

INDIAN HEMP CHALLENGES AND FUTURE OUTLOOK

Parul Singh* *Vibhuti*

**Assistant Professor, Home Science Department, DAV College for Girls, Yamunanagar*

***Assistant Professor, Home Science Department, DAV College for Girls, Yamunanagar*

ABSTRACT

India being one of the oldest civilizations in the world and Hemp which is the Earth's most sustainable natural resource is a great combination. Hemp is a miracle crop due to which many countries are taking advantage of this crop. India is a country that still thrives on farming. Not just India's economy but even its environment will benefit from hemp. And yet India is lagging behind in utilizing this wonder plant. Hemp clothes are not just easy on the skin but also a comfortable wear. They possess a longer duration also. All over the world, cotton is the preferred natural fiber and India is no exception. While cotton takes about ninemonths to grow, hemp grows to twelve feet in three to four months. Hemp consumes less water and could be a boon to water-starved India. Besides, it is good at suppressing weeds and also can be grown for multiple cycles in a land. Keeping in mind the advantages of hemp over cotton, the young entrepreneurs are nowadays deciding to source hemp from the farmers in Uttarakhand and Jammu and Kashmir. Hemp clothing has given men and women an opportunity to contribute with their handlooms and earn handsomely. The challenge has been that people are under the wrong impression that hemp could harm mental balance. Even though there are only a few states that have legalized hemp cultivation, a good beginning has been made. Other state governments would do well to consider the following suit. Entrepreneurs must also explore new ways of using this miracle crop.

Keywords: *Hemp, India, Environment, Economy, Cultivation, Clothing, Technology*

INTRODUCTION

Cannabis has been used in India for thousands of years. In fact, the Vedas, estimated to be at least 3400 years old, refer to it as one of the five most sacred plants. Hemp finds wide applications in the field of medicines, steel industry and as an alternative for harmful plastics.

HEMP AND INDIA – THE BAN: WHEN AND WHY

In India, the Narcotic Drugs and Psychotropic Substances (NDPS) Act banned the production and sale of flowers and resin from cannabis. This ban was imposed in the mid-1980s. Until then hemp had been widely grown and harvested. The issue is that hemp comes from the same family of plants as marijuana. However, it does not contain the same harmful effect that marijuana does. Marijuana comes from a female Sativa plant containing psychoactive tetrahydrocannabinol (THC) that is consumed to get a "high". On the other hand Hemp contains less than 0.3percent of THC and does not produce the same effect.

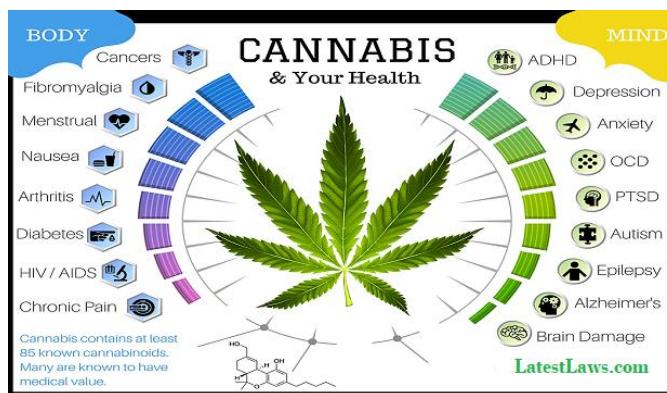


Image Source: marijuanaspan.com

The USA, which had been a major user of hemp products, banned hemp in the 1930s, apparently due to pressure from big industrialists. There has been a misconception around the possible effects of THC in hemp. Unfortunately, India stands among the highest consumers of drugs (by number) next only to the USA thus leading to a ban on hemp cultivation. The Uttarakhand state government has become the first one in India to issue a license for hemp cultivation. One can legally grow hemp provided the THC content is less than 0.3percent. Uttar Pradesh is the other state that has legalized hemp cultivation and Himachal Pradesh can become the third state. However, there is no bar on doing hemp research for which one can easily get a license anywhere in India.

ADVANTAGES OF HEMP

- Hemp is a source of Quality Fiber:** All over the world, cotton is the preferred natural fiber and India is no exception. While cotton takes about nine months to grow, hemp grows to twelve feet in three to four months. Moreover, hemp consumes less water and could be a boon to water-starved India. Besides, it is good at suppressing weeds and also can be grown for multiple cycles in a land.
- Hemp is a viable Source of Paper:** Currently we are getting paper from timber trees but we might as well make it from hemp. There are several advantages to hemp paper:
 - Hemp grown in one acre could help produce as much paper as four acres of timber.
 - Hemp has shorter yield cycles meaning we can produce more paper from it in any given time period.
 - Paper made from hemp is stronger and more durable.
- Hemp Can Improve Exports:** Given India's hemp cultivation potential, the country could quickly catch up with the others – China, Australia, etc. – in exporting hemp products to the US and Europe. What can we export? CBD oil for which there seems to be perennial demand.
- Hempcrete is a sustainable Alternative to Concrete:** Given the thrust to the construction industry in India, hemp could provide a sustainable alternative to concrete. While hempcrete is not in the same league as concrete in terms of functionality, it is quite promising in that it helps bring down the operating costs.



