuries saw controversy over hashish use even as hemp rope-making was a standard craft. This again highlights the *dual identity* of cannabis – the same plant providing two very different categories of product, usually managed and perceived separately.

Hemp in the Age of Sail and Industry

Between the 1500s and 1800s, as global trade and navies expanded, hemp became a strategic commodity. Strong naval powers required enormous quantities of hemp for rigging, sails (often a hemp-linen blend canvas), fishing nets, and provisioning (hemp sacks). For example, it was said that a single ship-of-the-line (a large warship) might require 60–100 tons of hemp ropes and sails. This demand led to significant hemp industries in countries with suitable climates and land:

• **Russia and Eastern Europe:** From the 17th through 19th centuries, the Russian Empire was the world's leading hemp producer. By around 1740, Russia supplied at least 80% of the hemp used in Europe. The rich soil of regions like Ukraine, and cheap serf labor, made Russia an ideal supplier. Hemp fiber was Russia's

number one export by the 18th century – more important than even timber or fur trade. Britain relied heavily on Russian hemp; in the late 1700s, over 90% of the Royal Navy's hemp came from Russia. This dependence was so critical that it influenced geopolitics: during the Napoleonic Wars, Napoleon attempted to cut off Britain's hemp supply by persuading the Tsar to stop exports (the "hemp war" strategy). When Russia resumed hemp trade with Britain in defiance of Napoleon, it contributed to Napoleon's decision to invade Russia in 1812 – an invasion that failed disastrously. Such episodes underscore hemp's historical strategic importance.

After the Napoleonic era, Russian hemp production continued strong. Even post-Industrial Revolution, when other fibers rose, the Russian/Soviet region remained a hemp center. In 1931 the USSR established a specialized Institute of Bast Crops in Glukhov, Ukraine, to improve hemp cultivation. Soviet agronomists developed improved hemp varieties through the mid-20th century, including strains with higher fiber yields and lower THC content in the 1970s. This indicates that even behind the Iron Curtain, the distinction between drug and fiber cannabis was recognized and breeders worked to minimize the psychoactive component in hemp.

- Western Europe: Countries like Poland, Lithuania, Italy, France and Britain also grew substantial hemp. France in particular has a continuous history of hemp cultivation (e.g., in Brittany and Champagne regions) and maintained hemp breeding programs into the 20th century. Italy's Napoli (Naples) region was noted for high-quality hemp in the 18th–19th centuries (the term "Naples hemp" was synonymous with fine hemp cordage). Britain, lacking ideal climate for large-scale hemp, encouraged production in colonies (Canada, New Zealand, India) and imported the rest from Russia and Eastern Europe. By the 1800s, industrial centers processing hemp (for canvas, sailcloth, ropewalks making ropes) were common across Europe. Hemp was a backbone of the maritime economy until steam power reduced the need for sails and synthetic fibers emerged.
- Americas: Hemp arrived in the Americas with European colonization. As noted, British colonies in North America grew hemp from the 1600s onward for instance, Kentucky became a heartland of U.S. hemp production. By the mid-19th century, Kentucky was producing 40,000 tons of hemp fiber annually (the U.S. peak) in 1850. American hemp was used for rope, twine, canvas, and rough textiles (like slave clothing in the antebellum South). The U.S. Navy sourced domestic hemp for rope until imports became cheaper. In Latin America, the Spanish introduced hemp to Chile in the 1500s for naval supply; Chile became a hemp producer for the Spanish Armada's needs. Similarly, Mexico had sporadic hemp cultivation (though overshadowed by the use of wild cannabis as marijuana later).
- **Other regions:** In Asia beyond China, countries like Korea, Japan, and Vietnam also used hemp. Japanese samurai armor lacing and some traditional fabrics were made from hemp; in fact, remnants of hemp cloth have been found in prehistoric Jomon sites in Japan, indicating ancient usage. In the Middle East, cultivation was smaller-scale, but regions like Anatolia (Turkey) grew hemp for local rope and cloth markets. In Africa, hemp was introduced by Arab traders in some areas for rope making, even as local names (like "dagga" in South Africa) also came to refer to psychoactive use.