INDIAN COMPANIES MAKING HEMP-BASED PRODUCTS

Health Horizons, Delhi: This Company makes organic products like body creams, hemp oil, and shampoos.

Foxy, Mumbai: Foxy Couture mixes high fashion and natural fibers to create a line of clothing. This company sells both office wear and casual wear.

Hempsters, Hyderabad: Hempsters makes completely hand-made, hemp seed-based products in body care such as shower gels and soap bars.

Satliva, Bengaluru: This company, whose motto is 'Nature is the best Nurture' offers skin and body care products made of hemp oil.

Greenjams, Vizag: This company makes hempcrete to promote green buildings.

Vedi, Bhubaneshwar: Vedi makes ayurvedic medicines from hemp, which it calls "a jewel in the court of Ayurveda".

TRADITIONAL ASPECT

In Uttarakhand, hemp has been in use since the dawn of civilization as food, medicine, religious ceremonies, customs, and household usage. Before the ban on hemp production came into existence, hemp seeds had been under use for centuries to produce hemp milk, oil cheese substitutes, and protein powder. Having a mild nutty flavor, hemp seeds were loved by many as their food item. From long ago, practitioners of the Ayurvedic line of medicine used hemp for treating arthritis, asthma, warts, cough, and several other health conditions. When it came to customs, hemp had always been a part of Holi and many local festivals, not just in Uttarakhand but all across India. In the household, it was not uncommon for homemakers to use hemp in cooking. Hemp leaves are offered to Lord Shiva with devotion. According to the 1893 cannabis study conducted in British India, hemp was one of the five holy plants mentioned in the Vedas and woven with various local cultures. Mythological texts like Shiv Purana mention hemp with prominence. However, hemp or CBD (cannabidiol) has not been yet made legal as an ingredient in the food, beverages, and food supplements. Section 10 of the

Indian Narcotic Drugs and Psychotropic Substances (NDPS) Act of 1985 empowers the State Governments to issue licenses for the cultivation of cannabis for medical and scientific purposes. The intentions of the government may be pious. But the problem lies in them implementing the hemp industrial policy without putting in the thought it deserved. They just copied from what the US policymakers had done. Looks like the officials entrusted for drafting the policy were not aware of various products and commercial aspects of hemp and did not conduct any kind of research as well. It was a major mistake made by them not to take into consideration the context under which the ban was being revoked. They forgot that the ground realities in India are completely different from the conditions in the US or any other country. While hemp may just be a minor factor in a huge economy like the US, in India, it may be the difference between utter poverty and prosperity for many families. Because of hemp, a family in Uttarakhand struggling to have their daily meals may have a decent living.



Image Source: businessinsider.in

While the government has made hemp legal, seeds are not yet available through any official channel. This suggests a major step such as introducing a new hemp policy was taken without any proper consideration and preparation. Moreover, the question is, why do they want to make seeds available when the Himalayan hemp is already considered to be the best in the world. People who have framed the policy have forgotten that hemp is a natural growth in the Himalayan ecosystem and no external seeds are required. Implementation of a flawed policy has had undesired effects in several layers. For instance, the locals are making efforts on their own to cut naturally grown hemp to save them from legal inconvenience. Farmers who have had so many regular challenges of their own are now trying to save themselves from the outrage of government officials. Nobody exactly does not know what is the policy actually about and what is required for the same. On the ground, the people entrusted with the implementation of the policy have no training. The outcome is utter confusion at every level among the local government officials. Various excise department officials are defining the law in their own way. There is no information on how the production of industrial level hemp will be monitored. Immediate steps need to be taken to inform the officials about the policy objectives and the details. Several misconceptions are prevailing when it comes to hemp farming, processing, and other business activities. There is a myth that an Ayush license is required for hemp farming or dealing in hemp seeds. No, what you need is an excise license. An Ayush license is required only when you are producing hemp for manufacturing Ayurvedic/Unani drugs or retailing them.

The FSSAI (Food Safety and Standards Authority of India) comes into the picture when the hemp is being used in food products. They are empowered by the Federal Food, Drug, and Cosmetic Act (FD&C Act) to act when a food item consisting of hemp is negatively influencing the health and safety of consumers. But when hemp has not been allowed as a food ingredient, the FSSAI has no role, unless someone violates the law. Centre for Aromatic Plants (CAP), Uttarakhand, was designated as a nodal agency for the cultivation of industrial hemp by the state government. However, more steps need to be taken to inform the officials on the ground as well as cultivators about the hemp policy, what is acceptable and what is not, and the support system available to the hemp economy. A huge mistake committed by the policymakers is the introduction of external hemp seeds.