By the 19th century, hemp's dominance began to wane due to several factors. The Industrial Revolution brought technological changes and new materials that undercut hemp: the invention of the cotton gin in 1793 made cotton fiber far cheaper to process into fabric than labor-intensive hemp, accelerating cotton's popularity for textiles. The rise of steamships in the mid-1800s reduced reliance on sail power and thus demand for sailcloth and rigging made of hemp. Cheaper imported fibers like jute (from India) and abaca (Manila hemp from the Philippines, which is actually a banana plant fiber) competed with hemp for cordage; jute was less durable but very cheap, and abaca was favored for marine ropes due to its lighter weight and salt resistance. The late 19th century also saw the development of *metal cables* which began replacing ropes for heavy load tasks.

In the early 20th century, the invention of synthetic fibers (starting with rayon and acetate in the 1920s and nylon in 1935) posed a final challenge. Nylon, in particular, was directly promoted as an alternative to hemp and silk for parachutes and ropes. Companies like DuPont (which developed nylon) had financial interests in seeing synthetics supplant natural fibers. Consequently, by the 1930s hemp was already in economic decline in the Western world. Hemp processing did not fully industrialize at the same pace as cotton (there was no widely adopted "hemp decorticator" machine to automate fiber separation until much later), so hemp remained relatively labor-intensive and costly. Global production of hemp fiber and seed fell dramatically from the 19th into the mid-20th century. For instance, world hemp fiber output in the early 1960s was only about one-sixth of what it had been a few decades earlier, as many farms stopped growing it.

Importantly, this market decline coincided with growing social/legal pressures against *Cannabis* due to the rise of drug use concerns, which would soon nearly eliminate hemp farming in many countries. Nonetheless, on the eve of prohibition, hemp still had pockets of significance – e.g., the Soviet Union in the 1950s was reportedly cultivating hundreds of thousands of hectares of hemp and remained the largest producer, and some Western farmers and scientists held out hope that new technologies could spark a "hemp renaissance" (as suggested by a 1938 *Popular Mechanics* article calling hemp the "new billion-dollar crop" if fully mechanized). But any such renaissance was cut short by legal bans.

Legal and Regulatory Milestones Shaping Hemp's Fate

Early Drug Laws and the Fall of Hemp (1900s–1950s)

Hemp's decline was hastened and nearly sealed by the wave of cannabis prohibition laws in the 20th century, which generally failed to distinguish between low-THC hemp and high-THC marijuana. Several key milestones include:

- International Opium Convention (1925): The first multinational drug control treaty to include cannabis. Spurred by concerns about hashish trade in the Middle East and North Africa, the 1925 Geneva convention added "Indian hemp" (cannabis) to the list of substances whose export was to be limited to medical and scientific purposes. While the treaty targeted psychoactive cannabis resin, it planted the seed for viewing *Cannabis sativa* as a controlled substance internationally. Countries like Egypt and South Africa had already outlawed recreational cannabis by the 1910s, and pressures mounted on colonial powers to regulate cannabis in their territories. Crucially, these early laws did not exempt industrial hemp explicitly – mostly because at the time hemp was still legal and its potential inclusion was overlooked or deemed unproblematic. This ambiguity later allowed countries to ban hemp under the guise of narcotics control.
- United States Marihuana Tax Act (1937): A seminal event in hemp history. The Marihuana Tax Act was the first federal U.S. law effectively prohibiting cannabis. It did so not by out-right ban, but by imposing prohibitive taxes and complex registration requirements on growing, selling, or possessing cannabis. The Act's language made no distinction for industrial hemp; it defined "marihuana" broadly as *"all parts of the plant Cannabis sativa L."* (excluding mature stalks and non-germinating seeds nominally). Enforcement treated any unlicensed cannabis cultivation as illegal, and licenses were rarely if ever granted for hemp. The Act also institutionalized the term "marihuana" (marijuana) as the legal term replacing "cannabis" in legislation and thereby conflating hemp with a word that, in the public mind, was associated with a dangerous drug used by fringe elements. This was not accidental; Federal Bureau of Narcotics commissioner Harry Anslinger led a campaign in the 1930s demonizing "marijuana" with sensationalist claims, explicitly aiming to halt all cannabis cultivation. Anslinger and certain industrial interests viewed hemp's close relation to marijuana as an opportunity to eliminate an industry seen as competing with wood

pulp (for paper) and synthetic fibers. By 1937, U.S. hemp production, already shrinking, collapsed – from about 12,000 acres in 1936 to virtually zero a few years later. One contemporary report noted U.S. hemp fiber output had dwindled to only 500 tons by 1933. The Tax Act is widely regarded as a death knell for American hemp farming, with one exception shortly after:

- Hemp for Victory (World War II, 1942–45): During WWII, imported hard fibers (jute, abaca) were cut off by Japanese action in Asia, creating shortages for rope and cordage in the U.S. military. The U.S. government temporarily reversed its stance on hemp. In 1942 the federal ban/tax was suspended, and the USDA launched a "Hemp for Victory" emergency program to incentivize farmers to grow hemp for the war effort. The USDA produced a film titled *Hemp for Victory* extolling hemp's history and uses. The government distributed seeds and provided processing mills. As a result, about 350,000–400,000 acres of hemp were cultivated across the Midwest and South from 1942–1945. Peak planting reached over 150,000 acres in 1943. This short-lived revival proved that with encouragement, farmers could supply hemp at scale even under modern conditions. However, it was a forced, utilitarian effort divorced from any change in hemp's legal status as a "drug crop." When WWII ended, the federal government shut down the program in 1945, and by 1957 the last commercial hemp fields in the U.S. (in Wisconsin) were harvested before total prohibition resumed. The Controlled Substances Act of 1970 would later formalize the illegality of hemp by classifying all cannabis (again with no hemp exemption) as Schedule I the strictest category, alongside heroin.
- UN Single Convention on Narcotic Drugs (1961): This treaty consolidated earlier drug conventions and required signatory countries to prohibit the production of cannabis for non-medical use. The Single Convention defined Cannabis as "the flowering or fruiting tops of the cannabis plant" and cannabis resin. Notably, it excluded the seeds and mature stalk fiber from the definition (implicitly acknowledging hemp parts), but not the cultivation of the plant itself. In other words, under the treaty any cannabis plant grown could fall under control unless it was for strictly industrial (fiber/seed) purposes supervised by governments. The Convention obliged countries to eliminate cannabis from illicit channels, which led most nations to ban cannabis cultivation outright by the 1960s (since policing who grows what variety was deemed impractical). There was "no allowance for potency distinctions" - all cannabis was treated the same in law. By the late 1960s, hemp farming had been outlawed in virtually all Western countries. For example, the UK's 1971 Misuse of Drugs Act made cannabis (including hemp) illegal to grow without a special Home Office license. Similarly, Canada in 1938 banned cannabis and by 1950 had no legal hemp cultivation. Many countries that had grown hemp for centuries (France being a rare exception with some continued cultivation) saw the crop vanish due to regulatory fears that fields could hide marijuana or that hemp was not worth the legal headaches. As one source summarizes, "after the 1961 UN treaty, cannabis without distinction between hemp and marijuana - was banned in most countries," and even research was heavily restricted.
- The Soviet Bloc and China: An interesting divergence occurred under communist regimes. The USSR, China, and some Eastern European countries never completely halted hemp production during the mid-20th century. The Soviet Union remained the largest hemp cultivator through the 1950s, as noted, and into the 1980s still grew hemp (albeit on a smaller scale after synthetic fibers took hold). The Soviets did implement controls to prevent diversion (their low-THC varieties and state-run farms ensured hemp wasn't used for drugs). China likewise continued large-scale hemp fiber farming (in provinces like Heilongjiang and Yunnan) through the prohibition era since domestic hemp textiles and ropes were economically important – again keeping THC levels low and usage industrial. These countries effectively treated hemp as a separate category, although officially they were treaty signatories who banned "drug cannabis." This illustrates that distinguishing hemp was always possible with the political will, but in the West such nuance was lost for decades.

In summary, by the 1970s hemp was nearly extinct in North America and Western Europe, kept alive only in isolated state-controlled programs or by small-scale clandestine growers. Public knowledge of hemp's uses faded; a whole generation grew up with "hemp" and "marijuana" synonymous and stigmatized. One notable anecdote: The USDA's own *Hemp for Victory* film was literally hidden – the agency denied its existence until hemp advocates unearthed archived copies in the 1980s, emblematic of how thoroughly hemp's legacy had been buried.