Image Source: economictimes.indiatimes.com

As history suggests, local communities in the Himalayas did not only use locally produced hemp for keeping themselves warm in the cold mountainous region but also to maintain high immunity in their bodies and keep various diseases at bay. Local attire included shoes, socks, clothes, and ropes made of hemp. People used hemp seeds and leave extensively for making delectable teas, fritters, and chutneys. For these communities, hemp getting banned in the first place was nothing less than a shock. The ban led to the dying of centuries-old heritage in food, clothes, and local customs. They suffered massively because of the apathy of central and state governments to the local context and they're coming under the influence of vested natural interests. If the officials decide that a farmer is guilty of violating the law, they may simply burn/destroy the crops. If they want to take a more stringent step, they would report the incident under the draconian Narcotic Drugs and Psychotropic Substances (NDPS) Act.



Image Source: indianexpress.com

Many hemp enterprises, under the fear of the NDPS Act, would import raw hemp from China or Europe. Moreover, Uttarakhand is the only state now allowing the production of hemp. The government has allowed only the seed and fiber of the plant to be used, prohibiting anyone from using the flower, leaf, and stem, thus hurting the earning potential of farmers as well as enterprises. Genetically modified crops have earned a bad name for disrupting the natural process of gene flow. Moreover, their seeds are six to seven times costlier than conventional seeds. Over time, pests develop resistance to these crops. Then the manufacturers of these seeds will come up with more advanced versions of the seeds and people will have no option but to purchase them. Long term effects of genetically modified crops on the soil and environment are not yet known.



Image Source: hemptoday.net

It is surprising that the Government has come up with a policy that requires farmers to purchase seeds supplied by external companies without considering that the seeds they provide may be genetically modified. Introducing these seeds to the Himalayan ecosystem could be deleterious. God forbid, if it happens, reversing the damage would be almost impossible. To cherish the full advantages of the super crop that hemp is, it is imperative to use the local variety of hemp seeds i.e. Himalayan hemp, a 100 percent organic and naturally existing plant. Everyone who is aware of the possibly disastrous effects of the new hemp policy needs to be vocal about it and try to convince the government to roll it back. Seed genetics has the potential to make or break hemp farming. This is a field we can't afford to make a mistake in. Moreover, research on seed genetics takes time. It is not something that can be done and established in a few days or weeks. The regular time for developing seed is generally six years. When you add the local context, it could be even more.

When an excellent natural seed is available for hemp production in Uttarakhand, there is no need to introduce genetic seeds. An excuse often given to disallow normal production of hemp is to promote de-addiction. However, this is a flimsy excuse against hemp as it is different from marijuana. Marijuana is a *Cannabis sativa* plant with more than 0.3 percent THC (tetrahydrocannabinol), the main psychoactive compound in cannabis. Consumption of THC makes one feel the change in cognition.

CONCLUSION

Cannabis plants with 0.3 percent or less THC are defined as hemp plants. Even a plant with a slightly higher THC (for instance 0.4 percent) won't have any psychoactive effect on the consumer. When hemp is devoid of the ability to make anyone intoxicated, the argument of de-addiction loses all conviction. All that the excuse of de-addiction is doing is to block the production of natural hemp and the subsequent economic benefits. It is ruining any chance of economic uplift of hundreds of villages. It seems the narrative of de-addiction is the product of those who want to make good money by selling their seeds in India. They have conveniently hidden the fact that usage of these seeds will have a deleterious effect on the Himalayan ecosystem. Development of a lasting economic ecosystem of hemp-related products is only possible when a natural crop of the region is resumed. The Government needs to recognize the truth and make a change in the policy. It is the question of eradicating the abject poverty in thousands of Uttarakhand villages. We can't really afford to lose this great hemp-induced opportunity of meeting this objective.

REFERENCES

1. Petri, G., "Medicinal and aromatic plants (I)", *Biotechnology in agriculture and forestry*, 1988(ed. by Y. P. S. Bajaj).
2. Walsh, D., Mahmoud, F., "Supportive Care in Cancer", 11(3), 2003, 137-143.
3. Ranganathan, M., D'Souza, D. C., "Psychopharmacology", 2006. 188(4), 425-444.
4. SethiV. K., Thakur R. S., *Planta Med.*, 1978, 33, 36-38.
5. Singh N., BhargavaK. P., *Planta Med.*, 1981. 43, 56-58.
6. fieo.org, Federation of Indian Export Organizations.
7. msmeindia.org, Micro Small and Medium Enterprises.
8. <https://link.springer.com/article/10.1007/s10443-006-9032-9>
9. <https://ijcsm.springeropen.com/articles/10.1186/s40069-020-00429-6>
10. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6265480/>