Modern Re-emergence and Legal Reforms (1990s-2020s)

After decades of dormancy, the late 20th century saw a gradual rediscovery of hemp's benefits, leading to legal reforms in many countries. Key milestones in the hemp renaissance include:

- European Union Reforms (1990s): In the 1990s, several European countries re-legalized hemp cultivation under license. The UK (1993), Germany (1996), the Netherlands (1994), and other EU nations set up licensing regimes to allow farmers to grow hemp provided the varieties stayed below a THC threshold (initially 0.3%, later 0.2% in EU). The European Union incorporated hemp into its agricultural policy farmers growing approved low-THC hemp cultivars could receive EU subsidies as part of a push for alternative crops. By the late 90s, tens of thousands of acres of hemp were being grown in Europe again. France, which had continuously grown hemp (though at low levels), expanded production and remains Europe's top producer. The EU's rules created a model: industrial hemp defined by THC content, monitored via certified seed varieties. This concept of differentiating hemp in law by an allowable THC percentage (usually around 0.2–0.3%) became standard globally.
- **Canada (1998):** Canada lifted its 60-year ban on hemp by introducing an Industrial Hemp Regulation in 1998. Canadian law allows cultivation of *Cannabis sativa* with less than 0.3% THC under government licenses. Since then, Canada has become a major producer of hemp grain (seed) especially Canadian farmers pioneered large-scale production of hemp hearts (shelled seeds) and oil for the health food market. As of the 2010s, Canada was planting tens of thousands of acres of hemp annually, primarily in the prairie provinces, reclaiming part of the North American hemp supply that had been served by imports.
- **Australia and others:** Australia's states began permitting hemp in the 1990s (e.g., Tasmania 1995 pilot program, Victoria 1998). By the 2010s, most Australian states and New Zealand allowed licensed hemp farming. Likewise, Asian countries like South Korea, Thailand, and India have recently launched or relaunched hemp cultivation programs under strict controls, recognizing the economic potential.
- United States Farm Bill Acts (2014 & 2018): The U.S., which had been one of the last holdouts still treating hemp as a Schedule I drug, made significant changes through its Farm Bills. The Agricultural Act of 2014 (Farm Bill 2014) allowed states to enact research pilot programs for industrial hemp under limited conditions (Section 7606). This led to a patchwork of state-level experimental hemp farms, mostly tied to universities and state agriculture departments. Enthusiasm and successful pilot results built momentum for full legalization. Finally, the Agricultural Improvement Act of 2018 (Farm Bill 2018) dramatically changed federal law: it removed hemp (defined as cannabis with $\leq 0.3\% \Delta 9$ THC) from the Controlled Substances Act. Hemp was no longer a controlled drug but treated as an agricultural commodity. The law also allowed interstate commerce of hemp and hemp products, and made hemp farmers eligible for crop insurance and USDA programs. In short, as of 2018, the U.S. legally recognizes *hemp* as distinct from marijuana. This landmark brought American policy in line with Canada and Europe and unleashed a boom in hemp farming by 2019, over 500,000 acres of hemp were licensed in the U.S., though much of it initially for CBD extraction rather than fiber or seed.
- **THC Thresholds and Evolving Standards:** The 0.3% THC definition has become a global norm, but it is somewhat arbitrary originally proposed by Canadian scientist Ernest Small in 1976 as a pragmatic line between "drug" and "non-drug" cannabis. Some countries use different thresholds (e.g., the EU is shifting

from 0.2% to 0.3%; Switzerland and Australia use 1% in some cases). There is ongoing discussion among policymakers to harmonize these limits and possibly raise the THC cutoff slightly, given that even 1% THC hemp cannot produce intoxication if used as intended. However, any changes would need careful communication to avoid reigniting fears that "hemp is just marijuana by another name."

United Nations and International Stance (2010s): The UN Single Convention remains in force, but the UN and WHO have begun acknowledging distinctions. In 2018, the WHO recommended that preparations of CBD (cannabidiol, a non-intoxicating component derived from hemp or cannabis) not be scheduled as narcotics, implicitly supporting hemp-based CBD trade. In 2020, the UN Commission on Narcotic Drugs voted to remove cannabis from Schedule IV (the strictest category) to recognize its medical uses – a symbolic move that does not directly legalize hemp internationally but reflects shifting attitudes. The European Industrial Hemp Association (EIHA) and other advocacy bodies have argued that industrial hemp is clearly exempted from the scope of drug treaties and should be treated as an ordinary crop. While treaty language can be interpreted in multiple ways, in practice many countries now report their hemp fiber and seed production to the UN separately, indicating a de facto acceptance that *industrial hemp ≠ cannabis drug*. As of 2025, more than 40 countries worldwide cultivate hemp commercially, and international trade in hemp seeds, fibers, and extracts is growing swiftly.

The legal rollercoaster of the past century – from hemp's fall to its resurgence – has greatly influenced public perception. Laws against cannabis created stigma and confusion, but recent reforms are helping to restore hemp's reputation as a beneficial and legitimate crop. The challenge now is ensuring that regulatory frameworks, both domestic and international, consistently differentiate hemp and enable its full potential.

Distinguishing Hemp from Psychoactive Cannabis

Historically, farmers, traders, and consumers understood that **hemp is not marijuana** – they are different breeds of the same species cultivated for opposite ends. How were they distinguished, and how did modern law blur this distinction?

Agronomic and Physical Differences: Hemp varieties are bred and cultivated to maximize fiber in the stalk or seed output, not resin in the flowers. Traditional fiber hemp is grown densely – with plants close together and encouraged to grow tall (6–15 feet or 2–5 meters) with slender stalks and minimal branching. This forces the plant to channel energy into a long central stalk ideal for fiber, at the expense of foliage and flowering. The resulting hemp plants have relatively low concentrations of the sticky resin where THC (tetrahydrocannabinol) resides. By contrast, marijuana (drug cannabis) is often a bushy plant with many branches, widely spaced in cultivation or individually tended, to maximize the development of flowers (buds) rich in resin. Visually, one can often tell them apart: in a field, industrial hemp looks like a uniform stand of bamboo-like green stalks, whereas marijuana plants are shorter, Christmas-tree shaped shrubs. As a U.S. Congressional Research Service report noted, hemp and marijuana "look quite different when under commercial cultivation" – hemp tall and thin, marijuana short and broad. Harvest timing differs too: fiber hemp is harvested early (before full seed set) for soft, high-quality fiber, or later for seed; but in neither case is it allowed to fully flower to peak THC potency.

Chemical Differences: The defining chemical distinction is that hemp has very low levels of THC, the principal psychoactive compound, typically <0.3% by dry weight. It often has higher CBD (cannabidiol), a non-intoxicating compound that can counteract THC's effects. Psychoactive cannabis, conversely, is bred to produce high THC (anywhere from 5% to 25% or more in modern strains) and usually lower CBD. These chemotype differences were not quantified historically, but the effects were observed – people did not smoke hemp rope for a high. In fact, in Europe, traditional medicinal uses of "hemp" drew on preparations from fiber or seeds (like poultices or hempseed

oil) that had little to no intoxicating effect. The "drug" applications were separate, often termed differently (e.g., "hashish," "bhang"). This delineation goes back to antiquity: for example, medieval Islamic physicians distinguished between using hemp seeds in medicine versus the recreational use of concentrated resin (hashish) which they often warned against.

Historical Recognition: Many historical sources explicitly note differences. The Mishna (2nd century CE Jewish text) lists hemp among crops and notes its long growing season, with no hint of it as a drug. Medieval authors in Europe writing about hemp (Latin *canabis*) praised its fiber for cloth and seed for gruel, but when discussing the plant's drug effects they often used terms like "bangue" or "hashish" borrowed from elsewhere, implying it was viewed almost as a separate entity. In the 19th century, as cannabis-based drugs (tinctures, etc.) became known in Western medicine, they were often labeled "Indian hemp" to indicate high-potency material from *Cannabis indica*. Pharmacists understood that Indian hemp (drug) and European hemp (fiber) were the same species but not the same crop.

However, modern prohibitionist legislation ignored these nuances. Why? Largely due to enforcement practicality and political intent. Regulators in the 1930s-1970s argued that allowing any cannabis cultivation could be a "Trojan horse" for illegal marijuana growing. There was concern that drug plants could hide among hemp plants or that policing THC content in fields would be too hard. Additionally, the anti-cannabis campaigns were often driven by moral panic and commercial interests that did not want to spend effort drawing fine lines. Thus, laws were written simply to ban *Cannabis* (with maybe a token exception for sterilized seed or fiber already processed). For decades, the U.S. DEA and counterparts abroad maintained that distinguishing hemp from marijuana was difficult and that any legalization of hemp would "send the wrong message" about cannabis in general. This stance persisted even as scientific and industrial communities demonstrated that hemp fields are poor concealment for marijuana (the cross-pollination in a hemp field would actually ruin marijuana's potency, and their appearance is distinct).

The result of this regulatory blur was that *the term "hemp" itself fell out of public knowledge* in some places. People spoke only of "marijuana" or "cannabis" and forgot that a non-drug form had ever existed. For instance, by the 1990s in the U.S., few remembered that hemp once made pioneer wagon covers or that "canvas" came from cannabis – those facts were reintroduced by activists and historians (e.g., Jack Herer's 1985 book *The Emperor Wears No Clothes* sparked renewed interest in hemp history). In recent years, thanks to legalization efforts, the public is regaining awareness that hemp is *the same species as marijuana but a completely different product*. Educational campaigns stress that hemp products (such as hemp foods, oils, textiles) do not induce a high. As the Brookings Institution noted, *"in short, hemp can't get you high"*, and for decades, federal law failed to recognize that difference.

The distinction is now formally restored in many jurisdictions (with THC testing regimes to enforce it). Scientists have even proposed different terminology: some use "industrial cannabis" vs "drug cannabis," or genotype labels (Cannabis sativa subsp. *sativa* for hemp vs subsp. *indica* for drug, though this classification is debated). Colloquially and legally, "hemp" has re-emerged to mean exactly what it meant for centuries – a versatile agricultural crop, not a narcotic substance. The challenge moving forward is to keep these lines clear, through both law and language, so that hemp's stigma continues to fade and its opportunities can be fully realized.

Reclaiming "Hemp": Industrial, Nutritional, and Agricultural Roots

Given hemp's distinct history and uses, there is a strong case for reclaiming the term "hemp" and educating people on its true meaning. Reclaiming "hemp" involves undoing the conflation with marijuana and emphasizing hemp's role in industry, nutrition, and sustainable agriculture. Why is this important? **1. Economic and Environmental Value:** Hemp offers tremendous benefits as a crop – it can produce fiber for textiles, hurd for building materials (e.g., hempcrete), pulp for paper, seeds for healthy food and oils, and even biofuel – with comparatively low environmental footprint. It grows rapidly with little need for pesticides, can improve soil with deep roots, and sequesters carbon efficiently. Modern industries are exploring hemp-based plastics, composites for automotive parts, and more. The global market for hemp products (fiber, shivs, grain, CBD, etc.) was estimated at over \$5 billion in 2023 and is growing as more uses are commercialized. However, investment and development in hemp industries often lag due to regulatory uncertainty and public misconceptions. By clearly defining and championing "hemp" as a legitimate crop (separate from drug cannabis), policymakers can stimulate rural development and green industries. For example, countries like France, Canada, and China – which normalized hemp – have reaped economic rewards through exports of hemp foods and fibers. According to the Canadian government, the global market encompasses over 25,000 products that can be made from hemp, from clothing to construction materials. Reclaiming the word and promoting hemp as an agricultural commodity can help realize this economic potential.

2. Public Health and Nutrition: Hemp seeds are a highly nutritious food, rich in protein, omega-3 and omega-6 fatty acids, and minerals. They contain no psychoactive compounds. In places where hemp foods were outlawed (like the U.S. before the early 2000s), consumers missed out on a valuable nutrition source. Now hemp seed oil, protein powders, and snacks are increasingly popular. Clarifying that hemp grain = health food, not a drug is vital to avoid unwarranted restrictions. For instance, in the 1990s the U.S. DEA attempted to ban all hemp seed products by claiming any trace THC (even a few ppm) made them dangerous, but courts overruled this in 2004, recognizing the absurdity given the non-psychotropic nature of hemp foods. With "hemp" back in a positive light, regulatory agencies like the FDA can more easily provide guidance on hemp-derived food, supplements, and even pet feed. Similarly, hemp-derived CBD (which exploded after hemp legalization) is largely non-intoxicating and holds promise for wellness products – but it needs its own clear regulatory path to ensure safety and quality, without being treated as illicit marijuana. Using correct terminology (e.g., "hemp extract" for CBD oil) helps consumers understand the source and nature of these products.

3. Agricultural and Community Benefits: Hemp's return can help diversify farming and support sustainable agriculture. It fits well in crop rotations (hemp's deep roots can reduce soil compaction and its quick canopy helps suppress weeds). In regions hit by declines in traditional crops or industries, hemp offers a new opportunity. For farmers to embrace it, they must be assured that *growing hemp is legally secure* and socially accepted. If "hemp" is constantly confused with "pot" in the public sphere, farmers face stigma, difficulties with financing and insurance, or even harassment. In fact, even after 2018 some U.S. hemp farmers reported issues like their bank accounts being closed or credit denied because the institution lumped hemp businesses with cannabis generally. Clear language in law and commerce is needed so that banks, insurers, and marketers treat hemp like any other crop. When a merchant services company or a social media platform bans advertisement of "cannabis," they should not inadvertently ban hemp fiber products or hempseed protein shakes – yet this has happened under poorly drawn policies. Reclaiming the proper definition of hemp can remove these impediments. One case study showed many hemp startups struggled with online advertising algorithms that flagged "hemp" as forbidden content, not recognizing its legal status. Through advocacy and perhaps legislation, we can push for systems to recognize *hemp* separately from *marijuana*, reducing unfair barriers.

4. Cultural and Historical Identity: There is also an intangible benefit in restoring hemp's identity – it allows society to reconnect with a plant that was a significant part of our heritage. Many older generations were taught that "marijuana is evil" and by extension anything related to cannabis is suspect. By educating the public – for instance, teaching that the sails of Columbus's ships and the first drafts of the US Declaration of Independence (written on hemp paper) came from hemp – we put the plant in a different context, one of utility and historical importance. The narrative shifts from "drugs" to "fiber, food, and freedom". Such reframing can build public support for pro-hemp policies. Already, efforts to normalize hemp include events like "Hemp History Week" and

museums highlighting hemp (the Hash, Marihuana & Hemp Museum in Amsterdam, for example, showcases hemp's industrial uses to thousands of visitors, often to their surprise). A clear and positive definition of hemp helps these educational efforts.

5. Preventing Misuse and Ensuring Safety: Interestingly, drawing a bright line between hemp and drug cannabis also aids law enforcement and public safety in the long run. When hemp is clearly defined and regulated, police and courts can focus on true illicit marijuana and not waste resources on hemp handlers. Early after hemp's return, there were cases of mistaken raids or seizures of legal hemp shipments by authorities who couldn't tell the difference. Consistent standards (like requiring documentation of hemp shipments, standard THC testing protocols, etc.) have been developed to mitigate this, but a prerequisite is the unambiguous legal status of hemp. Reclaiming the term in statutes helps – e.g., the 2018 Farm Bill not only legalized hemp but explicitly forbids treating it as a controlled substance, which has been used in legal defenses when overzealous arrests occurred.

"Hemp" must be firmly re-established in the lexicon as an agricultural commodity and industrial resource. This means in all communications – legislation, regulation, media, and education – the word should be used in its proper context, and whenever confusion with psychoactive cannabis is possible, clarifications should be made. Many organizations now advise using "cannabis" as the broad term for the plant, "marijuana" specifically for high-THC recreational/medical use, and "hemp" for low-THC industrial use. This kind of vocabulary precision is essential. Reclaiming hemp also involves celebrating its uses: hemp grain should be grouped with other oilseeds like flax or chia, hemp fiber with other natural fibers like jute or kenaf, not lumped with controlled drugs. The more this framing penetrates, the easier it will be to design sensible policies.

Conclusion

The journey of hemp – from ancient crop to vilified contraband and back to renascent resource – offers valuable lessons. It shows how language and law, as much as botany and chemistry, determine a plant's fate in society. By reclaiming the term "hemp" in line with historical reality and scientific fact, we not only correct the record but unlock economic and environmental opportunities for the future. Clarity in terminology leads to clarity in policy: when lawmakers, enforcers, and the public all share a common understanding that *hemp is a non-intoxicating, industrial and nutritional crop*, regulations can be appropriately tailored and fear-based barriers removed.

Hemp's global history is rich – it has been the cordage of ships of exploration, the cloth of humble farmers and great artists' canvases, the paper of scholars, and the seed of sustenance in lean times. It largely avoided controversy until relatively recently, when a convergence of events temporarily rebranded it as something dangerous. Now, in the 21st century, we have the perspective and knowledge to appreciate hemp on its own merits again. Policymakers can take inspiration from historical precedent (e.g., licensing models from the past and present, such as the careful Soviet approach or the EU guidelines) to regulate hemp in a way that maximizes its benefits while minimizing any potential risks.

In doing so, we also honor cultural heritage – preserving ancient words and practices connected to hemp. When a Chinese textbook discusses "má" or a French farmer talks of "chanvre," or an English designer extols the virtues of "hempcrete," all are part of the same tapestry. Encouraging the correct use of *"hemp"* helps unify these threads and educates new generations that this plant is more than the misconceptions of recent history. It stands for strength, durability, and renewal.

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(All links and citations were accessed and verified in 2025 for accuracy and relevance.)